Aq 84M MKC. Pob # 1015 C. 1 OF GENERIC NAMES OF THE SCALE INSECTS (Homoptera: Coccoidea)



Miscellaneous Publication No. 1015

Agricultural Research Service UNITED STATES DEPARTMENT OF AGRICULTURE



Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

AN ANNOTATED LIST OF GENERIC NAMES OF THE SCALE INSECTS (Homoptera: Coccoidea)

COMPILED BY HAROLD MORRISON and Emily R. Morrison

Miscellaneous Publication No. 1015

Agricultural Research Service UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D.C.

Issued October 1966

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, D.C. 20402 - Price 55 cents The subsection of the second s

a second se

and the second sec

Last and the second second

An Annotated List of Generic Names of the Scale Insects (Homoptera: Coccoidea)

Compiled by HAROLD MORRISON, collaborator,¹ and EMILY R. MORRISON, biologist,² Entomology Research Division, Agricultural Research Service

INTRODUCTION

This list of generic names of the Coccoidea, or scale insects, is an outgrowth of a card catalog that has been maintained for many years in the identification unit of the organization currently known as the Entomology Research Division of the U.S. Department of Agriculture. A catalog of names, with associated data, is a prerequisite for taxonomic and other investigations of coccids carried on in the Department of Agriculture, and is equally valuable to other persons undertaking similar studies on this group of insects.

The compilation of a list of generic names of coccids seems to us to be especially difficult because of the early widespread use of certain coccids in the evolving economic life of man. Inevitably there was a comparable widespread, but inconsistent, reference to these insects and to coccids as a group in early post-Linnaean, scientific literature. Indeed, a review of authors and titles in the Horn and Schenkling Index Litteraturae Entomologicae, 1928–29, suggests that there may be several hundred early papers, beyond those already found, in coccid literature that could be examined for discussions that might affect coccid nomenclature. The probings of L. Lindinger bear out this assumption. But such probings seem to us to have produced a very poor return and to have dealt serious blows to name stability, which is a very necessary constituent of current biological science. References to coccids appear in publications of several biological disciplines including taxonomy, economic entomology, insect anatomy and physiology, transmission of diseases, and minutely detailed problems of genetics. Under such circumstances it is imperative that fixity of coccid scientific names be sought, so that reference to any genus has the same significance in any publication, from general zoological or entomological text or reference book to the most re-

¹ Deceased.

² Retired.

stricted paper on classification or genetics. Our concern for fixity carries especially to those few names which are historically significant, and our discussion of each of these, as they occur in the list, attempts to justify their retention and continued usage as valid and significant names.

We have attempted to fit each generic name into the pattern of availability outlined in the 1961 International Code of Zoological Nomenclature. In regard to spelling, we have, as a basic procedure, accepted the original published spelling of each name as the proper one for continued usage if the genus appears to be valid. If subsequent emendations have been suggested, they too have been listed, as well as obvious misspellings that usually can be attributed to manuscript or printer's errors. However, positive differentiation between incidentally proposed emendations and simple misspellings has not always been possible. Respecting already proposed or possible emendations, we decline to take responsibility for changes that would bring the generic names into strict accord with the provisions of Articles 26-33 of the 1961 Code, for three reasons : First, it is our conviction that acceptance of original spelling is a simple, consistent, and satisfactory basis for establishment of a generic name; second, according to observations over the years, emendations either are largely ignored by other workers or their proposal stimulates long, drawn-out, often inconclusive, public debate over the legitimacy or the exact form of the change: third, as is pointed out in the late R. W. Brown's Composition of Scientific Words, 1956, the precise and correct formation of any zoological name may be an extremely complex task, demanding background training far beyond the experience of many, if not most, of today's students of insect taxonomy. For the future, we believe that a solution for this problem lies either in the acceptance of a generic name as it first appears in print or in the establishment of a competent, prepublication clearinghouse for such names by the International Commission on Zoological Nomenclature, or by some other agency located at a large center of work on zoological taxonomy.

Except through incidental reference under individual genera, no attempts are made to treat the classification of the coccids above the genus level. Although this group of insects was long accepted as representing a family in the general scheme of homopterous classification, the usual approach in recent years has been to accept the group as of superfamily standing, and Handlirsch (*in* Schröder, Handbuch der Entomologie 3: 1134, 1925) even presented the group as subordinal in status, although he included only the one family, Coccidae. Various proposals for suprageneric groupings of the numerous coccid genera have been made since the publication of the Fernald Catalogue, 1903, but they have not been wholly consistent, and do not permit the assignment of all genera that belong with the coccid complex. Publications by Balachowsky, Borchsenius, Ferris, and Morrison (*see* Bibliographies) should be examined for studies in this area. It is our opinion that no classification system has evolved to a point permitting its rigid acceptance as a framework on which to hang all of the currently known coccid genera.

All names in the list have been cross-checked in Neave, Nomenclator Zoologicus, I–V, 1939–50, and various earlier compilations of scientific names and bibliographies have been freely consulted.

In presenting these coccid generic names, the original place of publication for each is given as a convenience. Further citations, in the discussion which may occur under a name, are presented in the abbreviated form of author name, year of publication, and page citation, and each may be expanded to a full literature citation by reference to the Selected Bibliographies (U.S. Dept. Agr. Misc. Pubs. 734, 1957, and 987, 1965) which have been issued as a prelude to this work. The closing date of the list is December 31, 1963.

Painful amounts of time and effort have gone into the compilation of this list, and it is our hope that sufficient evidence is offered to satisfy other coccid workers that the information presented can be accepted as a foundation on which to build an evolving and continually improving system of classification for the Coccoidea.

Although the actual compilation of this generic list of Coccoidea has taken place recently, much of the initial information contained in it accumulated over a period of many years and was gathered by many persons. C. L. Marlatt started the catalog in the early 20th century as a continuation of the Fernald Catalogue. J.G. Sanders and E.R. Sasscer worked on it in its early years, and published several lists of generic and specific coccid names. Ida Weckerly was engaged in the endeavor for nearly 20 years.

The development of the catalog was under the direction of Harold Morrison for approximately 40 years. Dr. and Mrs. Morrison devoted their efforts for some months to listing, checking, and annotating generic names, and to recording pertinent information. The manuscript was in rough draft at the time of Dr. Morrison's death on March 11, 1963. Mrs. Morrison continued the work, and added names that appeared later in the year. Louise M. Russell reviewed the manuscript, and actively participated in the preparation of the final draft.

We wish to acknowledge the assistance of several persons and organizations in the preparation of this list. Formal note should be made of the helpfulness of A Catalogue of the Coccidae of the World, by Mrs. Maria E. Fernald, published in 1903. The large amount of information brought together in that volume was the starting point for much of our review work on the older coccoid genera, even though our final opinions sometimes diverge strongly from the conclusions indicated in the Fernald Catalogue. The present staff of the National Agricultural Library of the U.S. Department of Agriculture and the personnel of the former Library of the Bureau of Entomology and Plant Quarantine assisted materially by locating and supplying copies of much of the early, frequently obscure literature that has been examined in the preparation of the list. The late Ruth O. Ericson, translator for the insect identification unit of the Department of Agriculture, translated various foreign language papers. Finally, we extend our sincere appreciation to our colleagues in the Entomology Research Division, and to all who have assisted in any way.

VI

ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA

Abgrallaspis Balachowsky, 1948, Actualités Sci. et Indus., Ent. Appl 1054: 306.

TYPE-SPECIES: Aspidiotus cyanophylli Signoret, 1869, by original designation.

This genus was established for six species and was assigned by the author to his Aspidiotina.

Acanthaspidiotus Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 381.

The authors presented this genus in the Aspidiotini, close to *Aspidiotus* Bouché and *Metaspidiotus* Takagi.

Acanthococcus Signoret, 1875, Soc. Ent. de France Ann. [Bul. Ent.] (1874) (ser. 5) 4: ccxx; 1875, Soc. Ent. de France Ann. (ser. 5) 5: 16, 34.

TYPE-SPECIES : Acanthococcus aceris Signoret, 1875, by monotypy.

This name has been widely accepted as a synonym of *Eriococcus* Targioni-Tozzetti, 1868. It was so considered by Ferris, 1957c: 85, and by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 62. Lindinger, 1933a: 78, 107, considered it identical with *Eriococcus*, but placed both names under *Nidularia* Targioni-Tozzetti, 1868. Borchsenius, 1948: 501, 503, considered the genus to be valid, and transferred to it most species formerly assigned to *Eriococcus*.

Acanthococcus Kiritchenko, 1936, Rev. d'Ent. de l'URSS (1935) 26: 155.

TYPE-SPECIES: Acanthococcus marrubii Kiritchenko, 1936, by monotypy.

This name was preoccupied by *Acanthococcus* Signoret, 1875. and was replaced by *Spinococcus* Borchsenius, 1948a: 953. This genus was assigned to the Pseudococcidae.

Acantholecanium Borchsenius, 1949, Ent. Obozr. 30: 339-340.

TYPE-SPECIES: Ctenochiton haloxyloni Hall, 1926, by original designation and monotypy.

Borchsenius, 1957: 291, 308, discussed this genus, and assigned it to the Coccinae, Coccini.

TYPE-SPECIES: Aspidiotus pustulans Green, 1905, by original designation and monotypy.

Acanthomytilus Borchsenius, 1947, Akad. Nauk SSSR Dok. (n.s.) 58: 344.

TYPE-SPECIES: Lepidosaphes intermittens Hall, 1924, by original designation and monotypy.

The author associated this genus with Lepidosaphes Shimer.

Acanthopulvinaria Borchsenius, 1952, Akad. Nauk SSSR Zool. Inst. Trudy 12: 297, 301.

TYPE-SPECIES: Pulvinaria orientalis Nassanov, 1908, by original designation.

Borchsenius, 1957: 203, 285, discussed this genus, and assigned it to the Coccinae, Coccini.

Acantococcus Mitiaev, 1958, Akad. Nauk Kazakh. SSR Inst. Zool. Trudy Ent. 8:79, 94.

A lapsus for Acanthococcus Signoret of Borchsenius.

Achorophora Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 273.

TYPE-SPECIES: Achorophora obliqua Brimblecombe, 1957, by original designation.

The author placed this genus in the Aspidiotini, and suggested its resemblance to *Pseudaonidia* Cockerell.

Acledra Signoret, 1864, Soc. Ent. de France Ann. (1863) (ser. 4) 3: 547, of Kloet and Hincks, 1945, A Check List of British Insects, p. 76.

Kloet and Hincks presented *Acledra* Signoret, 1864, a valid generic name in the Heteroptera, as an alternate to *Aclerda* Signoret, 1874, in the Coccoidea. In our opinion this is unjustifiable.

Aclerda Signoret, 1874, Soc. Ent. de France Ann. (ser. 5) 4:96; 1875, Soc. Ent. de France Ann. [Bul. Ent.] (1874) (ser. 5) 4: vii.

TYPE-SPECIES : Aclerda subterranca Signoret, 1874, by monotypy.

This name has been used consistently since its original publication to designate a group of coccid species, with rather specialized morphological characteristics, which has been accepted as a distinct family since the establishment of the Coccoidea as a superfamily. The classification of the Aclerdidae was critically reviewed by McConnell, 1954.

Acontonidia Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 285.

TYPE-SPECIES: Acontonidia triangularia Brimblecombe, 1957, by original designation and monotypy.

This genus was placed by the author in the Aspidiotini, somewhat related to *Pscudaonidia* Cockerell.

Acreagris Koch and Berendt, 1845, Neues Jahrebuch für Mineralogia : 873, nomen nudum; 1854, *in* Berendt, Die im Bernstein befindlichen Organ. Reste der Vorwelt 1 (2) : pl. 17, f. 157.

TYPE-SPECIES : Acreagris crenata Koch and Berendt, 1854, by monotypy.

This genus was based on a margarodid female from Baltic amber, originally described as an Aptera. Ferris, 1941: 6–10, gave a detailed discussion of this genus, its type-species, and probable fossil relatives. He accepted it as quite similar to existing *Matsucoccus* Cockerell.

Actenaspis Leonardi, 1906, Portici R. Scuola Super. di Agr. Ann. (ser. 2) 6:4,25.

TYPE-SPECIES : Leucaspis pusilla Löw, 1883, by monotypy.

This name has been placed by subsequent workers as a synonym of *Leucaspis* Löw.

Aculeococcus Lepage, 1941, Inst. Biol. [Sao Paulo] Arch. 12: 141.

TYPE-SPECIES: Aculeocoocus morrisoni Lepage, 1941, by original designation and monotypy.

This genus is currently assigned to the Eriococcidae.

Acutaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-328.

TYPE-SPECIES: Aspidiotus perseae Comstock, 1881, by original designation.

This genus was established for seven aspidiotine species, and its assignment to the Aspidiotini is generally accepted.

Acystomargarodes Bodenheimer, 1953, Istanbul Univ. Facult. des Sci. Rev. (ser. B) 18: 152.

TYPE-SPECIES: Margarodes tritici Bodenheimer, 1941, by present designation.

This post-1930 generic name was proposed, in tentative fashion only, for two named species presumably having similar characteristics in the adult stage, but no type-species was selected at the time of publication. Regardless of any zoological validity, the name appears to be deprived of status by the restrictions of Article 13 of the 1961 Zoological Code.

Adelosoma Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 63: 583.

TYPE-SPECIES: Adelosoma phragmitidis Borchsenius, 1948, by original designation and monotypy.

This genus was placed by its author as related to *Pseudantonina* Green in the Pseudococcinae.

Adiscodiaspis Marchal, 1909, Acad. des Sci. [Paris] Compt. Rend. 148: 871.

TYPE-SPECIES: Diaspis (Adiscodiaspis) ericicola Marchal, 1909, by monotypy.

Balachowsky, 1949:109, and 1953g:760, placed this name as a synonym of Ru-gaspidiotus MacGillivray, 1921. The Marchal name has clear priority if the genera are accepted as identical.

Adiscofionina Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202:727.

A lapsus for Adiscofiorinia Leonardi.

Adiscofiorinia Leonardi, 1906, Redia (1905) 3: 17, 52.

TYPE-SPECIES: Fiorinia secreta Green, 1896, designated by MacGillivray, 1921: 372.

The author placed this genus as related to Fiorinia Targioni-Tozzetti.

Adisodiaspis Bodenheimer, 1937, l'Inst. d'Egypte Mém. 33: 218.

A lapsus for Adiscodiaspis Marchal.

Aegyptococcus Ezzat, 1963, 16th Internatl. Congr. Zool. Proc. 1: 192.

TYPE-SPECIES: *Phenacoccus inermis* Hall, 1925, by original designation and monotypy.

The author established this genus in the Pseudococcidae for the type-species of *Mirococcus* Borchsenius, 1947, and gave as his reason the absence from the original characterization of *Mirococcus* and the redescription of *inermis* Hall by Williams, 1958, of certain definite characters present in authentic material of *inermis* Hall. Since such an action is not in accord with provisions of the International Code of Zoological Nomenclature, *Aegyptococcus* Ezzat stands as a synonym of *Mirococcus* Borchsenius because of community of type-species.

Affirmaspis MacGillivray, 1921, The Coccidae, pp. 393, 448.3

TYPE-SPECIES: Aspidiotus socotranus Lindinger, 1913, by original designation.

Recent workers have placed this name as a synonym of *Quadraspidiotus* MacGillivray.

Africaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: Diaspis chionaspiformis Newstead, 1910, by original designation.

Recent workers have accepted this genus as valid. Balachowsky, 1954e: 171, assigned it to his Diaspidina, chionaspiform group.

Africonidia McKenzie, 1947, Calif. Dept. Agr. Bul. 36: 110-111.

TYPE-SPECIES: Africonidia halli McKenzie, 1947, by original designation and monotypy.

The most recent discussion of this genus, Balachowsky, 1958b: 149–150, 226, placed the type-species as a synonym of *Gymnaspis africana* Newstead, 1913. The original indications of relationship were with *Aonidiella* Berlese and Leonardi and *Diaspidiotus* Berlese and Leonardi.

³ Neave, Nomenclator Zoologicus, I–V, 1939–1950, apparently consistently, supplies two page citations for MacGillivray's new genera; the need for this is not apparent to us and the second page citation is hereafter omitted, except in the few instances where changes of spelling are presented.

Afrotachardina Chamberlin, 1923, Bul. Ent. Res. 14: 201.

TYPE-SPECIES : Tachardia longisetosa Newstead, 1911, by original designation.

This genus was accepted in the latest catalog of lac insects, Kapur, 1958. Balachowsky, 1950: 9, assigned it to Tachardinina.

Agrophaspis Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 375.

TYPE-SPECIES: Aonidia buxtoni Laing, 1933, by original designation and monotypy.

The authors presented this genus in the Parlatoriini, close to *Greeniella* Cockerell in characters of the adult female.

Akermes Cockerell, 1902, Canad. Ent. 34: 89–90.

TYPE-SPECIES: Akermes bruneri Cockerell, 1902, by original designation and monotypy.

This genus is one of a group of several New World genera of which *Toumeyella* Cockerell apparently was first described. They belong in the Coccidae (str.) but have not been critically studied in recent years.

Albastaspis MacGillivray, 1921, The Coccidae, p. 295 (*Albataspis*, pp. 290, 475).

TYPE-SPECIES: Mytilaspis nivea Maskell, 1895, by original designation and monotypy.

The describer indicated that the relationships of the genus are with *Fusilaspis* MacGillivray and *Pinnaspis* Cockerell. MacGillivray presented this name in two spellings. We are inclined to the opinion that his original intent was to present the alternate spelling as his established genus name, but Ferris, 1941a: 11, discussed this confusion, and arbitrarily chose *Albastaspis*, which must stand according to Article 24 of the 1961 Code.

Albataspis MacGillivray, 1921, The Coccidae, pp. 290, 475.

TYPE-SPECIES: Mytilaspis nivea Maskell, 1895, by original designation and monotypy.

See discussion under Albastaspis MacGillivray.

Alecaniochiton Lindinger, 1937, Ent. Jahrb. 46: 178.

An emendation of Alecanochiton Hempel.

Alecaniopsis Lindinger, 1932, Konowia 11: 178; 1937, Ent. Jahrb. 46: 178.

An emendation of Alecanopsis Cockerell.

Alecanium Morrison, 1921, Philippine Jour. Sci. 18: 648.

TYPE-SPECIES: Alecanium hirsutum Morrison, 1921, by original designation and monotypy.

Originally assigned to the Coccidae (str.), this genus has not been restudied for more precise assignment within the family. Alecanochiton Hempel, 1921, Arch. da Esc. Super. Agr. e Med. Vet. [Nictheroy, Rio de Janeiro] 5:144.

TYPE-SPECIES: Alecanochiton marquesi Hempel, 1921, by original designation and monotypy.

This genus was assigned by the author to the Coccidae (str.) without association with any subgroup.

Alecanopsis Cockerell, 1901, *in* Cockerell and Parrott, 1901, Canad. Ent. 33: 58.

TYPE-SPECIES: Lecanopsis filicum Maskell, 1894, by original designation and monotypy.

This genus was originally placed in the Coccidae (str.). Green. 1924b: 41–45, added three new species, but without suggestions as to the possible relationships of the genus to other members of the family.

Alichtensia Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9:451.

TYPE-SPECIES: Lichtensia (?) attenuata Hempel, 1900, by original designation and monotypy.

This genus is known to include at least three species which probably are more or less related to *Ceroplastodes* Cockerell. It was discussed by Lizer, 1942a: 322-324.

Alioides Brimblecombe, 1958, Queensland Jour. Agr. Sci. 15:91.

TYPE-SPECIES: Aspidiotus tuberculatus Laing, 1929, by original designation and monotypy.

The author placed this genus in the Diaspidini. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 356–357, discussed it and commented on the difficulty of a positive tribal placement.

Allantomytilus Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:45 (205)-46 (206).

TYPE-SPECIES: Mytilaspis maideni Maskell, 1897, by monotypy.

This genus may be distinct from relatives such as *Lepidosaphes* Shimer and *Coccomytilus* Leonardi as Ferris, 1936a: 20, 24, concluded, but there has been no recent comparative study of its status.

Allococcus Ezzat and McConnell, 1956, Md. Agr. Expt. Sta. Bul. A-84:13.

TYPE-SPECIES: *Pscudococcus inamabilis* Hambleton, 1935, by original designation.

This genus was established for four species from widely separated localities but all showing relationship to the pseudococcid genus *Planococcus* Ferris.

Allomyrmococcus Takahashi, 1941, Tenthredo 3: 201.

TYPE-SPECIES: Allomyrmococcus acariformis Takahashi, 1941, by original designation and monotypy.

This is an aberrant genus of the Pseudococcidae, which probably associates with some other genera (*Hippeococcus* Reyne) in a distinct group, well isolated from characteristic pseudococcine forms.

Allopulvinaria Brain, 1920, Bul. Ent. Res. 11: 16.

TYPE-SPECIES: Allopulvinaria subterranea Brain, 1920, by original designation and monotypy.

The author's implied relationships (in generic key) were with *Pulvinaria* Targioni-Tozzetti and *Protopulvinaria* Cockerell in the Coccidae (str.).

Allotrionymus Takahashi, 1958, Univ. Osaka (Prefecture) Bul. (ser. B) (1957) 7:4–5.

TYPE-SPECIES: Allotrionymus elongatus Takahashi, 1958, by original designation and monotypy.

According to the describer, this genus is related to *Trionymus* Berg in the Pseudococcidae.

Aloaspis Williams, 1955, Ent. Soc. South. Africa Jour. 18:247.

TYPE-SPECIES: Aloaspis mutica Williams, 1955, by original designation and monotypy.

This was placed by the author in the chionaspiform group of genera, presumably Balachowsky's Diaspidini, Diaspidina, chionaspiform group.

Alrococcus Goux, 1941, Marseille Mus. d'Hist. Nat. Bul. [n.v. (v. 1 ?)] 1:69.

In all subsequent references the author spelled this name *Atrococcus*, and it is our assumption that the latter spelling was his intended choice and that *Atrococcus* is a lapsus.

Ambigaspis MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: *Pseudaonidia lycii* Brain, 1919, by original designation and monotypy.

This genus was placed by MacGillivray in the Aspidiotini in association with *Lattaspidiotus* MacGillivray, *Partargionia* MacGillivray, and others. Recent workers (Balachowsky, 1958b: 269) have accepted it as valid but have placed it in the Diaspidini.

Amelococcus Marchal, 1904, Soc. Ent. de France Ann. 73: 557, 560.

TYPE-SPECIES: Amelococcus alluaudi Marchal, 1904, by original designation and monotypy.

Originally suggested for inclusion in the Eriococcinae, this genus actually is identical with, or very closely related to, the genus *Cerococcus* Comstock in the Asterolecaniidae.

Americoccus MacGillivray, 1921, The Coccidae, p. 78.

TYPE-SPECIES: Matsucoccus fasciculensis Herbert, 1919, by original designation and monotypy.

The type-species of this genus is an obvious *Matsucoccus* Cockerell so the genus lacks standing. *See* Morrison 1928: 48.

7

Ametrochaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: Chionaspis flava Green, 1899, by original designation and monotypy.

Recent authors (Rao, 1949: 59-60) have placed this name as a synonym of *Unaspis* MacGillivray.

- Amonostherium Morrison and Morrison, 1922, U.S. Natl. Mus. Proc. 60, Art. 12 (No. 2407): 48.
 - TYPE-SPECIES: Dactylopius lichtensioides Cockerell, 1897, by original designation and monotypy.

This genus was established for a rather common western U.S. pseudococcid and it possibly can be included in the phenacoccine series of genera.

Amorphococcus Green, 1902, Ent. Monthly Mag. 38: 261.

TYPE-SPECIES: Amorphococcus mesuae Green, 1902, by original designation and monotypy.

This genus was assigned to the Asterolecaniidae by its describer but it has been associated recently by Borchsenius, 1960d: 221, 223, with *Lecaniodiaspis* Signoret and other genera in the Lecaniodiaspididae.

Ampelocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 502.

This was proposed as a uninomial replacement for *Coccus vitis* Linnaeus; hence it is without status from the original publication. Lindinger, 1932f: 199, discussed an "*Ampelocecis vitis* Amy. 1847=? *Phenacoccus aceris*," so the name might have status of sorts from 1932.

Anamaspis Leonardi, 1906, Portici R. Scuola Super. di Agr. Ann. (ser. 2) 6:4, 22.

TYPE-SPECIES : Leucaspis loeui Colvée, 1882, by monotypy.

Some recent workers (Ferris, 1937d: 104, Balachowsky, 1953g: S42) have regarded this name as a synonym of *Leucaspis* Targioni-Tozzetti.

Anamefiorinia Leonardi, 1906, Redia (1905) 3: 17, 48.

TYPE-SPECIES: Fiorinia casuariniae Maskell, 1897, by subsequent designation by MacGillivray, 1921: 372.

Recent workers (Balachowsky, 1953g: 842) have accepted this as a valid genus related to *Fiorinia* Targioni-Tozzetti.

Anaparaputo Borchsenius, 1962, Akad. Nauk SSSR Zool. Inst. Trudy 30: 224.

TYPE-SPECIES: Anaparaputo liui Borchsenius, 1961, by original designation and monotypy.

The describer placed this genus close to *Paraputo* Laing in the Pseudococcidae, Planococcini.

- Anapulvinaria Borchsenius, 1952, Akad. Nauk SSSR Zool. Inst. Trudy 12: 296, 300.
 - TYPE-SPECIES: Pulvinaria pistaciae Bodenheimer, 1926, by original designation and monotypy.

The describer, 1957: 203, assigned this genus to the Coccidae (str.), Coccinae, Pulvinariini.

Anaspidiotus Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 381.

TYPE-SPECIES: Aspidiotus immaculatus Green, 1904, by original designation and monotypy.

The authors placed this genus in the Aspidiotini related to Aspidiotus Bouché.

Anatolaspis Bodenheimer, 1949, The Coccoidea of Turkey, Ankara. Guney Pub. Office No. 670: 29, 39, 101 (in Turkish); 1951, Ent. Ber. 13: 330 (in English).

TYPE-SPECIES: Anatolaspis abidini Bodenheimer, "1941," by original designation and monotypy.

The describer's action in apparently dating the type-species from 1941 is confusing. We have found no evidence that the name appeared in print that year. We accept the appearance of the name plus an adequate illustration of the morphological characteristics of the type-species in 1949 as evidence of its publication in that year, and note that the author, in his 1951 reference, dated the genus from 1949. Balachowsky, 1953g: 827, concluded that the type-species is identical with *Parlatorcopsis longispina* (Newstead), 1911, and that the name *Anatolaspis* is a synonym of *Parlatorcopsis* Lindinger. We concur in this conclusion.

Ancepaspis Ferris, 1920, Canad. Ent. 52:32.

TYPE-SPECIES: Protodiaspis tridentata Ferris, 1919, by original designation.

This was originally described as a peculiar diaspidid genus. Ferris, 1936a: 18, placed it in the Phoenicococcinae, which he accepted as a subfamily of the Diaspididae.

Andaspis MacGillivray, 1921, The Coccidae, p. 275.

TYPE-SPECIES: Mytilaspis flava var. hawaiiensis Maskell, 1894, by original designation.

The species assigned to this genus have been reviewed by Rao and Ferris, 1952 : 17–32.

Anemolus Mahdihassan, 1934, Current Sci. [India] 3:261.

We are uncertain as to the status of this name. Only one species, *indicus*, is mentioned in association with it, and Mahdihassan did not give the author of the specific name. An *indicus* has been published as a nomen nudum in association with *Anomalococcus* Green, first by Fletcher, 1917, Second Ent. Meeting, Pusa, Rpt. of Proc.: 275, then by Ramakrishna Ayyar, 1919: 627, who described the gross appearance of the insect. Our opinion is that this name is a lapsus for *Anomalococcus* Green.

9

Angulaspis "MacGillivray," 1937, Lindinger, Ent. Jahrb. 46: 179.

We find no evidence that MacGillivray proposed this name, and therefore conclude that it is a misspelling of *Augulaspis* MacGillivray.

Anisococcus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 26.

TYPE-SPECIES : Dactylopius crawii Coquillet, 1899, by original designation.

The author assigned six species to this genus. Its indicated relationships were with *Pseudococcus* Westwood, sensus latus.

Annulaspis Ferris, 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-154.

TYPE-SPECIES: Annulaspis polygona Ferris, 1938, by original designation and monotypy.

When he described this genus, the author indicated a relationship with the *Odonaspis* Leonardi group of genera. Balachowsky, 1953g: 728, assigned it to the Rugaspidiotina.

Annulicoccus Morrison, 1945, Wash. Acad. Sci. Jour. 35: 39.

A lapsus for Annulococcus James.

Annulococcus James, 1936, Roy. Ent. Soc., London, Trans. 85: 209.

TYPE-SPECIES: Annulococcus ugandaensis James, 1936, by original designation and monotypy.

According to Morrison, 1945: 40, this genus associates with a group of mealybug genera having *Heterococcus* Ferris as its best known representative.

Anomalococcus Green, 1902, Ent. Monthly Mag. 38:260.

TYPE-SPECIES: Anomalococcus cremastogastri Green, 1902, by original designation and monotypy.

The describer assigned this genus to the Asterolecaniinae. The latest comment on the genus (Borchsenius, 1960d: 221, 223) associated it closely with *Lecaniodiaspis* Signoret.

Anomosterium Gómez-Menor, 1960, Eos 36: 201.

A lapsus for Amonostherium Morrison and Morrison.

Anomostherium Balachowsky, 1932, Encyc. Ent. (ser. A) 15: XXXIX.

A lapsus for Amonostherium Morrison and Morrison.

Anophococcus Balachowsky, 1954, Soc. Ent. de France Bul. 59: 61.

TYPE-SPECIES: Eriococcus inermis Green, 1915, by original designation.

The author included five species in this genus and indicated a close relationship with *Eriococcus* Targioni-Tozzetti. The name appears to be a synonym of *Greenisca* Borchsenius, 1948: 502, since both genera have the same type-species. Anoplaspis Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:47 (207).

TYPE-SPECIES: Mytilaspis metrosideri Maskell, 1880, by monotypy.

Ferris, 1920a: 63-64, reviewed the confusion caused by Leonardi's double use of this name (*see Anoplaspis* Leonardi, 1900) and indicated the necessity to base the genus on *Mytilaspis metrosideri* Maskell. This action seems acceptable under the conditions of Article 16(a)(v) of the 1961 Code. This species was redescribed by Morrison and Morrison, 1922: 109. Balachowsky, 1954e: 171, assigned the genus to his Diaspidina, group II, chionaspiform.

Anoplaspis Leonardi 1900, Riv. di Patol. Veg. 8:344.

TYPE-SPECIES: Aspidiotus (Odonaspis) bambusarum Cockerell, 1898, by original designation and monotypy.

Leonardi unequivocally rejected his 1898 application of this generic name and applied it anew to an entirely different coccid. This new application has been generally rejected, and MacGillivray, 1921, proposed the new generic name *Berlesaspidiotus*, using the same type-species.

- Anotaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-269.
 - TYPE-SPECIES: Anotaspis particula Ferris, 1941, by original designation and monotypy.

The describer placed this genus in the Diaspididae, Diaspidini, without more precise assignment. Balachowsky, 1953g: 842, 1958b: 335, assigned it to his Leucaspidina.

Anothococcus Ferris, 1955, Atlas of the Scale Insects of North America 7:94, 148.

A lapsus for *Anophococcus* Balachowsky. Ferris also mistakenly cited *gouxi* Balachowsky, 1954, as the type-species.

- Antakaspis Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11: 465–466.
 - TYPE-SPECIES: Antakaspis terminalis Mamet, 1959, by original designation and monotypy.

The describer proposed a new tribe, Antakaspidini, in the Diaspididae for the reception of this genus.

Antandroya Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:410-412.

TYPE-SPECIES : Antandroya euphorbiae Mamet, 1959, by original designation. The describer placed this genus in the Coccidae (str.).

Antecerococcus Green, 1901, Linn. Soc. N.S. Wales, Proc. (1900) 25: 560.

TYPE-SPECIES: Antecerococcus punctiferus Green, 1900, by monotypy. 208-496-66-2

Green, 1909a: 305, placed this name as a synonym of *Ceroeoccus* Comstock, 1882. Ferris, 1955a: 31, accepted this placement. Borchsenius, 1960d: 104, however, differentiated between *Cerococcus* Comstock and *Cerococcus* Scott, and associated *Antecerococcus* tentatively in a group with them.

Antonia Signoret, 1872, Soc. Ent. de France Ann. [Bul. Ent.] (ser. 5) 2: xxxvi; 1875, [Bul. Ent.] (ser. 5) 4: ccxx.

TYPE-SPECIES: Antonia purpurea Signoret, 1872, by monotypy.

Signoret's usage of *Antonia* was preoccupied, according to Neave, 1939, Nomen. Zool. I: 235, by use in the Diptera in 1856 and in the Hemiptera in 1864, and was therefore invalid in the Coccoidea. *Sce Antonina* Signoret for other comment.

Antoniella Neave, 1950, Nomen. Zool. V:18.

A misspelling of Antoninclla Kiritschenko.

Antonina Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5: 24.

TYPE-SPECIES: Antonia purpurea Signoret, 1872, by monotypy.

Although no statement to that effect was located, we have assumed that Signoret proposed this name on discovery of the earlier usages of *Antonia* in other groups. The author suggested relationships with *Gossyparia* Signoret, *Capulinia* Signoret, and *Erioeceeus* Targioni-Tozzetti. Today it is well established as an aberrant genus in the Pseudococcidae.

Antoninella Kiritschenko, 1938, Konowia 16:233.

TYPE-SPECIES : Antoninella inaudita Kiritschenko, 1938, by monotypy.

Both the original describer and Borchsenius, 1950b: 173, indicated a relationship to *Rhizoccus* Künckel d'Herculais in the Pseudococcidae for this genus.

Antoninella Šulc, 1944, Seske Zool. Společ. Věst. (1944) 9: 148-149.

TYPE-SPECIES: Antonina sulci Green, 1934, by original designation and monotypy.

This generic name is clearly preoccupied by Antoninella Kiritschenko, 1938. From the incomplete study of casuarinae Maskell, the type-species of Sphaerococcus Maskell, 1892, made by Morrison and Morrison, 1922: 35, it appears that Antonina sulei has some relationship to the Maskell genus, but the evidence currently available is too incomplete to permit placing the Šulc name as a synonym of Sphacroeoecus Maskell.

Antoninoides Ferris, 1953, Atlas of the Scale Insects of North America 6:300.

TYPE-SPECIES: Antonina parrotti Cockerell, in Fernald, 1903b, by original designation and monotypy.

The author indicated close relationships with Antonina Signoret for this genus.

Aoinidomytilus Michelmore, 1955, Uganda Dept. Agr. Ann. Rpt. for 1954:117.

A lapsus for Aonidomytilus Leonardi.

Aonidia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:43; 1869, 11:735.

TYPE-SPECIES: Aonidia purpurea Targioni-Tozzetti, 1868, a name substituted by the author for Aspidiotus lauri Bouché, 1833.

This genus has retained its present concept, although soon after its first publication Signoret, in his early monographic work, made some attempt to associate *Aonidia* with *Coccus aonidum* Linnaeus, 1758. Balachowsky, 1958b: 232, proposed assignment to Aonidina, Aspidiotini, Diaspidinae, Diaspididae.

Aonidiella Berlese and Leonardi, 1895, in Berlese, Riv. di Patol. Veg. (1896) 4:77,83.

TYPE-SPECIES: Aspidiotus aurantii Maskell, 1879, by monotypy.

The authors did not associate this species directly with their new genus when this was described, although the combination was mentioned in a footnote discussing Targioni-Tozzetti's action in assigning the species to his genus *Aonidia*. In recent years this genus has acquired full status as a segregate within the Aspidiotinae. McKenzie reviewed the inclusions in 1938 and added supplementary information in 1942b, 1946, and 1953, covering a total of 22 species. Balachowsky, 1956: 22–49, reviewed the 19 African species of the genus.

Aonidomytilus Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:4, 102.

TYPE-SPECIES: Mytilaspis albus var. concolor Cockerell, 1893, by monotypy.

The describer presented this first as a subgenus (p. 4), later as a genus (p. 102), indicating a relationship with *Mytilaspis* (i.e., *Lepidosaphes* Shimer). Subsequent workers, including Ferris, 1942: SIV-446-448, have accepted the genus as a valid unit and have assigned several species to it. Balachowsky, 1954e: 23, included it in his Lepidosaphedina but listed *maideni* Maskell as the type-species.

Apezococcus Ferris, 1955, Atlas of the Scale Insects of North America 7:78-79.

TYPE-SPECIES: Apezococcus idiastes Ferris, 1955, by original designation and monotypy.

The author placed this genus in his Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 6, agreed.

Apiococcus Hempel, 1900, Rev. Mus. Paulista | Sao Paulo] 4:401.

TYPE-SPECIES: Apiococcus gregarius Hempel, 1900, by original designation.

The author assigned this genus to the Dactylopiinae (of the Fernald Catalogue, 1903b). Ferris, 1957c: 84, placed it in the Eriococcidae, as did Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 6.

Apiomorpha Rübsaamen, 1894, Berlin. Ent. Ztschr. 39: 201, 204.

TYPE-SPECIES: Brachyscelis pileata Schrader, 1863, designated by Lindinger, 1937: 179.

This name was substituted by Rübsaamen for the name *Brachyscelis* Schrader, 1863, which was preoccupied by use in 1834 in the Coleoptera. In spite of the long

14 MISC. PUBLICATION 1015, U.S. DEPT. OF AGRICULTURE

and involved history of this classificatory unit, we have found no type indication prior to that presented in Lindinger's 1937 list of coccid genera. Rübsaamen did not himself refer to *pileata*. Ferris, 1957b: 66, 1957c: 84, assigned the genus to the Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 6, agreed.

Apterococcus Newstead, 1898, Ent. Monthly Mag. 34:97.

TYPE-SPECIES: Ripersia fraxini Newstead, 1891, by monotypy.

It seems reasonably established that this name is a synonym. Lindinger, 1937: 179, and Borchsenius, 1949: 365, concluded that Newstead's species is identical with *Chermes* (?) *fraxini* Kaltenbach, 1860, which Nitsche, 1895: 1249, made the type of his genus *Pseudochermes*. Ferris, 1955a: 178, reviewed the problem of proper association but was unable to arrive at an acceptable conclusion. Later, he, 1957c: 88, tentatively followed Lindinger and Borchsenius in placing it as a synonym of *Pscudochermes*, which he assigned to his Eriococcidae, but raised a question as to the separation of this and *Gymnococcus* Douglas (now *Ovaticoccus* Kloet on account of problem.

Apteronidia Berlese, 1895, Riv. di Patol. Veg. (1896) 4:80.

TYPE-SPECIES: Aonidia blanchardi Targioni-Tozzetti, 1892, by original designation and monotypy.

The author first proposed this genus in a footnote discussion of Targioni-Tozzetti's assignment of certain species to the genus *Aonidia* Targioni-Tozzetti. It has had a varying status as a coccidological unit since its proposal, with most workers placing the name as a synonym of *Parlatoria* Targioni-Tozzetti, 1868. These, among more recent coccid students, include Stickney 1934a, Ferris 1936a, Morrison 1939a, McKenzie 1945, Borchsenius 1950b, and Balachowsky 1953g. In contrast, Lindinger, 1937: 179, recognized the genus as a valid zoological unit and placed several proposed coccid generic names in synonymy under it. Ghauri, 1962: 214, on the basis of his study of adult male diaspidids, suggested the validity of its generic separation from *Parlatoria*, but did not actually make this formal separation.

Araucaricoccus Brimblecombe, 1960, Queensland Jour. Agr. Sci. 17: 183.

TYPE-SPECIES: Araucaricoccus queenslandicus Brimblecombe, 1960, by original designation and monotypy.

The author suggested a relationship to *Matsucoccus* Cockerell in the Margarodidae for this genus.

Archangelskaia Bodenheimer, 1951, Ent. Ber. 13: 331.

TYPE-SPECIES: Parlatoria ephedrae Lindinger, 1911, by original designation and monotypy.

The describer indicated that this genus is related to *Parlatoria* Targioni-Tozzetti. Balachowsky, 1953g: 773, 793, placed the name as a synonym of *Parlatoria*.

Archaspis Bodenheimer, 1943, Iraq. Dir.-Gen. Agr. Bul. 28: 25.

TYPE-SPECIES : Archaspis ephedrac Bodenheimer, 1943, by monotypy.

Since the author of this 1943 genus did not himself definitely fix a typespecies for it, the genus can have no standing under Article 13(b) of the 1961 Code. Otherwise, the genus has the identical foundation for acceptance available for many other coccid genera. The author suggested a relationship to the genus *Conchaspis* Cockerell, but both Balachowsky, 1948b: 257, 259, and Mamet, 1954b: 193, in his monograph of the Conchaspididae, disagreed, considering that the insect is either an aberrant or an immature diaspidine coccid.

Arctorthezia Cockerell, 1902, Entomologist 35:114, 259.

TYPE-SPECIES: Orthezia occidentalis Douglas, 1891, by subsequent designation by the author (p. 259).

Originally set up as a new "section" of the genus *Orthezia* Bose d'Antie, this unit was subsequently raised first to subgeneric, and then to generic standing by Morrison, 1925: 143, 1952: 53, who reviewed it with other orthezid genera and species.

Artemicoccus Balachowsky, 1953, Soc. des Sci. Nat. du Maroc, Bul. 33 (trimest. 3): 147.

TYPE-SPECIES: Centrococcus bispinus Borchsenius, 1949, by original designation.

The author proposed this genus for three species previously assigned to *Centrococcus* Borchsenius, all living on *Artemisia*.

Artemisaspis Borchsenius, 1949, Akad. Nauk SSSR Dok. (n.s.) 64: 735-736.

TYPE-SPECIES: Artemisaspis artemisiae Borchsenius, 1949, by original designation.

The author placed this genus in the Diaspidini, and indicated a close relationship to *Chionaspis* Signoret. Balachowsky, 1953g: 751 (footnote), placed the name in synonymy with *Rhizaspidiotus* MacGillivray, and since *artemisiae* was already included in the latter genus, proposed the new name *Rhizaspidiotus mesasiaticus* for *artemisiae* Borchsenius. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 357, rejected this action and considered *Artemisaspis* a distinct and valid genus.

Arundaspis Borchsenius, 1949, Akad. Nauk SSSR Dok. (n.s.) 64: 735, 737.

TYPE-SPECIES: Arundaspis secreta Borchsenius, 1949, by original designation and monotypy.

The describer placed this genus in the Odonaspidini. Balachowsky, 1951: 650, 670, placed the name in synonymy with *Rhizaspidiotus* MacGillivray in the Aspidiotini, Targionina of his scheme of classification. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 381. rejected this opinion and considered the genus to be distinct and allied to the genera *Aspidiella* Leonardi, *Rhizaspidiotus* MacGillivray, *Remotaspidiotus* MacGillivray and *Eremiaspis* Balachowsky in the Aspidiotini. Lindinger, 1957: 545, indicated that the type-species was identical with *Dycryptaspis* (i.e., *Odonaspis* of authors) secreta (Cockerell), but we believe that his opinion was based on a misunderstanding of the Borchsenius description.

Ascelis Schrader, 1863, Ent. Soc. N.S. Wales Trans. 1:6.

TYPE-SPECIES : Ascelis pracmollis Schrader, 1863, by monotypy.

The describer associated this genus with Apiomorpha Rübsaamen and Opisthoseelis Schrader. Ferris, 1957c: S4. included it in the Eriococcidae, and Hoy, 1963. New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 6. placed it there tentatively.

Asphodelococcus Morrison, 1945, Wash. Acad. Sci. Jour. 35: 41-42.

TYPE-SPECIES: *Ripcrsia asphodcli* Bodenheimer, 1927, by original designation and monotypy.

The indicated assignment for this genus was within the *Heterococcus* Ferris complex of the *Phenacoccus* Cockerell series of genera in the Pseudococcidae.

Asphodeloripersia Bodenheimer, 1953, Istanbul Univ. Facult. des Sci. Rev. (ser. B) 18:164.

We believe that this is a lapsus for *Asphodelococcus* Morrison since the associated figure on page 124 is labeled *Asphodelococcus asphodeli*.

Aspidaspis Ferris, 1938, Microentomology 3: 45; 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-181.

TYPE-SPECIES : Aspidiotus densiflorae Bremner, 1907, by original designation.

The author included five species here and indicated a relationship with *Aspidiotus* Bouché (str.). Balachowsky, 1950b: 545, recognized the genus for the Palearctic area, assigned three species to it, and placed it in the Aspidiotini.

Aspidatus Kirchner, 1856, Lotos 6:218.

A lapsus for Aspidiotus Bouché.

Aspidiatus Breyer, 1862, Soc. Ent. de Belge Ann. 6:97.

A lapsus for Aspidiotus Bouché.

Aspidiella Leonardi, 1898, Riv. di Patol. Veg. (1897) 6: 50 (210), 60 (220).

TYPE-SPECIES: Aspidiotus sacchari Cockerell, 1894, by original designation.

Originally presented as a new subgenus of *Aspidiotus* Bouché, the author included here a collection of aspidiotine forms now widely scattered in several genera. Ferris, 1937c: 50, 53, accepted this as a valid zoological unit. Balachowsky, 1958b: 282–286, accepted the genus for the species *hartii* (Cockerell) and *sacchari* Cockerell.

Aspidioides MacGillivray, 1921, The Coccidae, p. 387.

TYPE-SPECIES: Aspidiotus corokiac Maskell, 1891, by original designation.

Lindinger, 1937: 179, and Ferris, 1937c: 50, both used this spelling, which first appeared in a key on page 387. On subsequent pages (406, 477) in his book, MacGillivray presented the spelling *Aspidoides*, but this presumably is to be rejected because of definite acceptance of the initial spelling. Ferris, 1941e: 42, suggested the possibility that the type-species would assign to the genus *Aspidicila* Leonardi. Borchsenius and Williams. 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 384, considered the resemblance to *Aspidicila* superficial and regarded the genus distinct pending further study of the New Zealand and Australian species. They suggested *Monaonidiella* MacGillivray as its nearest genus.

Aspidioproctus Sasscer, 1912, U.S. Dept. Agr., Bur. Ent., Tech. Ser. 16:83.

A lapsus for Aspidoproctus Newstead.

Aspidiotes Bouché, 1844, Stettin. Ent. Ztg. 5:294.

A lapsus for Aspidiotus Bouché.

Aspidiotus Bouché, 1833, Naturgeschichte der Schädlichen und Nützlichen Garten Insekten: 52; 1834, Naturgeschichte der Insekten, p. 9.

TYPE-SPECIES: Aspidiotus nerii Bouché, 1833, by subsequent designation of Leonardi, 1897: 285.

Ferris, 1941e: 39, reviewed this genus, attempted to list and, where indicated by current ideas, to reassign all species that had ever been placed in the genus. He restricted the inclusions to a comparatively few species. Subsequently he, 1946: 42-44, added supplementary notes to his previous review.

In post-Fernald Catalogue, 1903b, literature involving the type-species of Aspidiotus, this has been presented consistently, except for Ferris, 1941e, as "A. hederae (Vallot)" or as "A. nerii Bouché=A. hederae (Vall.)." So far as we have been able to ascertain, the name "C. hederae Vallot 1829" is a nomenclatorial artifact that did not exist prior to presentation in Signoret, 1868: 513, 856. The name is not presented in Vallot, 1829, where only one scientific name, Coccus mesembryanthemi Vallot, appears, and a search through other volumes of the "Mém, Acad. Dijon" has produced no other paper in which hederae is proposed by Vallot. We know of no recent critical review of the question of the identity of Aspidiotus hederae as described by Signoret, 1869: 122, and Aspidiotus nerii Bouché, as this has been interpreted since its original description. The first hint of synonymy appears to be the suggestion of the possibility by Cockerell, 1894, Insect Life 6: 327, and 1894w: 211. The first flat assignment of nerii in synonymy under hederae appears to have been made by Leonardi, 1898c: 71, where Signoret's "C. hederae Vall." is also converted into Chermes hederae Vallot, 1829. This was accepted in the Fernald Catalogue, 1903b, and apparently universally thereafter, except for Ferris, 1941e: 39, who said, "type nerii which is supposed to be hederae." There are so many references to Aspidiotus hederae in the literature, both as a valid species and as the proper name for the coccid which Bouché called *nerii*—we have records of around 1,000 such citations—that we hesitate to suggest any disruption of the existing stability. However, if priority is to stand as one of the foundation stones of zoological nomenclature, it appears to us that this is one instance in which it is necessary to apply its requirements, and to accept the name *nerii* for the type of *Aspidiotus*.

Aspidistus Cockerell, 1899, New York Ent. Soc. Jour. 6: 258–259.

A lapsus for Aspidiotus Bouché.

Aspidites Berlese and Leonardi, 1896, Riv. di Patol. Veg. 4: 349-350.

TYPE-SPECIES: Aspidiotus rapax Comstock, 1881 (A. camelliae Sign. ?), by original designation.

This name was preoccupied in Reptilia, 1877, and in Mollusca, 1895, according to Neave, 1939, Nomen. Zool. I: 319. Cockerell, 1897 (*in Leonardi*, 1897a),

discovered the Molluscan preoccupation shortly after the presentation of *Aspidites* by Berlese and Leonardi and suggested the name *Hemiberlesia* as a substitute.

Aspiditus Lindinger, 1910, Ztschr. f. Wiss. Insektenbiol. 6: 192.

A lapsus for Aspidiotus Bouché.

Aspidoides MacGillivray, 1921, The Coccidae, pp. 406, 477.

See discussion under Aspidioides MacGillivray.

Aspidonymus Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 283.

TYPE-SPECIES: Aspidonymus woodwardi Brimblecombe, 1957, by original designation and monotypy.

The author suggested relationship with Pseudaonidia Cockerell.

Aspidoproctus Newstead, 1901, London Zool. Soc. Proc. (1900) 62: 948.

TYPE-SPECIES: Walkeriana pertinax Newstead, 1901, by original designation and monotypy.

Newstead's presentation of this name was curiously contradictory. The typespecies was actually presented in *Walkeriana* Signoret. The generic name *Aspidoproctus* was only presented in an appended discussion of the original intent of the author, and was discarded in his final action, which we interpret as presentation in synonymy (1961 Code, Article 11(d)). The generic name *Aspidoproctus* has had long use, however, and was validated in Opinion 268 (1954): 397, of the International Commission on Zoological Nomenclature. For its relationships in the Coccoidea *see* Morrison, 1928: 151.

Aspisarcus "Newport" Walker, 1852, List of the Specimens of Homopterous Insects in the Collection of the British Museum. Pt. 4: 1088.

TYPE-SPECIES: Aspisarcus eucalypti Newport [no date], nomen nudum, by monotypy.

Although presented by Walker as indicated, we have not succeeded in finding earlier references to Newport's proposal of the names, and follow other coccid workers in regarding both genus and species as *nomina nuda*. Fernald Catalogue, 1903b: [330], suggested "A Psyllid ?" but since no description of any sort accompanied the Walker presentation, we do not understand the basis for the suggestion.

Assymetraspis Lindinger, 1937, Ent. Jahrb. 46: 180.

A lapsus for Asymmetraspis MacGillivray.

Asterilecanium Lindinger, 1923, Ent. Jahrb. 32: 146.

A misspelling of Asterolecanium Targioni-Tozzetti.

Asterochiton Maskell, 1879, New Zeal. Inst. Trans. and Proc. (1878) 11:214.

Although described as a coccoid genus, this is reported to be an aleyrodid.

Asterococcus Borchsenius, 1960, Akad. Nauk SSSR Zool. Inst. (n.s. 77) 8:113–115.

TYPE-SPECIES: Asterococcus schimae Borchsenius, 1960, by original designation.

This genus was established for four species, and was placed in close association with *Cerococcus* Comstock.

Asterodiaspis Signoret, 1877, Soc. Ent. de France Ann. [Bul. Ent.] (ser. 5) 6:ccix.

TYPE-SPECIES : *Aonidia ilicicola* Targioni-Tozzetti, 1888, misidentified by Signoret as *Asterolecanium quercicola* (Bouché), 1851. *See* Russell, 1941 : 109, for a report on her examination of Signoret specimens.

Russell, 1941: 4, placed this name as a synonym of *Asterolecanium* Targioni-Tozzetti. Borchsenius, 1950a: 781, 1960d; 174, recognized it as a valid genus and included 17 species in it.

Asterolecanium Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:41; 1869, 11:734.

TYPE-SPECIES: Coccus aureus Boisduval, 1868, by monotypy.

Targioni-Tozzetti presented *aurcus* Boisduval as a synonym of "Asterolecanium aurcum nob." Coccus aurcus Boisduval is at present considered to be a synonym of Lecanium epidendri Bouché, 1844.

Russell, 1941, considered *Asterolecanium* to be a relatively homogeneous genus containing (in 1941) 160 species and varieties. Borchsenius, 1960d: 131, recognized 11 genera in the complex and restricted *Asterolecanium* to 3 species.

Asymmetraspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: Chionaspis distorta Newstead, 1917, by original designation.

The author placed this genus in his Diaspidini in association with several other new genera. Hall, 1946a: 503–504, accepted it as a valid genus.

Atriplicia Cockerell and Rohwer, 1909, Ent. Soc. Wash. Proc. (1908) 10: 169.

TYPE-SPECIES: Atriplicia gallicola Cockerell and Rohwer, 1909, by monotypy.

Neave, 1939, Nomen. Zool. I: 351, credited this genus to Cockerell only, but the original paper indicated that joint authorship existed. Lindinger, 1937: 180, presented a thoroughly confusing "*Atriplicia* Cockerell 1893." Ferris, 1955a : 94, placed the name in synonymy under *Eriococcus* Targioni-Tozzetti, but at the same time presented distinctive, descriptive information of a sort that has been used by some workers for generic recognition. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150 : 6, restored the genus to full value.

Atrococcus Goux, 1941, Mus. d'Hist. Nat. Marseille Bul. [n.v. (v. 1?)] (1):69.

TYPE-SPECIES: Atrococcus melanovirens Goux, 1941, by original designation.

The author first established this as a subgenus of *Pseudococcus* Westwood, but later in the same paper treated it as a genus. Williams, 1962: S. accepted the genus for three British species and noted that North American *Spilococcus* **Ferris**, 1950, and *Chorizoccus* McKenzie, 1960, show a close relationship to it.

20 MISC. PUBLICATION 1015, U.S. DEPT. OF AGRICULTURE

Augulaspis MacGillivray, 1921, The Coccidae, pp. 309, 353.

TYPE-SPECIES: Chionaspis nudata Newstead, 1911, by original designation and monotypy.

The author placed this genus in his Diaspidini in association with *Phenacaspis* Cooley and Cockerell and related genera. Hall, 1946a: 504, used it as valid in his discussion of African diaspidine coccids.

Aulacaspis Cockerell, 1893, Inst. Jamaica Jour. 1: 180.

TYPE-SPECIES: Aspidiotus rosac Bouché, 1834, by restriction by Newstead, 1901b: 168, through his transfer of boisduvalii Signoret, 1869, and bromeliae (Kerner), 1778, originally included by Cockerell, from Aulacaspis back into Diaspis.

Scott, 1952: 33-60, reviewed this genus and indicated proper retentions in it and disposal of species not correctly assigned. Balachowsky, 1954e: 163, placed it in his Diaspidina, diaspiform.

Aulacispis King, 1902, Psyche 9: 401.

A lapsus for Aulacaspis Cockerell.

- Auloicerya Morrison, 1923, *in* Morrison and Morrison, 1923, U.S. Natl. Mus. Proc. 62, Art. 17 (No. 2463): 22.
 - TYPE-SPECIES: Icerya rosae var. australis Maskell, 1894, by original designation.

Morrison, 1928: 211, placed this genus in the Iceryini, Monophlebinae, Margarodidae.

Aulycerya Castel-Branco, 1952, Estudos de Zool. An. 7:23.

A lapsus for Auloicerya Morrison.

Aumyrmococcus Gonzales Mendoza and Valenzuela, 1955, Agricultura Tropical 11: 593.

A lapsus for Eumyrmococcus Silvestri.

Austrolichtensia Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9: 451.

TYPE-SPECIES: Lecaniodiaspis (?) hakcarum Fuller, 1897, by original designation. Later, Fuller, 1899: 457, presented this same species as "Lichtensia hakcarum n. sp.," and Cockerell cited this combination as type of his new genus.

Cockerell made no suggestion regarding the probable relationships of this genus beyond placement in the "Lecaniinae." The Fernald Catalogue, 1903b: 142, associated it with the coccid genera that are completely enclosed by a secreted sac.

Austromaskellia Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 206–207.

TYPE-SPECIES: Maskellia globosa Fuller, 1897, by substitution of Austromaskellia for Maskellia Fuller.

This substitute for Maskellia Fuller, 1897, was proposed by Lindinger as a result of his discovery that the combination Maskellia zonata "Green" had appeared in print (as a host of hymenopterous parasites) in a paper published by Howard and Ashmead, 1896, U.S. Natl. Mus. Proc. 18: 639. The name also appeared in Dalle Torre, Catalogus Hymenopterorum (1898) 5: 266, and elsewhere in literature on parasitic Hymenoptera. Lindinger assumed, perhaps correctly, that this host species was the one finally described as Antonina zonata Green, 1919a: 175, but the picture appears to be considerably confused by the fact that the pinned parasite specimens discussed by Howard and Ashmead (now present in the U.S. National Museum collections) have attached to the pins the name *Pseudococcus zonatus* for the host. We can provide no explanation for this discrepancy. We do not find in the 1961 Nomenclature Code any requirement for the permanent rejection of nomina nuda, of which Maskellia zonata as presented by Howard and Ashmead, 1896, certainly is an example, and therefore can see no basis for the rejection of Maskellia Fuller, 1897-a genus that stood undisturbed for 46 years.

Austrotachardia Chamberlin, 1923, Bul. Ent. Res. 14: 194.

TYPE-SPECIES: Tachardia angulata Froggatt, 1911 (orthotype), by original designation.

Originally placed only in the Tachardiinae by its describer, this genus was assigned to the Austrotachardiini by the author, 1925: 40, and to the same by Kapur, 1958: [9]. Balachowsky, 1950: 9, assigned it to "Austrotachardinina Chamberlin."

Austrotachardiella Chamberlin, 1923, Bul. Ent. Res. 14: 174, 187.

TYPE-SPECIES: *Tachardia rotundata* Cockerell and Cockerell, 1903 (orthotype), by original designation.

Balachowsky, 1950: 9, assigned this genus to the Lacciferinina, Lacciferini. Kapur, 1958: [9], assigned it to the Lacciferini.

Baccacoccus Brain, 1920, Bul. Ent. Res. 10: 127.

TYPE-SPECIES: Baccacoccus elytropappi Brain, 1920, by original designation and monotypy.

The author placed this genus as "allied to the Lecaniinae."

Bacococcus Lindinger, 1937, Ent. Jahrb. 46: 180.

An emendation of *Baccacoccus* Brain, which is not here accepted.

Bakeraspis MacGillivray, 1921, The Coccidae, p. 395.

TYPE-SPECIES: Odonaspis schizostachyi Cockerell and Robinson, 1914, by original designation and monotypy.

Ferris 1937a: 33, 1938a: SII-161, and Balachowsky 1953g: 729, placed this name as a synonym of *Odonaspis* Leonardi.

Balachowskiella Kaussari, 1955, Rev. de Path. Veg. et d'Ent. Agr. de France 34: 229.

TYPE-SPECIES: Balachowskiella salvadorae Kaussari, 1956, by original designation and monotypy.

The author assigned this genus to the Diaspidinae, Diaspidini.

21

Balachowskya Gómez-Menor, 1956, Portici R. Scuola Super. di Agr., Lab. Zool. Gen. e Agr. Bol. 33: 615.

TYPE-SPECIES: Balachowskya hispanica Gómez-Menor, 1956, by original designation and monotypy.

The author assigned this genus as close to *Rhodania* Goux in the Pseudococcinae. The name was preoccupied by *Balachowskya* Peyerimhoff, 1928, in the Coleoptera.

Balanococcus Williams, 1962, Brit. Mus. (Nat. Hist.) Ent. Bul. 12: 13, 15.

TYPE-SPECIES: Ripersia scirpi Green, 1921, by original designation.

The author placed this mealybug genus as closest to *Kiritshenkella* Borchsenius.

Balaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 505-506.

TYPE-SPECIES: Balaspis faurei Hall, 1946, by original designation and monotypy.

Balachowsky, 1954e: 172, placed this genus in the Diaspidinae, Diaspidina, group II, chionaspiform.

Bambusaspis Cockerell, 1902, Entomologist 35:114.

TYPE-SPECIES: Chermes miliaris Boisduval, 1869, by subsequent designation of Sanders, 1906: 3.

Russell, 1941: 4, placed this name as a synonym of *Asterolecanium* Targioni-Tozzetti. Borchsenius, 1950a: 781, accepted the name as standing for a valid genus.

Bantuaspis Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci.: 213.

A lapsus for *Bantudiaspis* Hall. This spelling was also used by Lindinger, 1957: 547.

Bantudiaspis Hall, 1941, Ent. Soc. South. Africa Jour. 4: 225-226.

TYPE-SPECIES: Howardia loranthi Hall, 1928, by original designation.

The describer, 1946a: 506, associated this genus with *Asymmetraspis* Mac-Gillivray in his review of Ethiopian Diaspidini. Balachowsky, 1954e: 213, under the spelling *Bantuaspis*, suggested a close relationship to *Furchadaspis* MacGillivray.

Beesonia Green, 1926, Bul. Ent. Res. 17: 55.

TYPE-SPECIES : *Becsonia dipterocarpi* Green, 1926, by original designation and monotypy.

Ferris, 1950: 5, considered this genus unusual and established a new family, the Beesonidae, for it. Later he, 1957b: 66, maintained the family status for the genus but amended the name to Beesonidae.

- Benaparlatoria Balachowsky, 1953, Rev. de Path. Veg. et d'Ent. Agr. de France 32: [19]-20.
 - TYPE-SPECIES: Benaparlatoria moityi Balachowsky, 1953, by original designation and monotypy.

The author assigned this genus to his Parlatorina.

Bergrothia Kraatz, 1888, Deut. Ent. Ztschr. 32: 360.

TYPE-SPECIES: Westwoodia perrisii Signoret, 1875, by substitution of Bergrothia for Signoretia Kraatz.

This name was proposed as a substitute for *Signoretia* Kraatz, 1888, preoccupied in Hemiptera by use of Stål, 1860. *Bergrothia* Kraatz was itself preoccupied in the Coleoptera by use of Reitter, 1884. This zoological unit is currently placed under *Trionymus* Berg.

Bergrothiella Reitter, 1898, Wien. Ent. Ztg. 17: 54.

TYPE-SPECIES: Westwoodia perrisii Signoret, 1875, by substitution of Bergrothiella for Bergrothia Kraatz.

This name was proposed to replace the preoccupied name *Bergrothia* Kraatz, 1888, although it had been proposed, also by Reitter, 1897, Wien. Ent. Ztg. 16: 241, as an erroneous replacement for *Bergrothia* Reitter, 1884, in the Coleoptera. *Bergrothiella* currently is placed as a synonym of *Trionymus* Berg, 1899.

Bergrothula Strand, 1928, Arch. f. Naturgesch. (Abt. A.h. 8 for 1926) 92:47.

TYPE-SPECIES: Westwoodia perrisii Signoret, 1875, by substitution of Bergrothula for Bergrothiella Reitter.

Strand proposed this name as a replacement for *Bergrothiella* Reitter, 1898, noting that he referred to its application in the Coccoidea, and apparently unaware of the 1899 proposal of the name *Trionymus* by Berg, for this unit. This name currently is placed as a synonym of *Trionymus*.

Berlesaspidiotus MacGillivray, 1921, The Coccidae, p. 389.

TYPE-SPECIES: Aspidiotus (Odonaspis) bambusarum Cockerell, 1898, by original designation and monotypy.

Recent coccid workers place this name as a synonym of Froggattiella Leonardi

Berlesaspis MacGillivray, 1921, The Coccidae, p. 274.

TYPE-SPECIES : Mytilaspis spinifera Maskell, 1894, by original designation.

Balachowsky, 1954e: 23, placed this genus in his Lepidosaphedina, Diaspidini.

Berleseaspis Lindinger, 1937, Ent. Jahrb. 46: 180, 196.

An emendation of Berlesaspis MacGillivray which is not here accepted.

Bernardia Ashmead, 1891, Amer. Ent. Soc. Trans. 18:100.

TYPE-SPECIES: Chermes oleae Bernard, of authors, by subsequent designation. apparently by correspondence; see Marlatt, 1891, Insect Life 4: 150-151.

This genus was proposed in a key to coccid genera, but without any included species. *Bernardia* is currently accepted as a synonym of *Saissetia* Déplanche, 1859.

Bigymnaspis Balachowsky, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n.s.) Sci. Zool. 4:342.

TYPE-SPECIES: *Gymnaspis bilobis* Green and Laing, 1923, by original designation and monotypy.

This genus was placed by its author in his Parlatorini, Gymnaspidina, related to *Gymnaspis* Newstead.

Birchippia Green, 1900, Ann. and Mag. Nat. Hist. (ser. 7) 6:450.

TYPE-SPECIES: Birchippia anomala Green, 1900, by original designation and monotypy.

Green, 1901a: 294, concluded that this name was actually a synonym of *Lecaniodiaspis* Targioni-Tozzetti. The Fernald Catalogue, 1903b: 59, accepted it as valid. Borchsenius, 1959a: 841, 1960d: 223, included it in his *Lecaniodiaspididac* and suggested the need to restudy the question of its validity.

Bodenheimera Bodenheimer, 1953, Istanbul Univ. Facult. des Sci. Rev. (ser. B) 18:131.

TYPE-SPECIES: Lecanium (Eulecanium) racheli Bodenheimer, 1924, by monotypy.

This name, suggested by Green in lit., first appeared in print in the Bodenheimer list of Palearctic Coccidae, 1935: 240, 251. We consider that Bodenheimer gave the genus status by his inclusion of the name in his key to the Turkish genera of a mealybug subfamily, the Antoninae, even though his generic characterization was not critically definitive. He described the type-species in considerable detail in this paper. We cannot agree with his assignment after an examination of specimens of the species which Dr. Bodenheimer kindly presented to the U.S. National Collection of Coccoidea, but we are not able to suggest a proper assignment for the species from the material available to us. We believe that its placement can result only from a critical study of fresh material in all stages. Lindinger, 1957: 547, claimed that the type-species is identical to *Lccanium coryli* (L.), but we do not think that this can be possible.

Boisduvalia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5: 338.

We have found no evidence of type fixation for this genus as established in the Coccoidea. Signoret, 1822: clvii, noted that he had previously used *Boisduvalia* for what is currently known as *Cerataphis* Lichtenstein, an aphid genus, and immediately replaced it, for the Coccoidea, with the name *Oudablis* with the same included species. In addition, the name was already preoccupied by use in the Diptera where it had been established in 1830. For information on the zoological status of the unit represented by this name, *scc* under *Oudablis*.

Boisduvalis Šulc, 1944, Acta Soc. Sci. Nat. Morav. 16 (11): 49.

A lapsus for Boisduralia Signoret.

Borchseniaspis Zahradnik, 1959, Acta Faun. Ent. Mus. Nat. Pragae 5:65.

TYPE-SPECIES: Aspidiotus palmae "Morgan and Cockerell" [actually Cockerell only], 1893, by original designation and monotypy.

The relationships, according to the describer, are with *Hemiberlesia* Cockerell and *Abgrallaspis* Balachowsky.

Boreococcus Danzig, 1960, Ent. Obozr. 39:172.

TYPE-SPECIES: Boreococcus ingricus Danzig, 1960, by original designation and monotypy.

The author suggested a relatively close relationship to *Annulococcus* James, an African genus of the Pseudococcidae, for this genus.

Bouhelia Balachowsky, 1938, Soc. Ent. de France Bul. 43: 37.

TYPE-SPECIES: Bouhelia maroceana Balachowsky, 1938, by original designation and monotypy.

This genus was placed in the Eriococcinae at the time of its description, but was later placed in the Pseudococcini by Balachowsky, 1948b: 253. It belongs in the phenacoccine series of the Pseudococcidae.

Brachiomorpha Ferris, 1957, Microentomology 22:66.

From the usage, this seems to be a lapsus for Apiomorpha Rübsaamen.

Brachyscelis Schrader, 1863, Ent. Soc. N.S. Wales Trans. 1:2, 6.

Brachyscelis was preoccupied by usage in the Coleoptera in 1834, and was replaced by Apiomorpha Riibsaamen, 1894.

Brainaspis MacGillivray, 1921, The Coccidae, pp. 390, 427.

TYPE-SPECIES: Aspidiotus kellyi Brain, 1918, by original designation and monotypy.

MacGillivray placed this genus in his Aspidiotini. Ferris, 1938b: 65, after examination of a type specimen of *kellyi*, concluded that the name was a synonym of *Temnaspidiotus* MacGillivray, and he, 1952a: 8, reiterated this stand when he described a new species of *Temnaspidiotus*. Balachowsky, 1956: 132, however, speculated on the probability that *kellyi* and Ferris' 1952 new species should stand together as distinct from *Temnaspidiotus*, but took no definite action to revise *Brainaspis*.

Brevennia Goux, 1940, Soc. d'Hist. Nat. l'Afrique du Nord, Bul. 31: 58.

TYPE-SPECIES: Brevennia tetrapora Goux, 1940, by original designation and monotypy.

The describer erected this as a subgenus of *Ripersia* Signoret. Borchsenius, 1949: 270, accepted it as a valid genus and placed it in the phenacoccine series of the Pseudococcidae.

Brevicoccus Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17:10.

TYPE-SPECIES: Brevicoccus clavisetosus Hambleton, 1946, by original designation and monotypy.

The describer placed this genus in the rhizococcine series of the Pseudococcidae.

Caelostoma Maskell, 1884, New Zeal. Inst. Trans. and Proc. (1883) 16: 141.

From the context we believe this to be a printer's error for *Coelostoma* Maskell. In any circumstance the name is preoccupied by Agassiz's use of it in 1846 as a

25

replacement for *Coclostoma* Brullé. 1835. Lindinger. 1937: 181. charged Cockrell with the use of this misspelling.

Caia Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 15: 26.

TYPE-SPECIES: Caia quernea Williams, 1963, by original designation and monotypy.

The author referred this genus to the *Lepidosaphes* Shimer series of the Diaspidini with close affinities with *Andaspis* MacGillivray.

Calicoccus Balachowsky, 1959, Rev. Acad. Colombiana 10:339.

TYPE-SPECIES: Calicoccus guazumae Balachowsky, 1959, by original designation and monotypy.

The describer placed this genus in the Pseudococcidae, related to *Hypogeococcus* Rau.

Calimmata O. G. Costa, 1835,⁴ Fauna del Regno di Napoli, Famiglia de Coccinigliferi, o de Gallinsetti. Emitteri Napoli, p. 2.

Costa used this particular spelling in a footnote on page 2 for the segregate from the genus *Coccus* sens. lat. which he had called *Calymmata* in 1828: later in the paper, p. S, he substituted still another name. *Calypticus*, for *Calimmata*. We have found no evidence that *Calimmata* has ever had standing in the Coccoidea, although Westwood, 1840: 447, did discuss a Costa genus under this name.

Caliptici O. G. Costa, 1835,⁵ Fauna del Regno di Napoli, Famiglia de' Coccinigliferi, o de' Gallinsetti. Emitteri Napoli, p. 2.

Costa used this spelling for an italicized name, which was one "of three distinct genera" into which he divided *Coccus* Linnaeus, sens. lat. We have found no evidence that it ever acquired status in the Coccoidea.

Callipalpus "Sign. 1875," Lindinger, 1937, Ent. Jahrb. 46: 181.

In spite of diligent search through all the Signoret coccid papers known to us, we have failed to verify this spelling for a coccid generic name. Lindinger stated, "=Callipappus Guér."

⁵ See foootnote on Calimmata Costa.

⁴ This paper shows no date or other evidence of actual time of issue, and coccid workers and bibliographers from Agassiz and Hagen through Neave, including Sherborn, and Horn and Schenkling, are vague or arbitrary on the probable date of issue. Lindinger, 1943c: 248, after having earlier (1937: 183) accepted an 1835 date for the work, reported that Guérin-Méneville, 1844: 379, gave the date of publication for this Costa paper as 1829, and, indeed, Guérin-Méneville did state unequivocally that this was the publication date and that it considerably preceded the Burmeister 1835 Haudbuch. Because of the appearance in 1828 of his paper (Costa 1828a) dividing the genus Coccus, there is a degree of plausibility in an assumption that Costa did proceed immediately thereafter to complete and publish his paper on the coccid fauna of the Naples region. However, the acceptance of a later date, usually 1835, has become so firmly fixed in coccid literature, and the Guérin-Méneville allegation remains so completely without substantiation, in spite of much careful digging for evidence, that we have arbitrarily accepted the year 1835 as the date to be associated with the Costa "Fauna" names.

Callipappus Guérin-Méneville, 1841, Rev. Zool. 4:129.

TYPE-SPECIES: Callipappus westwoodi Guérin-Méneville, 1841, by monotypy.

This genus has had a long association with the margarodine series of genera. *See* Morrison, 1928: 82, for a discussion of its relationships.

Callipapput "Guérin," Perroud and Montrousier, 1864, Soc. Linn. de Lyon, Ann. (n.s.) 11:247.

A lapsus for Callipappus Guérin-Méneville.

Callococcus Ferris, 1918, Canad. Ent. 50: 328.

TYPE-SPECIES: Sphaerococcus pulchellus Maskell, 1897, by original designation and monotypy.

Its describer assigned this genus to the Asterolecaniidae. Morrison and Morrison, 1927: 10, presented detailed descriptive information on three included species. Borchsenius, 1960d: 92, 128, discussed the genus and tentatively suggested its inclusion in his Polliniini.

Callypticus Signoret, 1869, Soc. Ent. de France Ann. (1868) (ser. 4) 8:858.

Presented in combination with a Costa species name as "Callypticus aterrimus," this spelling is an evident lapsus for Calypticus Costa. It has never attained acceptance in coccid literature.

Calycicoccus Brain, 1918, Bul. Ent. Res. 9:11.

TYPE-SPECIES: Calycicoccus merwei Brain, 1918, by original designation and monotypy.

The describer set up a new subfamily, the Calycicoccinae, for this genus. Ferris. 1957b: 64, suggested that it should be assigned to the Eriococcidae along with certain other unusual genera. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 7, placed it in the Eriococcidae.

Calycococcus "Brain 1918," Lindinger, 1937, Ent. Jahrb. 46:181.

An emendation of Calycicoccus Brain, not here accepted.

Calymmata O. G. Costa, 1828, Prospetto di una nuova divisione metodica del genere Coccus, Lin. Lam. ec. Napoli, Dalla Tipografia Trani, pp. 6-7.

TYPE-SPECIES: Coccus hesperidum Linnaesus, 1758, by subsequent indication of Cockerell, 1929b: 150, through his selection of this species as type for Calymmatus Costa, 1840, and Calypticus Costa, 1835, which are themselves Costa emendations of Calymmata, 1828.

This name is recognized as a synonym of *Coccus* Linnaeus in the currently accepted sense.

208-496-66-3

Calymmatus O. G. Costa, 1840, Atti del real Ist. d'Incoragg. alle sci. nat. di Napoli 6:50.

TYPE-SPECIES: Coccus hesperidum Linnaeus, 1758, by subsequent designation of Cockerell, 1929b: 150.

This usage occurs only in the explanation for the figures at the end of the paper as "Calymmatus hesperidum." Earlier in the body of the paper the reference is to Calypticus hesperidum. We assume that Calymmatus is a lapsus. The name is placed in synonymy under Coccus Linnaeus, 1758. Lindinger, 1937: 181, credited this name to Costa, 1835, but we cannot confirm this date.

Calymnatus "Costa" Signoret, 1868, Soc. Ent. de France Ann. (ser. 4) 8:511; 1869 (ser. 4) 8:856.

TYPE-SPECIES: Coccus hesperidum Linnaeus, 1758, by subsequent indication of Cockerell, 1929b: 150, through his designation of this species as type for Calymmatus and Calypticus Costa.

Since Signoret (p. 511) discussed this name in relation to "Costa (1827)" it seems evident that it is a lapsus or an unannounced emendation of the original *Calymmata* Costa, 1828. Neave, 1939, Nomen. Zool. I: 554, listed it as "pro Calymma- Costa 1840," but the initial Signoret reference to "Costa 1827" seems to indicate clearly that *Calymmata* Costa, 1828, is involved. This and all other variations in the spelling of the Costa name are currently placed in synonymy under *Coccus* Linnaeus.

Calypticus O. G. Costa, 1835, Fauna del Regno di Napoli, Famiglia de' Coccinigliferi, o de' Gallinsetti. Emitteri Napoli, p. 8.

TYPE-SPECIES: Coccus hesperidum Linnaeus, 1758, by subsequent designation of Fernald, 1902: 178; also by Cockerell, 1929b: 150.

This generic name was proposed by Costa as a substitute for his *Calymmata*, 1828, on the grounds that it was more exact. It is generally accepted to be a synonym of *Coccus* Linnaeus.

Calyptococcus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 61: 956.

TYPE-SPECIES: Calyptococcus desertus Borchsenius, 1948, by original designation and monotypy.

The describer associated this genus with *Coccura* Šulc, *Centrococcus* Borchsenius and *Mediococcus* Kiritschenko in his Coccurini, Pseudococcidae.

Camptocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 503.

This name was proposed as a uninomial designation for a coccid species and so has no status as we understand the 1961 Nomenclature Code. According to Fernald, 1903b: 64, the species involved here is *Kermes quercus* (Linnaeus).

Canaspis MacGillivray, 1921, The Coccidae, pp. 308, 352.

TYPE-SPECIES: Chionaspis arundinariae Green, 1899, by original designation and monotypy.

The describer placed this genus in his Diaspidini. Lindinger, 1943b: 208, apparently accepted it as valid. Ferris, 1937a: 3, accepted it as distinct from

Chionaspis Signoret but later, 1952a: 6, placed it in synonymy with Greenaspis MacGillivray, 1921, first on the alleged grounds that the two genera have the same originally designated type-species, Chionaspis elongata Green, 1896, which is not true; later, on the basis that he had examined authentic material of the types of both genera and that he considered them to be congeneric, which probably is correct. As Ferris pointed out, Greenaspis has page priority. Balachowsky, 1954e: 171–172, assigned both genera to his Diaspidina, group II, chionaspiform, apparently without recognition of Ferris' previous conclusion regarding their identity. He also suggested that Greenaspis MacGillivray has a relationship to Pinnaspis Cockerell.

Canceraspis Hempel, 1934, Rev. d Ent. [Sao Paulo] 4: 141.

TYPE-SPECIES: Canceraspis brasiliensis Hempel, 1934, by original designation and monotypy.

Lepage, 1938: 432, synonymized this generic name with *Limacoccus* Bondar, 1929: 59, and placed *brasiliensis* in *Limacoccus*. Hempel proposed the subfamily name *Canceraspidinae* for *Canceraspis* although Lepage, 1938: 432, placed this genus in the Phoenicococcidae.

Cannococcus Borchsenius, 1960, Ent. Obozr. 39: 932.

TYPE-SPECIES : Cannococcus cannicola Borchsenius, 1960, by original designation and monotypy.

Borchsenius placed this genus in the Pseudococcidae close to his *Kiritshenkella* and *Neotrionymus*.

Capulinia Signoret, 1875, Soc. Ent. de France Ann. [Bul. Ent.] (ser. 5) 4: ccxx; 1875, Soc. Ent. de France Ann. (ser. 5) 5: 27.

TYPE-SPECIES: Capulinia sallei Signoret, 1875, by monotypy.

Its describer suggested that this genus associates with a group which he called the Acanthococcites. Cockerell, 1899m: 277, placed the genus in his Eriococcini. MacGillivray, 1921: 210, assigned it to Cylindrococcinae, as did Balachowsky, 1948b: 257. Ferris, 1955a: 224, 1957b, 66–67, after a study of the type-species, concluded that the genus cannot be placed comfortably in any accepted higher unit of coccid classification although he did suggest a possible relationship to the Australian genus *Opisthoscelis* Schrader. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 7, referred this genus to the Eriococcidae.

Cardiococcus Cockerell, 1903, Ann. and Mag. Nat. Hist. (ser. 7) 11: 155.

TYPE-SPECIES: Cardiococcus umbonatus Cockerell, 1903, by original designation.

The describer suggested a relationship with *Inglisia* Maskell in the Coccidae (str.).

Carpochloroides Cockerell, 1899, Entomologist 32:12.

TYPE-SPECIES : Carpochloroides viridis Cockerell, 1899, by monotypy.

The describer suggested a relationship with *Capulinia* Signoret and *Cylindrococcus* Maskell for this genus. Ferris, 1957c: 84, considered that it belonged in the Eriococcidae and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 7, agreed. Carteria Signoret, 1874, Soc. Ent. de France Ann. (ser. 5) 4:101.

TYPE-SPECIES: Coccus lacca Kerr, 1782, by original designation and monotypy.

This name. preoccupied in the Protozoa, 1866, and the Spongifera, 1867, was replaced by *Tachardia* R. Blanchard, 1886. *See Laccifer* Oken and *Kerria* Targioni-Tozzetti for details on this complex situation.

Carulaspis MacGillivray, 1921, The Coccidae, pp. 305, 313.

TYPE-SPECIES : Diaspis juniperi Bouché, 1851, by original designation.

This genus has been recognized in recent years as a valid segregate. Recent studies (Baccetti, 1960, Goidanich, 1960) have firmly established its validity in the Diaspidini. Balachowsky, 1954e: 165, mistakenly indicated the type-species for the genus as *Coccus visci* Schrank, 1781.

Casuarinaloma Froggatt, 1933, Linn. Soc. N.S. Wales, Proc. 58: 368.

TYPE-SPECIES : Sphaerococcus leaii Fuller, 1897, by monotypy.

The describer gave no indication as to the group assignment for this genus. Borchsenius, 1949: 44, implied an association with the Pseudococcidae in his listing of the genus as a member of the Australian fauna.

Casuarinoloma "Frogg. 1933," Lindinger, 1937, Ent. Jahrb. 46: 181. An emendation of *Casuarinaloma* Froggatt, not accepted here.

Cataenococcus Ferris, 1955, Microentomology 20:3.

TYPE-SPECIES: Dactylopius olivaceus Cockerell, 1896, by original designation.

Ferris established this genus for four species of North American mealybugs and indicated its relationship to the pseudococcid genus *Farinococcus* Morrison, described from South America.

Catenococcus Ferris, 1955, Microentomology 20: fig. 5.

A lapsus for Cataenococcus Ferris, that was repeated by McKenzie, 1960: 691.

Caulococcus Borchsenius, 1960, Akad. Nauk Tadzh. SSR Dok. 3: 47.

TYPE-SPECIES: *Phenacoccus angustatus* Borchsenius, 1949, by original designation.

The describer discussed the relationship of this pseudococcid genus with *Ferrisicoccus* Ezzat & McConnell and *Heterococcopsis* Borchsenius.

Ccrococcus Ramakrishna Ayyar, 1919, Bombay Nat. Hist. Soc. Jour. 26: 627.

A lapsus for Cerococcus Comstock.

Cecolepis Amyot, 1847, Soc. Ent. de France (ser. 2) 5:503.

This is a uninomial designation intended to replace a generic and specific name. Although listed in Neave, 1939, Nomen. Zool. I: 614, according to the 1961 Code it has no validity as a generic name. From the literature citations presented by Amyot we conclude that this probably relates to the species now known as *Lepidosaphes ulmi* (Linnaeus). Centrococcus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 61: 953.

TYPE-SPECIES: *Echinococcus echinatus* Balachowsky, 1936, by substitution of *Centrococcus* for *Echinococcus* Balachowsky, and, 1949: 307, confirmed by definite designation as type-species.

The author presented this name as a replacement for *Echinococcus* Balachowsky, 1936, preoccupied, and placed it and three other mealybug genera, *Coccura* Šule, *Mediococcus* Kiritshenko, and *Calyptococcus* Borchsenius in a new tribe, the Coccurini. Lindinger, 1943b: 218, proposed *Coccidohystrix* as a replacement for *Echinococcus*, and *Centrococcus* must fall into synonymy with *Coccidohystrix*.

Cephalaspis MacGillivray, 1921, The Coccidae, pp. 274, 286.

TYPE-SPECIES: Mytilaspis cocculi Green, 1896, by original designation and monotypy.

According to Neave, 1939, Nomen. Zool. I: 625, this generic name was preoccupied through use by Agassiz in 1835 in Pisces. Takahashi, 1939b: 265, and Balachowsky, 1954e: 28, placed this name as a synonym of *Lepidosaphes* Shimer.

Cercococcus Scott, 1907, Linn. Soc. London, Trans. Zool. (ser. 2) 9: 455.

TYPE-SPECIES: Cercococcus eremobius Scott, 1907, by monotypy.

The describer associated this genus with *Asterolecanium* Targioni-Tozzetti in the Dactylopiinae. Subsequent consideration has generally assigned the name as a synonym of *Cerococcus* Comstock, 1882. Borchsenius, 1960d: 105, accepted the genus as valid with two definite, and nine suggested, Palearctic inclusions.

Ceriococcus Mahdihassan, 1946, Current Sci. [India] 15:197.

A lapsus for Coricoccus Mahdihassan.

Cerococcus Comstock, 1882, U.S. Dept. Agr., Comnr. Agr. Rpt., 1881– 1882: 213.

TYPE-SPECIES : Cerococcus quercus Comstock, 1882, by monotypy.

This genus is currently well established as a member of the Asterolecaniidae.

Ceronema Maskell, 1895, New Zeal. Inst. Trans. and Proc. (1894) 27:55.

TYPE-SPECIES : Ceronema banksiae Maskell, 1895, by monotypy.

The type-species of this genus was redescribed in detail by Morrison and Morrison, 1922: 60. The Fernald Catalogue, 1903b: 127, associated the genus rather closely with *Pulvinaria* Targioni-Tozzetti, but there seems to have been no recent discussion of its associations within the Coccidae (str.).

Ceronesera Watt and Mann, 1903, Pests and Blights of the Tea Plant, Ed. 2, p. 310.

From the usage, this appears to be a lapsus for Ceronema Maskell.

Ceronina Kuwana, 1917, A Check List of the Japanese Coccidae, p. 8. A lapsus for *Ceronema* Maskell.

Ceroplasses Sankaran, 1954, Jour. Sci. Res. Benares Hindu Univ. 5: 100.

A lapsus for Ceroplastes Gray.

Ceroplastes Gray, 1828, Spicilegia Zoologica, pt. I, p. 7.

TYPE-SPECIES: Coccus (Ceroplastcs) chilcnsis Gray, 1827, by subsequent designation of Fernald, 1903b: 147 (the first we have found).

This is a well known, widely distributed genus of the Coccidae (str.) which probably will be divided into several segregates beyond the two already proposed by Cockerell, 1910a: 76, when the species currently assigned to it have been given critical study.

Ceroplastidia Cockerell, 1910, Canad. Ent. 42:76.

TYPE-SPECIES: Ceroplastes bruneri T. D. A. and W. P. Cockerell, 1902, by original designation.

This was established as a subgenus on the basis of growth habit, for species that crowd closely together on the host twig, produce solid masses of covering wax, and have the bodies vertically distorted. Morrison, 1919: 76, commented on this genus, noting its similarity to the genus *Gascardia* Targioni-Tozzetti, 1893, and its doubtful distinction from *Ccroplastes* Gray, sens. lat.

Ceroplastina Cockerell, 1910, Canad. Ent. 42:76.

TYPE-SPECIES: Ceroplastes lahillei Cockerell, 1910, by original designation.

This was established as a subgenus by its describer on the basis of the unusual development of the waxy covering of the body of the adult female.

Ceroplastodes Cockerell, 1893, Entomologist 26:350.

TYPE-SPECIES: Fairmairia (subg. Ceroplastodes) nivea Cockerell, 1893, by original designation and monotypy.

Cockerell. 1902n: 194, concluded that *nivca* must be a synonym of *Lccanopsis* dugcsii "Lichtenstein" Signoret, 1886a: xxxix, on the basis of his examination of topotype material sent to him by Dugès, who had forwarded the material of dugcsii to Lichtenstein. Subsequently (Fernald, 1903b: 164; Steinweden, 1929: 232; Lindinger, 1937: 181) it has been customary to cite dugcsii as the type of the genus *Ceroplastodes*. It seems probable that this synonymy, which has been accepted, is valid but it has not been based on a direct comparison of the types of the two species. The genus has been assigned to the "glassy" section of the Coccidae (str.), but seems not to have received critical restudy in recent years. There is doubt if the Indo-Malayan and Australian species assigned here actually associate generically with the North American inclusions.

Ceroplastus "*Gray*," Westwood, 1840, An Introduction to the Modern Classification of Insects 2: 449.

In the Westwood context this appears to be a misspelling of *Ceroplastes* Gray. The name was used in Coleoptera in 1883, according to Neave, 1939, Nomen. Zool. I: 648. AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 33

Ceroputo Šulc, 1898, K. Böhmisch. Gesell. der Wiss. Sitzber. (1897) No. 66:1.

TYPE-SPECIES : Ceroputo pilosellae Šulc, 1898, by monotypy.

This genus is accepted as closely related to *Puto* Signoret, 1876. Ferris, 1918d: 34, 61, 1950b: 190, actually placed *Ceroputo* as a synonym of *Puto*. Recent European workers including Lindinger, 1937: 181; Borchsenius, 1948b: 31, 1949: 285, 289–290; and Reyne, 1954a: 323, regard the genus as distinct. Balachowsky, 1948b: 253, assigned it to the Pseudococcini, but there is evidence that this genus and *Puto* deserve a sharper group separation from other known pseudococcids.

Cerrococcus Kiritschenko, 1936, Inst. Zashch. Rast. Plant Protect. 9:70.

A lapsus for Cerococcus Comstock.

Chaetaonidia Balachowsky, 1948, Actualités Sci. et Indus., Ent. Appl. 1054: 269, nomen nudum; 1951, 1127: 615.

TYPE-SPECIES: Aonidia tlaiae Balachowsky, 1927, by original designation and monotypy.

This genus was proposed in 1948 without description. Balachowsky, 1951: 615, indicated that the name was a synonym of *Cryptoparlatoreopsis* Borchsenius, 1947.

Chaetococcus Maskell, 1898, New Zeal. Inst. Trans. and Proc. (1897) 30: 249.

TYPE-SPECIES: Sphaerococcus bambusac Maskell, 1893, by subsequent designation of Fernald, 1903b: 120 (the first we have located).

This belongs with *Antonina* Signoret and some other genera in a group of much modified mealybugs. Betrem, 1937: 21, 97, and Lindinger, 1937: 181, placed the name as a synonym of *Antonina*. Goux, 1935a: 96, and Borchsenius, 1949: 314, recognized the genus and the latter assigned species to it. It appears to be validly distinct from *Antonina*.

Chavesia Balachowsky, 1957, Rev. de Path. Veg. et d'Ent. Agr. de France 36: 158–159.

TYPE-SPECIES: Chavesia caldasiae Balachowsky, 1957, by original designation and monotypy.

The describer assigned this coccid genus to the group "Kerminae-Eriococcini," related to *Eumyrmococcus* Silvestri. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 8, examined specimens of the type-species and found no morphological grounds for association with the Eriococcidae.

Chelinococcus Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 9: 104.

A lapsus for Chelonicoccus A. Costa.

Chelonicoccus A. Costa, 1866, Accad. delle Sci. Fis. e Mat. Napoli, Atti 3 (7): 10; Silvestri, 1920, *in* Leonardi, Monografia delle Cocciniglie Italiane, p. 500.

TYPE-SPECIES : Chelonicoccus luteus Costa, 1866, by monotypy.

Originally described as a "singular" Italian coccid, Silvestri reported that examination of the type specimen showed it to be a part of a lepidopterous chrysalid, probably of a lycaenid.

Chemnaspidiotus MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Cryptophyllaspis liquidambaris Kotinsky, 1903, by original designation and monotypy.

Lindinger, 1937: 181, placed this name as a synonym of *Aspidiotus* Bouché. Ferris, 1938a: SII-223, considered that the type-species belonged in the genus *Diaspidiotus* Berlese and Leonardi. Recent usage has avoided the use of the name.

Chentraspis Leonardi, 1897, Riv. di Patol. Veg. (Nov. 1896–Feb. 1897) 5: 284, 286; 1897, 6: 111 (again presented as a new genus).

TYPE-SPECIES: Aspidiotus unilobis Maskell, 1895, by subsequent restriction by Cockerell, 1899a: 395, where he included only the species unilobis under this generic heading, and by subsequent designation by Fernald, 1903b: 251.

Morrison and Morrison, 1922: 93, were in error when they alleged that only one species was included in the genus at the time it was established. Actually another species, Aspidiotus extensus Maskell, 1895, was also assigned here. Lindinger, 1937: 181, designated extensus as type-species, apparently on a "first species" selection basis, and ignored the prior designations cited above. In the same lists he indicated that Chentraspis, as discussed by Leonardi in 1898 [apparently 1897b: 111], represented a different concept than the original presentation and proposed a new genus, Neglectaspis, for this, with unilobis Maskell as type-species. Lindinger, 1937: 190, also considered Neoleonardia MacGillivray to be a synonym of *Chentraspis* as he restricted it, but this can be true only if his type fixation is accepted. Ferris, 1937e: 528, rejected Lindinger's 1937 type-species selection because of the action presented in the Fernald Catalogue. Lindinger, 1943b: 217, again insisted that extensus was the type-species of the genus, apparently this time basing his contention on the fact that the combination Chentraspis extensus occurs one page before Chentraspis unilobis in Cockerell's, 1897i: 26-27, list of Australian aspidiotine species. We do not agree with this, and consider that the earlier type assignment of *unilobis* has validity to fix the nature of the genus, which, on this basis, seems definitely to be aspidiotine in character.

Chermes Geoffroy, 1762, Histoire Abrégée des Insectes qui se trouvent aux environs de Paris, v. 1:498-504.

In this spelling and authorship this genus appears to have no current status in the Coccoidea although several early species of coccids were described under the name. The name was proposed first by Linnaeus in 1758 and seems definitely not to be applicable to any coccid. In Amyot and Serville, 1843, Hist. Nat. Ins. Hem., p. 630, this name was used as an alternate for the coccid *Kermes* Boitard, 1828, but wholly without nomenclatorial justification according to presently accepted rules.

Chianaspis Froggatt, 1908, Dept. Agr. Victoria, Jour. 6 (8): 489.

A lapsus for Chionaspis Signoret.

Chinaspis Gómez-Menor, 1954, Eos 30: 122.

TYPE-SPECIES: Chinaspis vellae Gómez-Menor, 1954, by original designation and monotypy.

The describer assigned this genus as close to *Lindingaspis* MacGillivray, one of the aspidiotine series of genera.

Chiomaspis Borchsenius, 1938, Akad. Nauk SSSR Izv. 29: 139.

A lapsus for Chionaspis Signoret.

Chionapsis Mouillefert, 1903, in Lindinger, 1954, Beitr. z. Ent. 4 (5/6): 620.

A lapsus for *Chionaspis* Signoret. This spelling appeared also in Lameere, 1936, Précis de Zoologie 4: 416.

- Chionaspis Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 8: 844, 854, 871-872, 874; 1869, (ser. 4) 9: 442 (first description: *C. salicis* offered as an "example").
 - TYPE-SPECIES: Coccus salicis Linnaeus, 1758, by subsequent designation of Cooley, 1899: 3, 9-10.

Numerous diaspid species of uncertain relationships have been described under this generic name, but in recent years many have been reassigned into new, restricted generic units, some of which appear to be zoologically valid. Depending on the individual viewpoint, there are now few to numerous synonyms placed under *Chionaspis* Signoret. The trend appears to be in the direction of restricting the use of *Chionaspis* to Holarctic species with acceptance of other generic units for species originally placed in this genus from other areas. Balachowsky, 1954e: 163, placed the genus in his Diaspidina chionaspiform.

Chironomus Fabricius, 1805, Systema Antliatorum, p. 46.

This generic name entered into coccid literature because of the description of *Chironomus dubius* Fabricius, 1805, now accepted as a male margarodid. *C. plumosus* Fabricius, a dipterous insect, appears to have been established as the type of the genus by dipterists. An hemipterous association was indicated for the name by Schulze, 1927, Nomenclator animalium generum et subgenerum 2: 660, and Sherborn, 1932, Index Animalium 2 (29): 47. Neave, 1939, Nomen. Zool. I: 699, recognized it only as a dipterous genus name.

Chlamidolecanium Lindinger, 1935, Ent. Jahrb. 44: 142; 1936, 45: 155.

A lapsus for Chlamydolecanium Goux.

Chlamydolecanium Goux, 1933, Soc. Ent. de France Bul. 38: 119–120.

TYPE-SPECIES: Chlamydolecanium conchioides Goux, 1933, by original designation and monotypy.

Lindinger, 1937: 182, placed this name as a synonym of *Parafairmea* [Lindinger spelling], but Borchsenius, 1957: 138, accepted the genus as valid, and assigned it to his Filippinae in the Coccidae (str.).

Chlidaspis Borchsenius, 1949, Akad. Nauk SSSR Dok. (n. s.) 64: 736-737.

TYPE-SPECIES: *Phenacaspis prunorum* Borchsenius, 1939, by original designation and monotypy.

The describer placed this genus close to *Phenacaspis* Cooley and Cockerell, in the Diaspidini. Balachowsky, 1954e: 369, synonymized the name with *Tecaspis* Hall, 1946. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 357–358, 360, regarded the genus as valid and belonging to a group of genera comprising *Tecaspis* Hall, *Voraspis* Hall, and *Rolaspis* Hall. They stated that *Voraspis adlei* Balachowsky and Kaussari, 1955, is identical with the type-species.

Chloeoon Anderson, 1788, Letters to Sir Joseph Banks, Baronet, President of the Royal Society, on the subject of cochineal insects, discovered at Madras [I-XIV]: 6, 25.

TYPE-SPECIES: Kermes choromandelensis Anderson, 1788, [p. 25], by monotypy.

According to a microfilm copy of Anderson's letters to Banks, 1788, obtained from the New York Public Library, this name was published by Anderson for a definitely stated genus, placed between Coccus Linnaeus and Kermes Boitard. Although a species name was not directly associated with the first mention (p, 6)of the generic name, the author (p. 25) later listed it, along with several other new coccid names, as "The Chlocoon or Kermes Choromandelensis." We consider that the generic name was validly established by Anderson's actions, and that the species name he proposed is to be accepted as its type-species. A plate showing illustrations of this and other coccids accompanied the descriptive information in the "Letters" and this insect was displayed in position on its grass host and also in crude detail. One of the pertinent illustrations, called the caterpillar stage of the coccid, seems clearly to represent the larval stage of some predatory insect, perhaps of a chrysopid. A second illustration, called the fly, supposed to be a male viewed with the microscope, is also highly suspect, as the figure is not clearly assignable to any insect group and its description reports the presence of four procumbent wings. Signoret, 1877: 612, considered the "fly" a hymenopterous insect. The remaining illustrations (figs. 1, 3-4) seem clearly to represent a coccid species and the habitus illustration strongly suggests the coccid currently going under the name Antonina graminis (Maskell), 1897, a species which was described from India as Antonina indica Green, 1908. We do not, however, present this indication as a firm assignment of A. graminis into synonymy under the Anderson names and consider that the species should continue to go under the name in current use. There seems to be no prospect of reaching a more critical decision on the identity of Anderson's species.

Chloropulvinaria Borchsenius, 1952, Akad. Nauk SSSR Zool. Inst. Trudy 12:299-300.

TYPE-SPECIES: Coccus flocciferus Westwood, 1870, by original designation.

Borchsenius, 1957: 203, placed this in his Pulvinariini, Coccinae, Coccidae (str.).

Chnaurococcus Ferris, 1950, Atlas of the Scale Insects of North America (ser.) 5 [v. 5]:40.

TYPE-SPECIES: Ripersia villosa Ehrhorn, 1899, by original designation.

The describer suggested a possible relationship for this genus with *Cryptori*persia Cockerell in the *Pseudococcidae*.

Choetococcus Goux, 1936, Soc. Ent. de France Bul. 41: 40.

A lapsus for Chaetococcus Maskell.

Chorizaspidiotus MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Aspidiotus (Targionia) gutierreziae Cockerell and Parrott, 1899, by original designation. [A synonym of Aspidiotus dearnessi Cockerell, 1898, according to Ferris, 1937a: 33.]

Ferris, 1937a: 33, 1938a: SII-213, 1943a: 99, placed this name as a synonym of *Rhizaspidiotus* MacGillivray. Balachowsky, 1951: 650, and 1958b: 288, agreed with the Ferris conclusions.

Chorizococcus McKenzie, 1960, Hilgardia 29:692.

TYPE-SPECIES: Chorizococcus wilkeyi McKenzie, 1960, by original designation.

The describer associated this genus closely with *Spilococcus* Ferris in the Pseudococcidae and also suggested relationships with *Atrococcus* Goux and *Allotrionymus* Takahashi.

Chortinaspis Ferris, 1938, Microentomology 3: 46, nomen nudum; 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-194.

TYPE-SPECIES: Aspidiotus chortinus Ferris, 1921, by original designation.

The describer placed this genus in the Aspidiotini. Balachowsky, 1948b: 382, accepted the genus as valid and assigned it to his Aspidiotina.

Chrysomphalus Ashmead, 1880, Amer. Ent. 3: 267.

TYPE-SPECIES: (Chrysomphalus ficus Ashmead, 1880) = Coccus aonidum Linnaeus, 1758, by monotypy.

The date and citation presented above are generally accepted for the establishment of this aspidiotine genus. However, Ashmead, 1879, Florida Agriculturist, v. 2, published an account of the insect, and it is possible that he included sufficient descriptive material to fix the genus and species from that date. We have not seen this publication. *Coccus aonidum* Linnaeus, 1758, has been widely recognized as type-species, but Ferris, 1937c: 50, 53–54, first accepted, then, 1937d: 105, rejected the concept and retained *ficus* as type-species. Williams (1960, in lit.) examined type specimens of *aonidum* in the collection of the Linnaean Society of London and decided that *ficus* Ashmead of authors was identical with it. We have not succeeded in locating type material of *ficus*.

Chrysonphalus Monastero, 1955, Palermo Univ. Ist. Ent. Agr. e Osserv. Fitopat. Bol. 1:89.

A lapsus for Chrysomphalus Ashmead.

Cintococcus Goux, 1940, Soc. d'Hist. Nat. l'Afrique du Nord, Bul. 31: 61-62.

TYPE-SPECIES: *Ripersia cinti* Balachowsky, 1933, by original designation and monotypy.

This was described originally as a subgenus of *Ripersia* Signoret but at a time when there was little critical understanding of the nature of *Ripersia* as a pseudococcid genus.

Cionops Leach, 1815, in Brewster's Edinb. Encyc. 9: 126 (according to Agassiz, 1845, List of Zoological Names, and Fernald, 1903b: 33). Sherborn, 1925, Index Animal., sec. 2, pt. VI: 1318, and Neave, 1939, Nomen. Zool. I: 740, state, "not located on search."

We have not succeeded in locating a copy of the 1815 edition of the Edinburgh Encyclopedia, so can contribute no critical comment on this name and its citation. The name seems to be universally accepted as a synonym of *Orthezia* Bosc d'Antic, 1784, but we have found no mention earlier than Westwood, 1840: 450, where it stands as a synonym of *Orthezia*, and therefore have no assurance that it actually has any status. It does not, for example, appear in Signoret's extensive study of the coccids, which started with a review of the work of earlier coccid authors. Perhaps it should be charged against Westwood, 1840, rather than Leach, 1815.

Circaputo McKenzie, 1962, Hilgardia 32: 643.

TYPE-SPECIES: Circaputo hirsutus McKenzie, 1962, by original designation and monotypy.

The describer placed this pseudococcid genus as related to *Cataenococcus* Ferris, *Paraputo* Laing, and *Criniticoccus* Williams.

Circulaspis MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Odonaspis canaliculata Green, 1900, by original designation and monotypy.

Ferris, 1937a: 33, considered this a valid genus zoologically, but later, 1938a: SII-156, 161, questioned if it represented a sound segregate. Balachowsky, 1948b: 264, 1949: 109, accepted it as valid in the Odonaspidini.

Cissococcus Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9:23.

TYPE-SPECIES: Cissococcus fulleri Cockerell, 1902, by original designation and monotypy.

The describer assigned this genus to the Eriococcini. Brain, 1918: 109, established the Cissococcinae for it. Ferris. 1920a: 65, assigned it to the Coccidae (str.), reporting affinities with *Ccroplastcs* Gray, Steinweden, 1929: 233, discussed it but added nothing to the Ferris opinion.

Cisticoccus A. Costa, 1877, Degl' Insetti che attaccano l' Albero ed il frutto dell' Olivo, Ed. 2, rev. and enl., Napoli, R. Ist. d'Incoraggiamento, pp. 125, 127.

Costa proposed this name as a substitute for *Pollinia* Targioni-Tozzetti, 1868, published in association with *P. costae* Targioni-Tozzetti, 1868. Targioni-Tozzetti

presented the latter names as a new genus and species combination to replace "Coccus Pollini" A. Costa, 1857: 77 (not O. Costa, 1828, as cited in Fernald, 1903b: 60). Costa (1877) properly pointed out the impropriety of substituting a complete new name for his "Coccus Pollini", but erred, according to the standards accepted to-day, in substituting his own new generic name for the one proposed by Targioni-Tozzetti. Since Cisticoccus is based on the same insect as Pollinia, the name is a synonym of the latter. Lindinger, 1937: 182, listed the spelling above, and the alternate spelling "Cystococcus Costa 1877". We have had no success in locating this spelling in Costa's paper of that date, or elsewhere.

Clavaspis MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: (Aspidiotus subsimilis var. anonae Houser, 1918) = Aspidiotus herculeanus Cockerell and Hadden, 1909, by original designation.

Ferris, 1937c: 50, 53, accepted this genus as valid and indicated the common identity of the two species, *subsimilis anonae* and *herculeanus*, included by MacGillivray. Later, 1938a: SII-202-214, he reviewed the North American species assigned to the genus.

Balachowsky, 1950b: 490 and 1956: 90–92, accepted the genus for various Old World species and placed it in his Aspidiotina, close to *Diaspidiotus* "Leonardi."

Clavataspis Ferris, 1955, Microentomology 20:24.

This name seems to have been presented in error in citing the type-species of *Scytalaspis* Ferris.

Clavicoccus Ferris, 1948, in Zimmerman, 1948, Insects of Hawaii 5: 148, 168.

TYPE-SPECIES: Clavicoccus tribulus Ferris, 1948, by original designation.

This is an unusual genus belonging to the Pseudococcidae.

Clypeococcus Newstead, 1920, Bul. Ent. Res. 10:175.

TYPE-SPECIES: *Icerya* (*Crypticerya*) hempeli Cockerell, 1899, by original designation and monotypy.

This genus was established because of Newstend's belief that he could recognize a clypeus on the type specimens. Morrison, 1928: 105, discussed the name as a synonym of *Mimosiccrya* Cockerell.

Cnetochiton Balachowsky, 1932, Encyc. Ent. (ser. A) 15:36,38.

A lapsus for Ctenochiton Maskell.

Cocccionella Lindinger, 1958, Beitr. z. Ent. 8: 371.

A lapsus for Coccionella Hahnemanns.

Coccicaccia Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5:496.

A uninomial designation for a coccid of uncertain status but which we suspect might be *Coccus cassiae* Chavannes, 1848. We believe this has no validity as a generic name but it is included in Neave, 1939, Nomen. Zool. I: 778. Coccidella Hambleton, 1946, Biol. Soc. Wash. Proc. 59: 177.

TYPE-SPECIES: Morrisonella poensis Hambleton, 1946, by substitution of Coccidella for Morrisonella Hambleton.

The describer proposed this new name for *Morrisonella* Hambleton, 1946, preoccupied by *Morrisonella* Bartsch, 1945, in the Mollusca. Ferris, 1953a: 426, considered *Coccidella* a synonym of *Rhizoccus* Künckel d'Herculais.

Coccidohystrix Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 218.

TYPE-SPECIES: *Echinococcus cchinatus* Balachowsky, 1936, by original designation and monotypy.

Lindinger, 1943b: 219, proposed this generic name as a substitute for *Echinococcus* Balachowsky, 1936c: 157, preoccupied in Vermes. For further discussion of associated complications, *see* under *Contrococcus* Borchsenius.

Coccilacca Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5:495.

This is a uninomial designation with no validity as a generic name, although it is listed in Neave, 1939, Nomen. Zool. I: 778. We presume that it is intended to stand for *Coccus lacca* Kerr.

Coccinella Gmelin, 1766, Onomatologia Hist. Nat. Completa 3 : column 22.

This was used by the author as a pseudogeneric name to designate the cochineal insect. In the same volume it was also used (col. 27) for the genus *Coccinella* in the Coleoptera. We believe that the coccid usage has no nomenclatorial status.

Coccionella Gmelin, 1766, Onomatologia Hist. Nat. Completa 3: column 22; Hahnemanns, 1793, Apothekerlexikon 1 (1): 193.

Gmelin used this name as a uninomial to designate the cochineal coccid. We believe that this usage does not give the name generic standing in the Coccoidea. Hahnemanns used the name as an apparent generic unit in association with a species Coccionella polonicus [Linnaeus, 1758], writing the name in italics. He also used the name as a uninomial in the same alphabetical sequence to refer to what we presume is the true Mexican cochineal coccid, which he further referred to, in the same sequence, under the name "Coccus Cacti L." which was written in Roman type. Neave, 1939, Nomen. Zool. I: 778, noted only the 1860 use of this name by Voet in the Coleoptera. Lindinger, 1954: 614, who discovered the 1793. apparently binomial, use of this name for a coccid, presented the case for acceptance. After examining the original Hahnemanns presentation, we reluctantly conclude that it is possible to interpret the latter's treatment (names presented in italics) as a binomial scientific name, even though he presented all other coccid binomials that were noted in his Lexicon in undifferentiated Roman type—e.g. "Coccus Cacti L." However, we cannot agree with Lindinger's use of the name as a total replacement for Margarodes Guilding, 1829, sensus latus. There has been sufficient work in recent years, notably by Silvestri, 1936-1939a, to demonstrate clearly that Margarodcs sensus latus is a complex of morphologically diverse species which can legitimately go into several distinct genera. Therefore Coccionella, if accepted, can replace only Porphyrophora Brandt, 1833.

Coccomytilus Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:45(205)-46(206).

TYPE-SPECIES: Mytilaspis convexa Maskell, 1894, by subsequent designation in Fernald Catalogue, 1903b: 304.

The type of this genus was redescribed by Morrison and Morrison, 1922: 100. Ferris, 1941a: 12, accepted it as a valid genus. Silvestri, 1939: 812, differentiated it from *Mytilococcus* Amerling [*Lepidosaphes* of authors]. It also was accepted as valid by Hall, 1946a: 508, and Balachowsky, 1954e: 23, 117, who placed it in his Lepidosaphedina.

Cocconidia Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 494.

This is a uninomial designation believed to stand for the mealybug currently known as *Pscudococcus adonidum* (Linnaeus), 1758. Although entered in Neave, 1939, Nomen. Zool. I: 779, it appears to have no standing as a coccid generic name.

Coccopoa Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5:494.

The author presented this uninomial designation as a substitute for *Coccus* phalaridis Linnaeus, 1761. This species does not seem to have been placed critically in modern coccid classification. It is presented in Neave, 1939, Nomen. Zool. I: 779, although without standing as a coccid generic name.

Coccoptelia Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5:495.

This is a uninomial designation offered to replace a generic and specific name for the insect involved, which in this instance seems to be the coccid currently called *Gossyparia spuria* (Modeer), 1778. This Amyot name appears to have no validity as representing a generic unit but is included in Neave, 1939, Nomen. Zool. I: 779.

Coccum Ledermüllers, 1760, Mikroskopischer Gemüths-und Augen-Ergötzung, pp. 64–65, 73.

The author presented this name as a personally preferred alternate spelling of the Greek-derived *Coccus*. While he associated this with *polonicum* and other specific names, his treatment does not appear to be strictly binomial throughout his discussion, so the name does not seem to be available beyond recognition of its identity with the widely accepted *Coccus* Linnaeus.

Coccura Šulc, 1908, Klubu Prirod., Prostejove, Vest. (1907), p. 64.

TYPE-SPECIES: Coccus comari Künow, 1880, by original designation and monotypy.

There has been confusion in the discussions of the status of this genus. Lindinger. 1937: 182, indicated its identity with *Tetrura* Lichtenstein, 1882, believing that its type-species was identical with *T. rubi* Lichtenstein, 1882. Subsequent workers, especially Borchsenius, 1948a: 953, considered that the type-species of these two genera were distinct and that *Coccura* was valid. Borchsenius placed it in a recognizable group of the Pseudococcidae, which he called the Coccurini, and included here also the genera *Mediococcus* Kiritshenko, *Centrococcus* Borchsenius, and *Calyptococcus* Borchsenius. Takahashi, 1958: 3, accepted it as a valid genus for Japan.

Coccus Linnaeus, 1758, Systema Nat. (Ed. 10) 1: 455-457.

TYPE-SPECIES: Coccus hesperidum Linnaeus, 1758, by general acceptance.

Neave, 1939, Nomen. Zool. I: 781, also cites 1767, Ed. 12: 7, 39. The significance of the later citation is not obvious at this writing. As the first established and oldest valid coccid genus, *Coccus* has had a most involved history. At the time of its establishment, and through the years since, numerous coccoid species representing a wide variety of forms have been assigned to it, and a number of entomologists have attempted to fix the correct type-species for the genus. Fernald, 1902a: 232, 1906: 125, gave critical consideration to the problem in relation to her 1903b Catalogue of the Coccidae, and decided that Sulzer, 1761, in his discussion of the genus, with a reference to *C. hesperidum* Linnaeus by name, accompanied by an illustrated description of this insect, had set the type by restriction to this single species.

Historically, and in terms of the original Greek source of the name Coccus, its type probably ought to stand as one of the originally included oak-infesting species currently placed in the genus Kermes Boitard and, indeed, Westwood, 1840: 447. presented this conclusion when he stated, "The type of this family (and for which, of course, the generic name Coccus must unquestionably be retained,) is the Coccus ilicis *Linn*," Cockerell, 1929b; 150, arrived at the some conclusion, apparently without recognition of Westwood's prior decision on the matter. Cockerell made several attempts at type fixation. In 1893dd: 1044, he discussed Coccus "as typified by C. cacti", with the associated discussion clearly indicating that he was citing Coccus cacti of authors, not Linnaeus [=Dactylopius coccus Costa of current usage]. This association was repeated by him in his 1896b Check List: 323. In 1899j: 260, after debate, he concluded that Coccus phalaridis Linnaeus, 1758, must be chosen as type-species of the genus because it was the only original Linnaean inclusion remaining in *Coccus* after division of the genus by Geoffroy, 1762 (a non-binomial work). Other attempts at type fixation include Latreille, 1810: 266, 434, who gave Coccus persicae Fabricius—a non-Linnaean and ineligible species—as the typical species; Kirkaldy, 1906a: 253, who stated that the type was mexicanus Lamarck, 1801: 298, which also was not an inclusion by Linnaeus in his 1758 Coccus. MacGillivray 1921: 102, associated the name Coccus with the true Mexican cochineal, using the name cacti Linnaeus for it.

A majority of the coccid students publishing since the appearance of the Fernald Catalogue, 1903b. have accepted C. hesperidum Linnaeus, 1758, as the typespecies of the genus. Coccid workers who have recently mentioned the genus with hesperidum accepted as the type-species include : Balachowsky, 1948b : 255-256, who placed it with related genera in his Lecaniini; Borchsenius, 1937: 75, 86, 1957: 292, who placed it in his Coccini; DeLotto, 1957: 295, 1959: 151; Ferris, in Zimmerman, 1948: 301; Gómez-Menor, 1937: 254, 295, and 1948: 82; Laing, 1944: 93. who considered that Latreille, 1802: 267, fixed the type of Coccus by citing Coccus hesperidum Linnaeus as an "Example;" Lindinger, 1937: 182, who chose hesperidum as type on a "first species listed" basis; Mamet, 1954: 48; Schmutterer, 1952: 552; and Silvestri, 1939: 716, who placed the genus in the Coccini. Beyond usage by coccid specialists, there is a considerable volume of reference to "Coccus hesperidum L." in non-taxonomic literature that has appeared since the publication of the Fernald Catalogue. None of the attempts at type fixation reported above appear to us to comply with a rigid application of the requirements of the 1961 International Code. However, the use of hesperidum Linnaeus, 1758, as understood by current coccid workers, for the type-species of Coccus has become so nearly universal that we believe strongly that it should be accepted without further questioning, and that the acceptance should date from Sulzer, 1761, as proposed by Fernald.

Cockerellaspis MacGillivray, 1921, The Coccidae, p. 306.

TYPE-SPECIES: Aulacaspis montana Cockerell, 1896, by original designation and monotypy.

Ferris, 1936a: 21, 24, regarded this name as a synonym of *Diaspis* Costa, but later, 1937: SI-21, 49, 52, placed it as a synonym of *Epidiaspis* Cockerell. No later opinion on the name is available.

Cockerellella MacGillivray, 1921, The Coccidae, p. 71.

TYPE-SPECIES : Monophlebulus townsendi Cockerell, 1905, by monotypy.

Morrison, 1928: 63, placed this as a synonym of Drosicha Walker.

Cocus Breyer, 1862, Soc. Ent. de Belg. Ann. 6:98.

A lapsus for Coccus Linnaeus.

Coelostoma Maskell, 1880, New Zeal. Inst. Trans. and Proc. (1879) 12:294.

TYPE-SPECIES: Coelostoma zealandica Maskell, 1880, by monotypy.

This name was preoccupied by *Coelostoma* Brullé, 1835, in the Coleoptera, and was replaced by *Coelostomidia* Cockerell.

Coelostomidia Cockerell, 1900, Nature [London] 61:367.

TYPE-SPECIES: Coelostoma zealandica Maskell, 1880, by substitution of Coelostomidia for Coelostoma Maskell.

This name was proposed by Cockerell to replace preoccupied *Coelostoma* Maskell. *See* Morrison, 1928: 112, for discussions of the structures and classification of the genus.

Coleococcus Borchsenius, 1962, Akad. Nauk SSSR Zool. Inst. Trudy 30: 240.

TYPE-SPECIES: Colcococcus scotophilus Borchsenius, 1962, by original designation and monotypy.

Its describer placed this genus in the Phenacoccini, Pseudococcidae, with an indication of close relationship to *Volvicoccus* Goux.

Colobopyga Bréthes, 1912, Buenos Aires Mus. Nac. de Hist. Nat. An. 23: 279.

TYPE-SPECIES: Colobopyga magnani Bréthes, 1912, by monotypy.

This genus remained a puzzle for years after its description, with Sasseer. 1915: 30, assigning it incorrectly to the Tachardiinae. Final assignment came only in recent years, when Ferris, 1952: 3, primarily on the foundation of Stickney's 1934 work on the Phoenicococcinae, concluded that the genus was identical with *Palmaricoccus* Stickney, 1934, which it antedated.

Columella Šulc, 1936, Českoslov. Zool. Spolec. Věst. (1935) 3:65.

From the usage, this is rather certainly a lapsus for *Columnea* Targioni-Tozzetti.

208-496-66-4

Columna Signoret, 1877, Soc. Ent. de France Ann. (ser. 5) 6: 658.

Signoret presented this name only as "Columna Targ.-Tozz.=Ceroplastes." Since he used *Columnca* elsewhere, it seems correct to conclude that *Columna* was a lapsus for *Columnca*. *Columna* was preoccupied in 1811 in the Mollusca, according to Neave, 1939, Nomen. Zool. I: 806.

Columnea Targioni-Tozzetti, 1866, R. Accad. dei Georg. Atti (n. s.) 13: 131, 138, 142; 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 11.

TYPE-SPECIES: Coccus caricae Fabricius, 1794, by subsequent restriction.

The proposer of this name originally presented it as a substitute for *Ccroplastes* Gray and included in the genus 10 species names, several of which he offered as substitutes for already published, available names. Subsequently, 1867: 11, he deliberately restricted the use of *Columnea* to *Coccus caricae* Fabricius, and assigned the other species to the genus *Ceroplastes*. All of his inclusions that have been recognized are currently assigned to *Ceroplastes*, but we consider that *Columnea* might be available if *Ceroplastes* should be split into smaller generic units.

Comstockaspis MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Aspidiotus perniciosus Comstock, 1881, by original designation.

There has been some variation of opinion on the status of this genus in recent years. Silvestri, 1939: S41, made use of it in his Compendio, and Bodenheimer, 1952: 341, argued in favor of its use. Ferris, 1937c: 50, 53, 56, first assigned the name to synonymy under *Forbesaspis* MacGillivray, but later, 1938a: SII-255, placed both names as synonyms of *Quadraspidiotus* MacGillivray. Balachowsky, 1950b: 397, followed the Ferris assignments.

Comstockiella Cockerell, 1896, Ill. State Lab. Nat. Hist. 4: 320.

TYPE-SPECIES: Aspidiotus sabalis Comstock, 1883, by original designation and monotypy.

Cockerell established this genus in a purely negative fashion by proposing it for *Aspidiotus sabalis* Comstock because "Comstock's excellent description and figures show that it is not *Aspidiotus.*" Subsequent critical mention seems to have been restricted to various observations by Ferris, especially in 1938a: SII-212-213, who characterized the genus and redescribed the type-species on the basis of examples from Texas. He strongly questioned the aspidiotine affinities of the genus but left it in the Aspidiotini. Brown, 1957: 362, and 1960: 160-162, commented on the strong digression of the chromosome pattern from the aspidiotine standards now known. Altogether, it seems doubtful that this genus associates with any aspidiotine genera, but no satisfactory assignment has thus far been found.

Conchaspis Cockerell, 1893, Jamaica Bot. Dept. Bul. (March 1893) 40: 9; 1893, Gard. Chron. (May 1893) 13: 548.

TYPE-SPECIES: Conchaspis angracci Cockerell, 1893, by monotypy.

In both citations Cockerell presented genus and species names as new. Mamet, 1954b: 190, in his thorough review of the Conchaspididae, accepted the genus as based on the Jamaica Bot. Dept. Bul. citation, and reviewed its status as the

single genus included in the family which he accepted as properly segregated from, but closer to, the Diaspididae than to other coccids. We concur on both points.

Conifericoccus Brimblecombe, 1960, Queensland Jour. Agr. Sci. 17: 185–186.

TYPE-SPECIES: Conifericoccus invaginatus Brimblecombe, 1960, by original designation.

The describer included two additional species in this genus which he assigned to close relationship with the margarodid genus *Matsucoccus* Cockerell.

Conofilippia Brain, 1920, Bul. Ent. Res. 11:25.

TYPE-SPECIES: Conofilippia subterranea Brain, 1920, by original designation and monotypy.

The proper association of this genus within the Coccidae (str.) has never been studied critically. Lindinger, 1928: 107, and 1937: 182, assigned the name as a synonym of *Parafairmairea* [Lindinger spelling], but Borchsenius, 1957: 133, stated that this synonymy is not correct.

Contigaspis MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: Chionaspis subnudata Newstead, 1912, by original designation.

The author erected this genus in the Diaspidini. It has generally been accepted as valid. Its status was discussed by Hall, 1946a, and Balachowsky, 1954e, who assigned it to his Diaspidina, chionaspiform complex. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 360, confirmed its validity and placed it in a group of genera consisting of *Sclopetaspis* MacGillivray, *Unachionaspis*, MacGillivray, *Balaspis* Hall, *Neochionaspis* Borchsenius, *Artemisaspis* Borchsenius, and *Aloaspis* Williams.

Cooleyaspis MacGillivray, 1921, The Coccidae, p. 308.

TYPE-SPECIES: Chionaspis praelonga Newstead, 1920, by original designation and monotypy.

Hall, 1946a: 510-511, accepted and discussed this genus of the Diaspidini. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 360-364, noted that it is very close to *Rolaspis* Hall and *Voraspis* Hall.

Coricoccus Mahdihassan, 1933, [Paris] Acad. des Sci. Compt. Rend. 196: 562.

TYPE-SPECIES: Coricoccus ornatus proposed as a substitute for Ccrococcus ornatus Green, 1909, by original implication.

The proposer of this genus based it, in his original treatment, not on any observable morphological characteristics but on the reaction of the secretionary cover of its presumed type, *ornatus*, to various chemical solvents plus the general nature of the associated internal symbionts (said to be bacterial). We are in some doubt if the genus can be accepted as validly described under Article 24(b) of the 1961 Code of Zoological Nomenclature. Certainly it does not meet fully the requirements of Article 13(b) of that Code. Nevertheless, it has entered coccid literature, even if somewhat uncertainly, since Lindinger, 1937: 182, recorded it with *ornatus* as type, and Borchsenius, 1960d: 104, accepted it, although perhaps uncritically, as a legitimate member of the Indo-Malaysian coccid fauna. The zoological validity of the genus is brought into further question by its proposer's treatment of a second species, *Cerococcus hibisci* Green, which he included. If we have correctly understood his initial 1933 discussion (in French), he considered that *ornatus* and *hibisci* may be separated by differences in the behavior of their secretionary coverings in relation to various wax solvents, that of *hibisci* dissolving on treatment, that of *ornatus* remaining resistant to wax solvents, even under heat treatment. In contrast to this described difference, Mahdihassan, 1946a : 197, stated that "both these species . . . do not produce wax." In this 1946a note, the forms were discussed under the generic names *Ceriococcus* and *Coriococcus*, which we accept as unintentional variants of the original *Coricoccus*.

Coriococcus Mahdihassan, 1946, Current Sci. [India] 15: 197.

The author used this name to refer to the genus and two included species presented by him as *Coricoccus* in 1933: 562. Lindinger, 1937: 182, stated, "*Coriococcus* = *Coricoccus*."

Cornoculus Ferris, 1955, Atlas of the Scale Insects of North America, 7: 81.

TYPE-SPECIES: Cornoculus oculatus Ferris, 1955, by original designation and monotypy.

The describer placed this genus in the Dactylopiidae as he recognized this family, and indicated close relationship to *Gymnococcus* Douglas, as defined by Ferris, 1955a: 178.

Cornuaspis MacGillivray, 1921, The Coccidae, pp. 274, 286.

TYPE-SPECIES : Mytilaspis ocellata Green, 1907, by original designation.

This genus seems to have doubtful zoological validity. Lindinger, 1937: 182, said: "=Mytilococcus Amerling [Lepidosaphes]," and Ferris, 1937a: 4, considered its status doubtful. Balachowsky, 1954e: 28, placed the name as a synonym of Lepidosaphes Shimer.

Coronaspis MacGillivray, 1921, The Coccidae, pp. 312, 362.

TYPE-SPECIES: Chionaspis coronifera Green, 1905, by original designation.

The describer placed this genus in the Diaspidini. Ferris, 1937a: 3, indicated that it is distinct from *Chionaspis* Signoret. Hall, 1946a: 511, 546, accepted it as a valid genus. Balachowsky, 1954e: 23, assigned it to his Lepidosaphedina.

Corylocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 502.

A uninomial designation proposed as a replacement for a proper binomial for the species discussed. This appears to be *Coccus coryli* Linnaeus, 1758, the identity of which is confused in European coccid literature. We do not consider that this name has proper status as representing a generic unit, but it is included in Neave, 1939, Nomen. Zool. I: 844.

Cosmococcus Borchsenius, 1959, Ent. Obozr. 38: 842–843.

TYPE-SPECIES: Cosmococcus erythrinae Borchsenius, 1959, by original designation.

The describer placed this genus in the Lecaniodiaspididae, which he separated from the Asterolecaniidae as a new family.

Cossus Řeháček, 1959, [Bratislava] Biologia 14: 625.

A lapsus for Coccus Linnaeus.

Costalimaspis Lepage, 1937, [Sao Paulo] Inst. Biol. Arch. 8: 239.

TYPE-SPECIES: Costalimaspis eugeniae Lepage, 1937, by original designation.

The describer placed this genus close to *Gymnaspis* Newstead. Subsequent publication by students of the Coccoidea, including Ferris, 1938b: 57-58; Silvestri, 1939: 801-802; and Lindinger, 1943b: 218, accepted it as zoologically valid in the Diaspidini.

Crassaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SII-274.

TYPE-SPECIES: *Pseudodiaspis multipora* Ferris, 1919, by original designation. The describer placed this genus in the Diaspidini.

Credodiaspis MacGillivray, 1921, The Coccidae, pp. 313, 366.

TYPE-SPECIES: Cryptodiaspis limuloides, Lindinger, 1909, by original designation and monotypy.

The describer assigned this genus to his Diaspidini. Lindinger, 1937: 182, placed the name as a synonym of *Cryptodiaspis* Lindinger, 1909. Hall, 1946a: 511, 546, accepted the genus as valid.

Crenulaspidiotus MacGillivray, 1921, The Coccidae, pp. 389, 426.

TYPE-SPECIES: Chrysomphalus (Melanaspis) portoricensis Lindinger, 1910, by original designation and monotypy.

Lindinger, 1937: 182, placed this name as a synonym of *Melanaspis* Cockerell, 1897. Ferris, 1941d: SII-347, agreed, as did Balachowsky, 1951: 578.

Cribrolecanium Green, 1921, Ann. and Mag. Nat. Hist. (ser. 9) 8: 639.

TYPE-SPECIES: Cribrolccanium formicarum Green, 1921, by original designation.

The species included in this genus are rather specialized Coccidae (str.) living under peculiar conditions.

Criniticoccus Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8:391.

TYPE-SPECIES: Criniticoccus ficus Williams, 1960, by original designation.

The describer indicated for this genus a close relationship with *Dysmicoccus* Ferris in the Pseudococcidae.

Criococcus Rutherford, 1915, Spolia Zeylanica 10: 110.

A lapsus for Eriococcus Targioni-Tozzetti.

Crisicoccus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 45.

TYPE-SPECIES: Dactylopius pini Kuwana, 1902, by original designation and monotypy.

The describer indicated the close association of this genus with *Planococcus* Ferris in the Pseudococcidae. Its zoological validity has been confirmed by Ezzat and McConnell, 1956: 3, 13, 22, and by Takahashi, 1958: 3.

Crocidocysta Rübsaamen, 1894. Berlin. Ent. Ztschr. 39: 218.

TYPE-SPECIES: Crocidocysta froggatti Rübsaamen, 1894, by monotypy.

There seems to be no question that this name is a synonym of *Cylindrococcus* Maskell, 1892, and that the type-species is identical with *C. amplior* Maskell, 1893. Lindinger, 1910: 156, and 1931a: 114, alleged that *C. froggatti* Rübsaamen was a psyllid but emended this view, 1937: 182, to indicate that *Crocidocysta* Rübsaamen partim equaled *Cylindrococcus* Maskell.

Crossotosoma Douglas, 1890, Ent. Monthly Mag. 26: 79.

TYPE-SPECIES: Crossotosoma aegyptiacum Douglas, 1890, by monotypy.

This name has long been accepted as a synonym of Icerya Signoret, 1875.

Cryptaonidia Neave, 1939, Nomen. Zool. I: 884.

A lapsus for Cryptoaonidia Leonardi.

Cryptaspidiotus Lindinger, 1910, Ztschr. f. Wiss. Insektenbiol. 6:156.

TYPE-SPECIES: Chrysomphalus barbusano Lindinger, 1908, by original indication and monotypy.

The type association of this genus has received some complicated treatment. Although proposed originally for *Chrysomphalus barbusano*, and for this only, Lindinger, 1931a: 10, in listing the genus said: "Typ: *aonidioides* n. sp." Later he, 1937: 182, gave *barbusano* as the type of the genus. Ferris, 1937c: 51, 53, complicated the matter by listing the type-species as *mediterraneus* Lindinger, but later in the same year, 1937d: 106, he too specified *barbusano*. MacGillivray, 1921: 426, included only *mediterraneus* Lindinger in his treatment of the genus. Balachowsky, 1948b: 269, accepted the genus as zoologically valid and assigned it to his Aonidina.

Cryptaspidus Lindinger, 1910, Jahrb. der Hamburg. Wiss. Anst. (1909) 27 Beih. 3:43.

TYPE-SPECIES: Cryptaspidus nucum Lindinger, 1910, by monotypy.

The describer, 1957: 543, offered the opinion that this genus is the "cryptogynous" form of *Pseudoparlatoria* Cockerell.

Cryptes (Crawford MS) Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24:21, nomen nudum; Cockerell and Parrott, 1899, Industrialist 25:162.

TYPE-SPECIES: Lecanium baccatum Maskell, 1892, by subsequent designation by Cockerell and Parrott, and monotypy.

The authorship and date of publication above are presented in Neave, 1939, Nomen. Zool. I: 884. Fernald, 1903b: 209, credited the genus to Crawford, and the type species to Maskell. Assignment of author and publication date has varied in the few recent references that mention the genus.

Following his description of *baccatum*, Maskell noted that "*Cryptcs baccata*" was a manuscript name attached by Crawford to the specimens on which *Lecanium baccatum* Maskell was based. This seems to us to make *Cryptcs* a nomen nudum under the negative restrictions of Article 11(d) of the 1961 Code, as actually, though perhaps not formally, publication in synonymy. We have

failed to find in the 1961 Code any solid support for the acceptance of Maskell 1892 as the proper author and date combination to associate with the name *Cryptes.* Morrison and Morrison, 1922: 80, discussed this matter when they redescribed *baccatum*, and concluded that the first positive use of *Cryptes* as a coccoid genus occurred in the 1899 Cockerell and Parrott reference. Publication of this opinion brought a prompt protest from Professor Cockerell, but no citation of Code provisions of that day that would justify his stand. Although not a precisely parallel situation, perhaps Opinion 268 (1954) of the International Commission, involving the genus *Aspidoproctus*, can be stretched to support the Neave interpretation of authorship and date for *Cryptes*. Otherwise, we think the name should be credited to Cockerell and Parrott, 1899, with type-species *Lecanium baccatum* Maskell, 1892, by subsequent designation and monotypy. There appears to have been no critical assignment of this genus within the Coccidae (str.).

Crypthemichionaspis Lindinger, 1910, Ztschr. f. Wiss. Insektenbiol. 6: 192, nomen nudum; 1911, 7: 175.

TYPE-SPECIES: Crypthemichionaspis nigra Lindinger, 1911, by subsequent designation of Sasscer, 1912: 91.

Lindinger established this genus for certain Australian species, including the type-species, but by 1937: 182, had concluded that the name should stand as a synonym of *Anamefiorinia* Leonardi, 1906. Ferris, 1936a: 21, 26, considered it to be a synonym of *Trullifiorinia* Leonardi, 1906, but later, 1941a: 12, left the question of zoological distinctness of the genus open to further investigation.

Crypticerya Cockerell, 1895, Psyche (1894–1896) (sup.) 7:15.

TYPE-SPECIES: *Icerya rosae* Riley and Howard, 1890, by original designation and monotypy.

The describer indicated a relationship to *Icerya* Signoret. *See* Morrison, 1928: 200, for information on included species and the position of the genus in the Margarodidae.

Cryptinglisia Cockerell, 1900, The Entomologist 33: 173.

TYPE-SPECIES: Cryptinglisia lounsburyi Cockerell, 1900, by monotypy.

The describer indicated a relationship to *Inglisia* Maskell in the Coccidae (str.). There seems to have been no further discussion of this; even Brain, 1920a: 38, confined himself to copying the original description.

Cryptoaonidia Leonardi, 1899, Sistema delle "Parlatoriae" Nota Preventiva. Florence Mariani, p. 5 (separate); 1900, Riv. di Patol. Veg. 8: 207, 323.

TYPE-SPECIES: Aspidiotus hakeae Maskell, 1896, by original designation and monotypy.

This name is a synonym of *Phaulaspis* Leonardi, 1897, because the two genera have the same type-species. Balachowsky, 1948b: 268, mentioned this name (spelled *Cryptaonidia*) as one of the proper inclusions in his Aonidina. The type-species was redescribed under *Phaulaspis* by Morrison and Morrison, 1922: 89.

49

Cryptococcus Douglas, 1890, Ent. Monthly Mag. 26: 155.

TYPE-SPECIES: Coccus fagi Baerensprung, 1849, by original designation and monotypy.

Lindinger, 1936a: 444, showed that the type-species was preoccupied by *Coccus* fagi Sulzer, 1776, and offered as a replacement the name *Cryptococcus* fagisuga Lindinger, 1936. Ferris, 1955a: 83; Balachowsky, 1948b: 254; Schmutterer, 1952: 405–406, 417; and Borchsenius, 1949: 370–371, placed this genus in the Eriococcidae (Dactylopiidae of Ferris, 1955a), and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 8, confirmed this assignment.

Cryptodiaspis Lindinger, 1909, Jahrb. der Hamburg. Wiss. Anst. (1908) 26 Beih. 3:26.

TYPE-SPECIES: Cryptodiaspis conservans Lindinger, 1909, by subsequent designation by Sasseer, 1911: 69.

The author erected this genus for three African diaspidine species. Hall, 1946a: 511, considered the genus zoologically valid on the basis of the published notes but without examination of specimens.

Cryptohemichionaspis Ferris, 1941, Microentomology 6: 16.

A lapsus for *Crypthemichionaspis* Lindinger. This spelling was presented on the plate figure showing the type-species with the correct spelling in the text. Takahashi, 1956a: 58, also used this misspelling.

Cryptokermes Hempel, 1900, Rev. Mus. Paulista [Sao Paulo] 4: 380. 398.

TYPE-SPECIES: Cryptokermes brasiliensis Hempel, 1900, by original designation and monotypy.

The proper assignment of this genus in the existing system of coccoid classification was discussed in detail by Morrison, 1928: 100, who placed it in the Margarodidae.

Cryptoparlatorea Lindinger, 1905, Insekten Börse 22: 132.

TYPE-SPECIES: Cryptoparlatorea leucaspis Lindinger, 1905, by original designation and monotypy.

This genus has been discussed by several recent coccid writers under the name *Cryptoparlatoria; see* discussions of *Parlatoria* Targioni-Tozzetti and *Parlatorea* Lindinger. Lindinger, 1937: 183, said "=*Apteronidia Berl.*" Balachowsky, 1958b: 315, among others, accepted it as valid, as *Cryptoparlatoria*.

Cryptoparlatoreopsis Borchsenius, 1947, Akad. Nauk SSSR Dok. (n.s.) 58: 343-344.

TYPE-SPECIES: Aonidia halli Bodenheimer, 1929, by original designation and monotypy.

The describer indicated a relationship with "Parlatorcopsis MacG." See Parlatorcopsis Lindinger. Balachowsky, 1958b: 232, 240–248, assigned the Borchsenius genus to the Aspidiotini, Aonidina. Cryptoparlatores Takagi, 1960, Insecta Matsumurana 23:71.

A lapsus for Cryptoparlatorea Lindinger.

Cryptoparlatoria Kuwana, 1917, A Check List of the Japanese Coccidae, p. 18.

An emendation of *Cryptoparlatorea* Lindinger. MacGillivray, 1921: 248, 253, 481, used both spellings. Balachowsky, 1958b: 315, who used this spelling, placed the genus in his *Parlatorina*.

Cryptoparlatyrea Lindinger, 1934, Ent. Anz. 14: 15.

A lapsus for Cryptoparlatorea Lindinger.

Cryptophyllaspis Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6: 14.

TYPE-SPECIES: Aspidiotus occultus Green, 1896, by original designation and monotypy.

Leonardi, 1897a: 375, may have antedated Cockerell's publication of this name when he published a brief note on the disposition of various names that Cockerell had presented in a letter addressed to Leonardi. He placed *Cryptophyllaspis* as a synonym of *Aspidiotus* Bouché, and Lindinger, 1937, 183; Ferris, 1941e: 35, 37; and Balachowsky, 1948b: 273, have accepted this synonymy.

Cryptorhizococcus Green, 1918, Ann. Appl. Biol. 5: 150, nomen nudum; Lindinger, 1937, Ent. Jahrb. 46: 183.

TYPE-SPECIES: Cryptorhizococcus oleariae Green, 1918, by subsequent designation of Lindinger, 1937: 183.

Both these names lack nomenclatorial and zoological status.

Cryptoripersia Cockerell, 1899, in Ehrhorn, Canad. Ent. 31: 5; Cockerell, 1899, Canad. Ent. 31: 278.

TYPE-SPECIES: Ripersia arizonensis Ehrhorn, 1899, by original designation and monotypy.

Ferris, 1953a: 307, 310, stated that *arizonensis* was a synonym of *Ripersia trichura* Cockerell, 1901, but the exact opposite should have been stated. Ferris placed this as an aberrant genus in the Pseudococcidae.

Cryptoselenaspidus Lindinger, 1910, Ztschr. f. Wiss. Insektenbiol. 6:259.

TYPE-SPECIES: Cryptoselenaspidus serra Lindinger, 1910, by monotypy.

Its proposer suggested that the second stage of this insect shows a similarity to the adult of *Selenaspidus silvaticus* Lindinger. The adult female remains enclosed within the second stage. Despite this implied relationship, the genus was not considered by Mamet, 1958a, in his review of the *Selenaspidus* complex, nor was it mentioned by Balachowsky, 1958b, in his coverage of the remaining aspidiotine genera from central Africa. Available information on it is confined to the original description.

51

Cryptostigma Ferris, 1922, Canad. Ent. 54: 160.

TYPE-SPECIES: Cryptostigma ingae Ferris, 1922, by original designation and monotypy.

Ferris subsequently (in lit.) concluded that this new species was identical with *Pscudophilippia inquilina* Newstead, 1920, described from Jamaica, but this, while quite possible, has not been confirmed by an examination of Newstead's types. *C. ingae* Ferris, published Oct. 12, 1922, is clearly identical with *Akermes secretus* Morrison, published before October 1, 1922. Morrison, 1929: 53, discussed this. The species properly assignable to this genus associate with New World genera such as *Toumeyella* Cockerell within the Coccidae (str.).

Crysomphalus Martins, 1961, Gazeta de Agricole de Angola 6: 203.

A lapsus for Chrysomphalus Ashmead.

Ctenochiton Maskell, 1879, New Zeal. Inst. Trans. and Proc. (1878) 11:208.

TYPE-SPECIES: *Ctenochiton viridis* Maskell, 1879, by subsequent designation of Fernald, 1903b: 159.

The describer compared this genus only with certain genera now placed in the Asterolecaniidae, but, on the basis of the indicated type-species, it seems clearly to assign to the Coccidae (str.). The genus and its type-species were redescribed by Morrison and Morrison, 1922: 71.

Cucullococcus Ferris, 1941, Microentomology 6: 25-26.

TYPE-SPECIES: Cucullococcus vaccinii Ferris, 1941, by original designation and monotypy.

The describer placed this genus in the Psudococcidae and suggested a relationship with *Ehrhornia* Ferris.

Cupidaspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Leucaspis cupressi Coleman, 1903, by original designation and monotypy.

This name is accepted as a synonym of *Lincaspis* MacGillivray. 1921, by recent coccid workers including Ferris 1936a: 19, 21, 24–25, and 1937: SI-77-78; Lindinger, 1937: 183; and Balachowsky, 1954e: 401.

Cupressaspis Borchsenius, 1962, Ent. Obozr. 41: 866-869.

TYPE-SPECIES : Cupressaspis isfarensis Borchsenius, 1962, by original designation.

The author placed this genus close to *Aonidia* Targioni-Tozzetti and noted that all members of the genus live on coniferous plants of the Cupressinae.

Cupulinia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:40.

A lapsus for Capulinia Signoret.

Curycerus Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 19.

A lapsus for Ericcrus Guérin-Méneville.

Cyclococcus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 116, nomen nudum.

Ferris presented this name as "Cycloccoccus balteatus (Green)" without further information that might authenticate it in terms of the post-1930 requirements of the 1961 Code of Zoological Nomenclature. The species involved was described in *Phenacoccus* Cockerell and is presently assigned to *Peliococcus* Borchsenius.

Cyclolecanium Morrison, 1929, Ent. Soc. Amer. Ann. 22: 56.

TYPE-SPECIES: Cyclolecanium hyperbaterium Morrison, 1929, by original designation and monotypy.

The describer placed this genus in the Coccidae (str.) and indicated a possible relationship with the *Toumeyella* Cockerell series of genera.

Cylindrococcus Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24:41.

TYPE-SPECIES: Cylindrococcus casuarinae Maskell, 1892, by subsequent designation by Fernald, 1903b: 84.

The type-species of this genus was redescribed by Morrison and Morrison, 1922: 26, with an indication that the genus was "possibly Eriococcine." It was also redescribed by Froggatt, 1933: 374. Balachowsky, 1942: 39, 44, placed the genus in a new family, the Cylindrococcidae, along with other genera he considered related. Ferris, 1957c: 85, assigned it to the Eriococcidae and this was accepted by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 8.

Cynodontaspis Takagi, 1961, Insecta Matsumurana 24: 42, nomen nudum; 1962, 25: [46]-48 (validated).

TYPE-SPECIES: Cynodontaspis piceae Takagi, 1962, by original designation and monotypy.

The describer assigned this genus to the Diaspidini.

Cyphococcus Laing, 1925, Bul. Ent. Res. 16:56.

TYPE-SPECIES: Cyphococcus caesalpiniae Laing, 1925, by original designation and monotypy.

The describer placed this genus in the Coccidae (str.) without closer association.

Cyphoma Gistel, 1848, Naturgeschichte des Thierreichs, Stuttgart, p. 151.

TYPE-SPECIES: Cyphoma characias [Bose d'Antic, 1784], by monotypy.

The type-species of the genus is accepted to be identical with *Orthezia urticae* (L.), so in this usage *Cyphoma* is a synonym of *Orthezia* Bose d'Antie. It was used in the Mollusca in 1798 and in 1807.

Cystococcus Fuller, 1897, West. Austral. Bur. Agr. Jour. 4: 1346.

TYPE-SPECIES : Cystococcus echiniformis Fuller, 1897, by monotypy.

The describer placed this genus in the Brachyscelinae of Maskell. Cockerell, 1902g: 114, and Fernald, 1903b: 48, assigned the name as a synonym of *Ascelis*

Schrader. Froggatt, 1921a: 156, accepted the genus as valid, but placed its typespecies as a synonym of *Brachyscelis pomiformis* Froggatt, 1892. There appears to be no recent contribution to its status.

Dactylaspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-26.

TYPE-SPECIES: Dactylaspis dactylifera Ferris, 1937, by original designation.

The describer placed four species in this genus and assigned it to the Diaspidini. Balachowsky, 1954e: 23, listed it as belonging to his group Lepidosaphedina, but subsequently (p. 172) included it in a group of genera which he assigned to his Diaspidina chionaspiform.

Dactylopius O. G. Costa, 1835,⁶ Fauna del Regno di Napoli, Famiglia de' Coccinigliferi, o de' Gallinsetti, Emitteri Napoli, pp. 2, 15.

TYPE-SPECIES: ?Coccus adonidum [Linnaeus 1758] by subsequent designation of Targioni-Tozzetti, 1866: 129, or Dactylopius coccus Costa, 1835, by subsequent designation of Cockerell, 1902k: 453. (This is Coccus sativus Lancry, 1791, according to Lindinger, 1949: 211.)

Aside from the complications surrounding the fixation of the proper date of publication for this genus, our examination of its beginnings showed serious complications in other areas. Costa, footnote (page 2) stated unequivocally that he was substituting this name for the nomenclatorially less exact name *Diaprosteci*, which he, 1828a: 7, had proposed along with two other currently accepted genera, for the reception of coccids having the body divided into 13 segments, each with lateral appendages, such as *Coccus adonidum*. Since this is the only coccid species he mentioned under *Diaprosteci*, it is type by monotypy. Since Costa, 1835: 2, deliberately substituted *Dactylopius* for *Diaprosteci*, the type-species of *Dactylopius* would stand as *Coccus adonidum* by substitution. However, *adonidum* received only the briefest incidental mention in the Fauna Napoli paper, and nearly all of the discussion under *Dactylopius* in this paper related to two species which Costa called *Dactylopius coccus* [the Mexican cochineal] and *Dactylopius polonicus* [the Polish cochineal].

The first subsequent comment on *Dactylopius* and *Diaprosteci* seems to have been made by Westwood, 1840: 447, who accused Costa of promoting nomenclatorial confusion through proposal of these names [Westwood substituted *Diaprostocetus* for *Diaprosteci*], but made no direct critical effort to establish the status of either genus. Targioni-Tozzetti, 1866: 129, made the first type-species designation for this genus that has been encountered, citing *adonidum* as the proper type-species. His proposal fitted the sequential pattern from *Diaprosteci* through *Dactylopius* but was predicated on his assignment of *Coccus cacti* of authors, non Linnaeus, as the type-species of the genus *Coccus* Linnaeus, a concept already rejected (*see Coccus*). At the same time he ruled out the use of the genus name *Pseudococcus* Westwood, 1840, for this mealybug concept on the grounds of prior publication of *Dactylopius*. Signoret and subsequent authors followed this association for some 60 years so that many species currently placed in the Pseudococcidae were originally described under the generic name *Dactylopius*.

The next pronouncement on type fixation apparently was by Cockerell. 1902k: 453–454, who allegedly reviewed the history of *Dactylopius* and stated: "D.

⁶ See footnote on Calimmata Costa.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 55

coccus Costa . . . which is the first mentioned is to be regarded as type of the genus. *D. coccus* is said to be *Coccus cacti* L., but instead of being a synonym of that species (*Monophlebus cacti* [see 1899j: 261]), it is the first available name for the commercial cochenille." This statement ignored the previous potential type fixation through the substitution of *Dactylopius* for *Diaprosteci* and the actual previous type fixation by Targioni-Tozzetti, but it was accepted by Fernald 1903b, and seems to have had substantial usage subsequently by critical students of coccid taxonomy, with the exception of Green, 1912a, and MacGillivray, 1921. Lindinger, 1937: 182, accepted *Dactylopius* as valid for his list of coccid genera. Laing, 1944: 93, discussed the name in connection with his comment on the genus *Pseudococcus* Westwood, as did Ferris, 1950b: 170, and 1955a: 85. Kirkaldy, 1904a: 254, and 1906a: 254, presented various observations on the status and type of this genus but his opinions do not seem to be significant or, indeed, germaine to the alignment of the genus.

It is our opinion that the zoological concept of this genus as standing for the Mexican cochineal and its relatives is now sufficiently established in taxonomic literature to make its continued use as the accepted designation for these coccids highly desirable. But a decision in its favor under the Plenary Powers of the International Commission is clearly required to make its use valid.

Dactylopus Signoret, 1875, Petites Nouvelles Ent. 7: 499.

This name was printed in Signoret's description of *Dactylopus bromeliae* n. sp. We consider it to be a lapsus for *Dactylopius* O. G. Costa, which was then in use for the mealybug genus now called *Pseudococcus* Westwood.

Daraspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 511.

TYPE-SPECIES: Chionaspis bussii Newstead, 1911, by original designation and monotypy.

The proposer of this genus suggested a relationship to *Sinistraspis* MacGillivray. Balachowsky, 1954e: 23, 172, suggested two different assignments for it, the first in Lepidosaphedina, the second in Diaspidina, group II, chionaspiform.

Dattilopii O. G. Costa, 1835, Fauna del Regno di Napoli, Famiglia de' Coccinigliferi, o de' Gallinsetti. Emitteri Napoli, p. 2.

Costa presented this italicized and capitalized name as one of the "three distinct genera" into which he divided the coccid group. It has never attained standing in coccid literature and may actually be a vernacular name.

Decoraspis Ferris, 1955, Microentomology 20: 31-32.

TYPE-SPECIES: Aonidia cornigera Green, 1896, by original designation.

This name was proposed by Ferris as a replacement for *Greeniella* "Mac-Gillivray 1921: 395." In our opinion this was an unnecessary proposal since MacGillivray, 1921: 395, actually stated "*Greeniella* Ckll." [1897]. Thus *Decoraspis* is a synonym of the Cockerell name. See Greeniella MacGillivray.

Delococcus Ferris, 1955, Microentomology 20:5.

TYPE-SPECIES: Formicoccus tafoensis Strickland, 1947, by original designation.

This was placed in the Pseudococcidae.

Dentachionaspis MacGillivray, 1921, The Coccidae, p. 310.

TYPE-SPECIES: Chionaspis capensis Newstead, 1917, by original designation and monotypy.

Hall, 1946a: 499, 512, 542, 546, accepted this genus as valid zoologically but stated that the type-species was identical to *Dinaspis lounsburyi* Leonardi, 1914. Balachowsky, 1954e: 172, accepted the genus and placed it in his Diaspidina, group II, chionaspiform.

Dentaspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Chionaspis substriata Newstead, 1910, by original designation and monotypy.

Hall, 1946a : 499, 542, 546, accepted this as a zoologically valid genus. Balachowsky, 1954e : 171, placed it in his Diaspidina, group II, chionaspiform.

Dermatolecanium Lindinger, 1937, Ent. Jahrb. 46:183.

An emendation of Dermolecanium Zavattari.

Dermolecanium Zavattari, 1928, *in* Casazza, Bol. della Soc. Med. Chir. 42: 419.

TYPE-SPECIES: Dermolecanium migrans Zavattari, 1928, by monotypy.

A claim was made that the larvae on which the description is based belong to the lecanine series of the Coccidae (str.). The report associated with the description of the new genus and species made the most unusual claim that the coccids were responsible for a serious skin injury to a human being. Silvestri, 1939: 769, commented on this report, and seemed inclined to accept the evidence at face value. We have examined the report carefully and feel that too many unexplained factors are present to give it full credence as evidence that this insect, presumbably belonging in a plant-feeding group, actually attacked and damaged human skin. We suspect some explanation other than active attack by the coccid may have accounted for the presence of the larvae in association with the lesions.

Desmococcus McKenzie, 1942, Microentomology 7:7.

TYPE-SPECIES : Desmococcus captivus McKenzie, 1942, by original designation.

The describer placed this genus in the new tribe Pitycoccini, Coelostomidiinae, Margarodidae.

Diaonidia Takahashi, 1956, Insecta Matsumurana 20: 25.

TYPE-SPECIES: Aonidia yabunikkei Kuwana, 1933, by original designation and monotypy.

The describer offered characters to separate this genus from *Aonidia* Targioni-Tozzetti.

Diaphoraspis Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 277.

TYPE-SPECIES: Diaphoraspis orbata Brimblecombe, 1957, by original designation.

Its describer placed this genus in the Aspidiotini.

Diaprostecha Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:4; 1869, 11:697.

An emendation or misspelling of *Diaprosteci* Costa, which has acquired no standing in coccid literature.

Diaprostechus Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:32; 1869, 11:725.

Presumably an emendation of *Diaprosteci* Costa, since Targioni-Tozzetti credited it to Costa, Pontano [a publication], 1828. It has acquired no standing in coccid literature.

Diaprosteci O. G. Costa, 1828, Prospetto di Una Nuova Divisione Metodica del Genere Coccus, Lin. Lam. EC. Napoli, Dalla Tipografia Trani, p. 7.

TYPE-SPECIES : Coccus adonidum Linnaeus, 1758, by monotypy.

Various compilers of lists of animal names, including Sherborn, 1925, Index Animalium, section 2: 1900, have placed this as a "vernac." name. According to Sherborn, Cockerell, 1902k: 453, stated that this was given in the Italian vernacular, and Fernald, 1903: 22, also regarded it as a vernacular name to be disregarded. We are not able to confirm that this is a "vernacular name" as defined in the 1961 Zoological Code. Instead, *Diaprosteci* appears to us to be derived from the Greek language, although perhaps poorly formed. For a number of years after its original publication the name appeared in the published works of Targioni-Tozzetti, Signoret, and other workers under a variety of spellings. Nine variations of the name have been found, and are included in this list.

This generic name was published by its describer in direct association with his *Diaspis* and *Calymmata*, which have been accepted fully in coccid literature. If our understanding of its formation is correct, *Diaprosteci* is as fully entitled to consideration as are *Calymmata* and *Diaspis*. The author, 1835: 1, however, developed dissatisfaction with it and, according to his own statement, replaced it with *Dactylopius*. The author's substitution of *Dactylopius* for the reason of personal dissatisfaction is not allowable according to Code Article 18(a). The initial complications here outlined appeared in print well over 100 years ago. In the intervening period, and especially in the past 60 years, *Diaprosteci*, in any spelling, has disappeared from coccid literature, while *Dactylopius* has retained its standing as an available generic name although it has had varying applications through the years.

Diaprostecie Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9: 454.

Cockerell stated that Costa presented this spelling of *Diaprosteci*, but we have been unable to confirm this.

Diaprostecus Waterhouse, 1902, Index Zoologicus, sup. 1: 410.

An emendation of *Diaprosteci* Costa, credited to Costa, 1827. Lindinger, 1937: 183, repeated this spelling, crediting it to Pontano [a publication], 1828.

Diaprostethus Signoret, 1877, Soc. Ent. de France Ann. (ser. 5) 6: 658.

Presumably this is another variation in the spelling of *Diaprosteci* Costa. Signoret credited it to Costa and indicated that it should be a synonym of *Dactylopius* Costa, 1835.

Diaprostetus Signoret, 1868, Soc. Ent. de France Ann. (ser. 4) 8: 842.

This spelling was presented in the synonymy Signoret included under *Coccus adonidum* Linnaeus in his preliminary catalogue of the Coccidae. The name was credited to Costa, 1828.

Diaprostocetus Westwood, 1840, An Introduction to the Modern Classification of Insects 2: 447.

Westwood credited this name to Costa, another change in the spelling of *Diaprosteci*.

Diapsis Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 38, 51.

A lapsus for Diaspis Costa.

- Diaspidiotus Berlese, 1896, or Berlese and Leonardi, 1896, *in* Berlese and Leonardi, Riv. di Patol. Veg. 4: 350; or Leonardi, 1897, Riv. di Patol. Veg. 5: 375:
 - TYPE-SPECIES: Aspidiotus (Diaspidiotus) patavinus Berlese, 1896, by monotypy; or Diaspis ancylus Putnam, 1877, by subsequent designation of Leonardi, 1898a: 50 (210).

This genus presents another of the painfully frequent instances of confusion over the early history and actual status of a coccid generic name. Neave, 1939, Nomen. Zool. II: 63, credited the name to Berlese, 1896, *in* Berlese and Leonardi, 1896: 350. This represented the first known publication of the name, which was presented as "6. *Aspidiotus (Diaspidiotus) patavinus* Berl. n. sp." This heading was followed by a description of the new species. We have found nothing in the 1961 Code of Zoological Nomenclature that would either permit or compel rejection of this publication date and author. Acceptance of this concept, however, repudiates completely the subsequent history of the genus and gives a zoological status other than that currently accepted by many coccid workers.

In 1897a: 375, Leonardi referred to the "subgenus *Diaspidiotus* already proposed by Prof. Berlese and me" and, in 1898a: 50 (210), in a key, he presented "*Diaspidiotus* Berl. et Leon., Typus *A. ancylus*" and repeated the joint authorship of page 215 of the same paper. Other coccid students of the period. e.g. Cockerell, 1897i: 11, and Newell, 1899: 3-5, also credited the genus to joint authorship. More recent students show variation on assigning authorship and date of publication, where indicated, but pretty consistently accept *Diaspis ancylus* Putnam, 1877, as the type-species of the genus. This is not possible if the earlier publication date is accepted since *Aspidiotus patavinus* Berlese, 1896, which is currently placed by European workers as a synonym of *Aspidiotus pyri* Lichtenstein, must necessarily be accepted as type-species by monotypy. This was discussed by De Lotto, 1963, Ent. Soc. South. Africa Jour. 26: 144-145, who

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 59

concluded that *Diaspidiotus* should be credited to Berlese, 1896, and that *patavinus* Berlese, 1896, =A. *pyri* Lichtenstein, 1881, is its type-species. Current publications on aspidiotine coccids generally recognize *Diaspidiotus*, based on *Diaspis ancylus* Putnam, 1877, as type-species, as a zoologically valid coccid segregate, generically separated from related forms and especially from *Quadraspidiotus* MacGillivray, 1921, which had *Aspidiotus ostreaeformis* Curtis, 1843, designated as its type-species.

We believe that the zoological distinction between Diaspidiotus and Quadraspidiotus, as they are now constituted (i.e., each with the type-species indicated and each with numerous included species), can be maintained on present knowledge only with considerable uncertainty. In our view much more critical study of included species would be needed to confirm the zoological separation of these two generic units. If patavinus is accepted as type-species of Diaspidiotus, then Quadraspidiotus clearly becomes a synonym of it. Such synonymy was indicated by Borchsenius, 1950b: 224. Perhaps this synonymy is valid zoologically as well, even if the currently accepted concept of Diaspidiotus rests on the occurrence of a reduced number of pygidial marginal lobes as compared with Quadraspidiotus. We conclude that a rigid conformity to the applicable Articles of the 1961 Code will disrupt the zoological standards for the genus Diaspidiotus that were established in 1897 and 1898 and that are currently accepted by many active students of the Coccoidea. We further conclude that, in the interest of stability, the genus can best stand as *Diaspidiotus* Berlese and Leonardi 1897, 1898, with type-species Diaspis ancylus Putnam, 1877, by designation of Leonardi, 1898a: 50 [210].

Diaspidistus Hempel, 1900, [Sao Paulo] Rev. Mus. Paulista 4: 497, 522.

TYPE-SPECIES: Diaspidistus multilobis Hempel, 1900, by original designation and monotypy.

Its describer keyed this genus to a relationship with *Diaspis* Costa. Cockerell, 1902p: 257, suggested a close affinity with *Pseudoparlatoria* Cockerell. Lindinger, 1937: 183, said: "=*Pseudoparlatoria* Ckll."

Diaspidopus Brimblecombe, 1959, Queensland Jour. Agr. Sci. 16: 129.

TYPE-SPECIES: Diaspidopus distinctus Brimblecombe, by original designation and monotypy.

The describer suggested a relationship to *Pseudotargionia* Lindinger for this genus.

Diaspis O. G. Costa, 1828, Prospetto di Una Nuova Divisione Metodica del Genere Coccus, Lin. Lam. EC. Napoli, Dalla Tipografia Trani, pp. 6–7, nomen nudum; 1835, Fauna del Regno di Napoli, Famiglia de' Coccinigliferi, o de' Gallinsetti. Emitteri Napoli, p. 19.

TYPE-SPECIES: (Diaspis calyptroides Costa, 1835) = Aspidiotus echinocactus Bouché, 1833, by subsequent designation of Cockerell, 1902d: 58.

While *Diaspis* was first proposed by Costa in 1828, he did not include in it at that time any definitely named species. Therefore it did not acquire status until its appearance in his coccid Fauna of Naples paper, of uncertain date, but here accepted as 1835 (*see* footnote under *Calimmata* Costa). Costa set no type-species for his genera. Targioni-Tozzetti, 1867: 9, stated that the type-species for this genus was *Coccus aonidum*, or a form that has been confused with

208-496-66-5

others under this name. Costa did not mention this name in his paper. We have found no tie-up that could permit acceptance of this attempted type-species fixation and since the subsequent Targioni-Tozzetti Catalog (1868) offers no confirmation of such a choice of type-species for *Diaspis*, we conclude that the proposal has no validity.

The first type-species designation with apparent validity that we have encountered, occurred in Cockerell, 1902d: 58, where he stated: "The type of *Diaspis* is *D. calyptroides* . . ." Searches in coccid literature by different workers have brought published opinions that Costa's *calyptroides* was identical with *Coccus luteus* Lancry, 1791, and with *Aspidiotus echinocacti* Bouché, 1833, and the evidence from the description of these forms seems to lend plausible support to the published opinions. Lindinger, 1943c: 249, accepting 1829 as the date of publication of *calyptroides* Costa, gave it priority over *echinocacti* Bouché, 1833, but held that both of these species were predated by *luteus* Lancry, 1791. For more than 60 years the majority of coccid workers have cited *echinocacti* Bouché, 1833, as type-species of *Diaspis* Costa.

The problem of the status of the coccid genus *Diaspis* seems to be further complicated by its proposal, apparently wholly independently of the Costa publication, by Bremi, or Bremi-Wolf, first in Ver. Schweiz. Naturf. Gesell., 1847: 43, where no species were included, and again, 1849: 327, where the species name *Diaspis nivea* was included. (Lindinger, 1936: 167, offered his opinion that this is *Chionaspis salicis* (L.) Sign.) *Diaspis* also was used in the Coleoptera in 1848 according to Neave, 1939, Nomen. Zool. II: 63, but the Costa use, whatever the date of its appearance, seems to have ample priority.

With respect to zoological usage, this genus has been applied with relative consistency, especially since the Cockerell type-species and the Fernald Catalogue acceptance, to a group of diaspidine coccids centering on the common armored scale found on many *Cactus* species. Balachowsky, 1954e: 173, placed this genus in Diaspidina, group I, diaspiform. We believe that this application should be accepted.

Diasprotecus Signoret, 1868, Soc. Ent. de France Ann. (ser. 4) 8:511.

A variation of spelling of Diaprosteci Costa.

Diaste Dalle Torre, 1898, Cat. Hymenopterorum 5: 220, footnote 3.

We believe that this name, as listed by Dalle Torre, resulted from an inadequate examination of the paper on North American Aphelinae by L. O. Howard, on which it was based. Howard reported one of his parasites as coming from "Mytilaspis on an orchid, an undetermined species of Dycaste from Japan." Dycaste does not seem to be a recognized plant genus and we are persuaded that the spelling was a lapsus for Lycaste, a well-known orchid genus. This error appears to have been compounded by Morley, 1909, Entomologist 42: 257, in his review of the Hymenopterous Parasites of Coccidae, where he further transposed Diaste into Diaspis.

Diastolaspis Brimblecombe, 1959, Queensland Jour. Agr. Sci. 16: 132.

TYPE-SPECIES: Diastolaspis novata Brimblecombe, 1959, by original designation and monotypy.

The describer placed this genus close to Pseudotargionia Lindinger.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 61

Diaulacaspis Takahashi, 1942, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 81:39-40.

TYPE-SPECIES: Diaulacaspis siamensis Takahashi, 1942, by original designation and monotypy.

The describer suggested a relation to Aulacaspis Cockerell but noted conspicuous differences.

Dichosoma Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 271.

TYPE-SPECIES: Dichosoma convexa Brimblecombe, 1957, by original designation and monotypy.

The describer suggested a relationship to *Neomorgania* MacGillivray and *Mimeraspis* Brimblecombe in the Aspidiotini.

Diclavaspis Balachowsky, 1956, Mus. Roy. du Congo Belge [Tervuren] Ann: (n.s.) Sci. Zool. 3:100.

TYPE-SPECIES: Aspidiotus (Diaspidiotus) ehretiae Brain, 1918, by original designation.

The describer associated this genus closely with the aspidiotine genera *Clavaspis* MacGillivray, *Quadraspidiotus* MacGillivray, *Abgrallaspis* Balachowsky, and *Aspidaspis* Ferris.

Dicyphococcus Borchsenius, 1959, Ent. Obozr. 38: 165, 167.

TYPE-SPECIES: Dicyphococcus bigibbus Borchsenius, 1959, by original designation.

Its describer placed this genus close to *Parafairmairia* Cockerell and *Cardiococcus* Cockerell in the Coccidae (str.).

Didesmococcus Borchsenius, 1953, Ent. Obozr. 33: 281.

TYPE-SPECIES : Didesmococcus megriensis Borchsenius, 1953, by original designation.

Its describer placed this genus close to *Sphaerolecanium* Šulc in the Coccidae (str.).

Dimargarodes Silvestri, 1938, Notes d'Ent. Chinoise 5: 22.

TYPE-SPECIES: Margarodes mediterraneus Silvestri, 1908, by original designation and monotypy.

This genus belongs in the Margarodini where it can perhaps be distinguished from *Margarodes* Guilding (str.).

Dinaspidiotus Gómez-Menor, 1957, Eos 33:45.

A lapsus for Dynaspidiotus Thiem & Gerneck.

Dinaspis Leonardi, 1911, Portici R. Scuola Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 5:282.

TYPE-SPECIES: Dinaspis ichesii Leonardi, 1911, by subsequent designation of Sasscer, 1912: 95.

Recent workers have presented diverse opinions regarding this genus, but Ferris, 1938: 37, 45–46, considered it to be zoologically valid and Balachowsky, 1954e: 23, accepted it and assigned it to his Lepidosaphedina.

Discoccus Ferris, 1955, Atlas of the Scale Insects of North America 7:79.

A lapsus for Discococcus Ferris.

Discococcus Ferris, 1953, Atlas of the Scale Insects of North America 6: 314.

TYPE-SPECIES: Ehrhornia graminis Ferris, 1918, by original designation.

This genus was placed in the Pseudococcidae by its describer.

Discodiaspis Koronéos, 1934, Les Coccidae de la Grèce surtout du Pélion, p. 88.

TYPE-SPECIES : Discodiaspis suaedae Koronéos, 1934, by monotypy.

Lindinger, 1937: 183, and Balachowsky, 1953g: 749-750, placed the typespecies as a synonym of *Protargionia salicorniae* Gómez-Menor. Both Ferris, 1937d: 104, and Balachowsky, 1953g: 749-750, 754-755, considered the genus to be zoologically valid and assignable to the Odonaspidini.

Distichlicoccus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 21, 48.

TYPE-SPECIES: Dactylopius salinus Cockerell, 1902, by original designation.

Its describer placed this genus in the Pseudococcidae.

Doriopus Brimblecombe, 1959, Queensland Jour. Agr. Sci. 16: 381, 397, nomen nudum; 1960, 17: 193.

TYPE-SPECIES: Doriopus bilobus Brimblecombe, 1959, by original designation and monotypy.

Its describer associated this genus with the Australian diaspidid genera Hybridaspis Green and *Hemiaspidis* MacGillivray. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 375, placed it in the Parlatoriini, noting that those affinities were revealed by the second-stage female.

Dorthesia d'Orthez (or Dorthez), 1785, Observations sur le Physique sur l'Histoire naturelle et sur les Arts [Jour. de Phys.] 26: 207.

TYPE-SPECIES: Orthezia characias [Bosc d'Antic], 1784, by monotypy.

The original papers presenting this name and Orthezia Bose d'Antic have not been seen, and the conclusions here presented are based primarily on F. B. White, 1880: 304. According to him the originally presented generic name was Orthezia [Bose] 1784; then, still according to White, the Abbé d'Orthez, whose name was the source of the original name, published on it in 1785 but emended Orthezia into Dorthesia. Both names have appeared in print subsequently as either "-zia" or "-sia." Signoret, 1868–1877, presented both Dorthesia and Dorthezia. This name, in either spelling, is currently accepted as belonging in synonymy under Orthezia Bose d'Antic, 1784. The type-species is considered to be a synonym of Coccus urticae Linnaeus.

Douglariella MacGillivray, 1921, The Coccidae, p. 474.

TYPE-SPECIES: Orthezia maenariensis Douglas, 1884, by substitution of this generic name for Douglasia MacGillivray, 1921, preoccupied.

MacGillivray replaced his *Douglasia*, preoccupied in the Lepidoptera and Coccoidea, with *Douglariella*. Laing, 1922: 254–255, synonymized the type-species with *Orthezia urticae* (Linnaeus), making *Douglariella* a synonym of *Orthezia* Bosc d'Antic.

Douglasia Green, 1902, Victorian Nat. 19:95.

TYPE-SPECIES: Coccus floccosus De Geer, 1778, by original designation and monotypy.

Green proposed this as a subgenus. It was preoccupied in Lepidoptera by *Douglasia* Stainton, 1854, according to Neave, 1939, Nomen. Zool. II: 151. In the same year, but probably about a month later, Green, Ent. Monthly Mag. 38: 285, published a practically identical paper, which proposed *Newsteadia* as the new subgeneric name, with "*D. foccosus*" as the type-species. We assume that editorial substitution was made for the preoccupied *Douglasia* since Green had forwarded both papers from Ceylon.

Douglasia MacGillivray, 1921, The Coccidae, pp. 110-111, 474.

TYPE-SPECIES: Orthezia maenariensis Douglas, 1884, by monotypy.

Laing, 1922: 254-255, showed that this name is a synonym of *Orthezia urticae* (Linnaeus). In this usage *Douglasia* is doubly preoccupied. *See* two preceding discussions.

Douglasiella MacGillivray, 1921, The Coccidae, p. 483.

A lapsus for Douglariella MacGillivray.

Drosicha Walker, 1858, List of the Specimens of Homopterous Insects in the Collection of the British Museum. Supplement, p. 306.

TYPE-SPECIES: Drosicha contrahens Walker, 1858, by monotypy.

This margarodid genus was reviewed by Morrison, 1928: 163.

Drosichiella Morrison, 1927, Biol. Soc. Wash. Proc. 40: 105.

TYPE-SPECIES: Monophlebus tamarindus Green, 1918, by original designation.

This genus is accepted as valid in Morrison, 1928: 160, but Rao, 1950a: 114, after examining the type specimens of *tamarindus*, reports that the genus name is a synonym of *Perissopneumon* Newstead, 1900.

Drosichoides Morrison, 1927, Biol. Soc. Wash. Proc. 40: 106.

TYPE-SPECIES: Llaveia haematoptera Cockerell, 1917, by original designation.

This genus was founded on the adult male only; its relationships to other margarodid genera were discussed by Morrison, 1928: 171.

Drosycha Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5: 351.

A lapsus for Drosicha Walker.

63

Drymococcus Borchsenius, 1962, Akad. Nauk SSSR Zool. Inst. Trudy 30: [221].

TYPE-SPECIES: Drymococcus rhizophilus Borchsenius, 1962, by original designation and monotypy.

This genus was assigned by its describer to the Planococcini, Pseudococcidae, where it is considered close to *Formicococcus* Takahashi.

Dryocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 501.

This is a uninomial designation for a coccid species, *Chermes variegata* Olivier, which is currently assigned as a synonym of *Kermes roboris* (Fourcroy).

Duplachionaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: Chionaspis graminis Green, 1896, by original designation.

MacGillivray included 21 species in this genus. Recent workers have accepted it as a zoologically valid unit. Balachowsky, 1954e: 171, assigned it to his Diaspidina, group II, chionaspiform.

Duplaspidiotus MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Pseudaonidia clavigera Cockerell, 1901, by orginal designation.

The author placed this genus close to *Pseudaonidia* Cockerell. Ferris, 1937c: 51, 54, was doubtful of its distinctness, but later, 1938a: SII-252, accepted it as zoologically valid. Balachowsky, 1958b: 256-257, 268-269, accepted it and used it for species included in his study of African diaspidid coccids.

Duplaspis Goux, 1937, Soc. Ent. de France Bul. 42: 229.

TYPE-SPECIES: Duplaspis fraxini Goux, 1937, by original designation and monotypy.

Its describer placed this genus in the Diaspidini. Balachowsky, 1954e: 168, accepted it and placed it in his Diaspidina, group II, chionaspiform.

Dycryptaspis Cockerell, 1897, *in* Leonardi, Riv. di Patol. Veg. (Nov. 1896–Feb. 1897) 5: 375; 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6: 31.

TYPE-SPECIES: Aspidiotus secretus Cockerell, 1896h: 20, by original designation and monotypy.

Leonardi discussed this name, crediting it to Cockerell and suppressing it as a synonym of his Odonaspis in a short published note in which he remarked on the details of a letter received from Cockerell after the publication of the Leonardi, 1897: 283–286, preliminary note on aspidiotine classification. Cockerell, in the reference cited, accepted Leonardi's suppression of his name in favor of Odonaspis, although without actual mention of Dycryptaspis. Lindinger, 1937: 184, 191 accepted Dycryptaspis Cockerell as valid nomenclatorially and as a replacement for Odonaspis Leonardi which he regarded as preoccupied by Odontaspis Agassiz, 1845. For further discussion on this problem, see Odonaspis Leonardi and Spatheaspis Leonardi. In spite of the emphasis Lindinger gave to this name, it does not seem to be included in Neave's Nomenclator Zoologicus.

Dynaspidiotus Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:131, 230-231.

TYPE-SPECIES: Aspidiotus britannicus Newstead, 1898, by original designation.

As a result of the unusual method used by these authors in presenting what seem to be extensive, critical, morphological studies, it is quite difficult to evaluate this genus properly. It was presented first (p. 131) as a subgenus, in the list of species studied. It appears to us to have been presented as both a nomenclatorial and a zoological unit much later in the paper (p. 231), where it was included in a key to the groups and species of Aspidiotini studied. The manner of presentation at this point ". . . Genus Dynaspidiotus (syn. Aspidiotus s. str.) (Typ: britannicus. Included hederae, abietis)" leaves no alternative to the conclusion that it is nomenclatorially a synonym of Aspidiotus Bouché. Acceptance of the existence of a zoologically independent unit, based initially on Aspidiotus britannicus Newstead, appears to date from Ferris, 1938a: SII-228, where he credited the genus to Thiem and Gerneck. Subsequent authors, including Balachowsky and Schmutterer, have followed this pattern, so the genus is now fairly well established in literature. It is our belief that the aspidiotine genera are much in need of critical classificatory studies, and that the zoological status of this unit must be considered as unsettled at present.

Dysmicoccus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 22, 53.

TYPE-SPECIES: Dactylopius brevipes Cockerell, 1893, by original designation.

This genus was separated from *Pseudococcus* Westwood to care for a group of 13 species, most of which were assigned to *Pseudococcus* previously. On the basis of present knowledge of the species in this group, the separation can be maintained only on very narrow grounds.

Echinicerya Morrison, 1930, Biol. Soc. Wash. Proc. 43: 17.

TYPE-SPECIES: Echinicerya anomala Morrison, 1930, by original designation and monotypy.

Its describer placed this genus in the Iceryini, Monophlebinae.

Echinococcus Balachowsky, 1936, Soc. Ent. de France Bul. 41: 157.

TYPE-SPECIES: Echinococcus echinatus Balachowsky, 1936, by original designation and monotypy.

This generic name was preoccupied by *Echinococcus* Rudolphi, 1801, in Vermes. Lindinger, 1943b: 219, recognized this prior usage and proposed the name *Coccidohystrix* as a replacement. Borchsenius, 1948a: 953; 1949: 307, also noted the preoccupation and suggested the name *Centrococcus*. See the discussion under *Centrococcus*.

Edwalia Borchsenius, 1957, Akad. Nauk SSSR Zool. Inst. (n.s. 66) 9:47.

A lapsus for Edwallia Hempel.

Edwallia Hempel, 1899, Canad. Ent. 31: 131.

TYPE-SPECIES: Edwallia rugosa Hempel, 1899, by original designation and monotypy.

This genus is placed in the group of "glassy" genera of Coccidae (str.).

Ehrhornia Ferris, 1918, Canad. Ent. 50: 324-325.

TYPE-SPECIES: Sphaerococcus cupressi Ehrhorn, 1911, by original designation.

Ferris redescribed the type-species when he established the genus. Borchsenius, 1949: 87, 178, assigned it to the Pseudococcidae, as did Ferris, 1953a: 345, where he restricted the genus to the type-species and assigned the previously included *E. graminis* Ferris as type-species of a new genus, *Discocccus*.

Elatocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 502.

This is a uninomial designation presented to replace a generic and specific name for the insect involved. It is without nomenclatorial status.

Elizabetiella Borchsenius, 1947, Akad. Nauk Armians. SSR Dok. 7: 142; 1948, Akad. Nauk SSSR Dok. (n.s.) 61:953.

TYPE-SPECIES: Dactylopius nipae Maskell, 1893, by original designation and monotypy.

Borchsenius, 1948a: 953, placed this name as a synonym of Nipaecoccus Šulc.

Emmereziaspis Mamet, 1941, Mauritius Inst. Bul. 2:36.

TYPE-SPECIES: Fiorinia allaudi de Charmoy, 1899, by original designation [see U.S. Dept. Agr. Misc. Pub. 734: 89, under Grandpré and Charmoy].

The describer implied a relationship with *Fiorinia* Targioni-Tozzetti for this genus.

Encarsia Zoological Record, 1895, p. 364.

Kirkaldy, 1904a: 257, commented: "N.B. The genus *Encarsia* was listed under Coccidae in error in the Zool. Record for 1895." It is a hymenopterous genus.

Enlacaspis Cardin, 1915, Cuba Estac. Expt. Agron. Informe 3: 125.

A lapsus for Aulacaspis Cockerell.

Enlecanium Cockerell, 1929, Science 70: 150.

A lapsus for Eulecanium Cockerell.

Entaspidiotus MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Selenaspidus magnus Lindinger, 1909, by original designation.

Mamet, 1958a: 362, 413–414, accepted this aspidiotine genus as valid but restricted its coverage to two species rather than to the nine originally included by MacGillivray. Ephedraspis Borchsenius, 1949, Akad. Nauk SSSR Dok. (n.s.) 64: 738.

TYPE-SPECIES: Aspidiotus ephedrarum Lindinger, 1912, by original designation and monotypy.

Its proposer assigned this genus to the Aspidiotini and suggested a relationship to Chortinaspis Ferris. Balachowsky, 1956: 14, placed the name as a synonym of Abgrallaspis Balachowsky, 1948.

Epicoccus Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9:24.

TYPE-SPECIES: Coccus acaciae Maskell, 1897, by original designation and monotypy.

This genus obviously assigns to the Pseudococcidae. Morrison and Morrison, 1922: 41, redescribed the genus and its type-species, but since the redescription of Ripersia Signoret by Reyne, 1951a, their suggestions on probable relationships no longer have significance.

Epidiaspis Cockerell, 1899, Ill. Nat. Hist. Survey Bul. 5: 398; 1902, Entomologist 35: 59.

TYPE-SPECIES: (Aspidiotus piricola Del Guercio, 1894)=Diaspis leperii Signoret, 1869, by subsequent designation of Fernald, 1903b: 250.

The author presented this name in his checklist as a subgenus of Diaspis Costa with two included species, but in the second citation, associated the genus with *piricola* only. Lindinger, 1912b: 359, 388, indicated the identity of species piricola Del Guercio, 1894, and leperii Signoret, 1869, by citing both as synonyms of betulae Baerensprung, 1849. Ferris, 1937: SI-51, and various European coccid students, including Balachowsky, 1954e: 217, accepted the piricola-leperii synonymy but not Lindinger's opinion in regard to betulae. We have no critical opinion on this point. Balachowsky assigned the genus to the Diaspidina, group I, diaspiform.

Eremaspis Bodenheimer, 1951, Ent. Ber. 13: 330.

TYPE-SPECIES: Pinnaspis zillae Hall, 1923, by original designation.

The describer indicated that this genus was proposed for certain species originally described in Pinnaspis Cockerell and Chionaspis Signoret. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 360, placed it in synonymy with Contigaspis MacGillivray, 1921, because they considered the typespecies of the two genera congeneric.

Eremiaspis Balachowsky, 1951, Actualités Sci. et Indus., Ent. Appl. 1127:671.

TYPE-SPECIES: Hemiberlesia balachowskyi Rungs, 1936, by original designation and monotypy.

This name has priority of publication date over the preceding (before April as against Sept. 1), but even so, it seems to us that it will be possible to retain both names because of the one-letter difference in spelling (Code Article 56(a)). At the time of description, Balachowsky assigned this genus to his Aspidiotini, Targionina.

67

Eremococcus Ferris, 1919, Canad. Ent. 51: 252.

TYPE-SPECIES: Sphaerococcus pirogallis Maskell, 1894, by original designation and monotypy.

The describer did not suggest any close relationships for this genus. Its typespecies was redescribed by Morrison and Morrison, 1922: 38, but their only suggestion was a possible relationship with Asterolecaniidae. Borchsenius, 1960d: 88, agreed with this concept tentatively, suggesting that this genus may represent a third branch of that family.

Eremohallaspis Bodenheimer, 1951, Ent. Ber. 13: 330.

TYPE-SPECIES: Coccomptilus farsetiae Hall, 1926, by original designation and monotypy.

Balachowsky, 1954e: 22, 26, 157-158, accepted this genus as zoologically valid and assigned it to his Lepidosaphedina.

Ericerus Guérin-Méneville, 1858, Soc. Ent. de France Bul. (3) 6: lxvii; Signoret, 1874, Soc. Ent. de France Ann. (5) 4: 90.

TYPE-SPECIES: Coccus ceriferus Fabricius [i.e. ceriferus of Anderson] as a misidentification by Guérin-Méneville of Coccus pela Chavannes, 1848, by monotypy.

This name was presented by Guérin-Méneville as subgenus of *Coccus* Linnaeus, and with the single included species, which clearly was misidentified since he wrote of an insect which produces wax in China, while Fabricius referred to an Indian wax-producing insect. The original presentation by Guérin-Méneville did not seem to include any material that can be characterized as positively descriptive, or any indication that can give substance to Guérin-Méneville's presentation of the name for a valid genus. Therefore it appears to have acquired nomenclatorial status only after its listing in Signoret's preliminary coccid catalog, 1869: 864, and solid zoological standing after Signoret presented his descriptive discussion of both genus and species, although Targioni-Tozzetti, 1866: 140, did comment on this coccid briefly under the name "*Pela cerifera* nob." Regardless of any possible technicalities, this genus has stood as "*Ericerus* Guérin-Méneville, 1858" for so many years (90 plus) that we believe it should be accepted as permanent in such association.

Eriocerus Cotes, 1891, Indian Mus. Notes 2:91.

A lapsus for Ericerus Guérin-Méneville.

Eriochitin MacGillivray, 1921, The Coccidae, pp. 168, 175.

A lapsus for Eriochiton Maskell.

Eriochiton Maskell, 1887, New Zeal. Inst. Trans. and Proc. (1886) 19:46.

TYPE-SPECIES: Eriochiton hispidus Maskell, 1887, by subsequent designation of Fernald, 1903b: 127.

Morrison and Morrison, 1922: 63, redescribed this type-species and genus, and stated, incorrectly, that *hispidus* was the only species included in the genus by Maskell. The genus belongs in the Coccidae (str.), in the group of genera having the adult female enclosed in a felted test or sac.

Eriococcus Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:33; 1869, 11:726.

TYPE-SPECIES: Coccus buxi Fonscolombe, 1834, by subsequent restriction of Signoret, 1872: 429.

69

This is another early coccid genus with a tangled history. It was first proposed by Targioni-Tozzetti in 1868: 33, as "Gen. 9. Eriococcus nob." with five included species, all previously described in Coccus Linnaeus, but no type was selected or indicated. Signoret, 1870: 283, removed one of the five included species to a new genus of his own and in the process remarked that he was reserving Eriococcus "for C. festucae Fonse." We do not regard this as type-species fixation in the face of the requirements of Article 67(b) of the Code. A little later, Signoret, 1872: 422, 429, concluded that "Coccus buxi Fonscolombe is a true Coccite and for it we will retain the name of Eriococcus Targioni." This we accept as adequate type-species designation. Lindinger, 1933a: 77, discussed the status of *Eriococcus* at some length and pointed out, correctly we believe, that Fernald, 1903b: 70, should have designated Coccus buxi Fonscolombe as type-species of Eriococcus, rather than Coccus crispus Fonscolombe. Rather than accept this, however, Lindinger applied his own personal standard of selecting the first species included in any multispecific genus as its type-species. This approach led him to designate *Coccus festucae* Fonscolombe as the typespecies of Eriococcus, resulting in a very different zoological concept for the genus, and in his substitution of the name Nidularia Targioni-Tozzetti for the zoological concept of genus *Eriococcus*, as most coccid workers have accepted it.

Borchsenius, 1948: 501, reviewed this action by Lindinger and rejected the latter's type-species selection of Coccus festucae for Eriococcus. Borchsenius credited the genus to Signoret rather than to Targioni-Tozzetti on the ground that the latter's presentation was a nomen nudum. On this we disagree, believing that the Targioni-Tozzetti presentation constituted establishment through indication in accordance with the requirements of Article 16(a)(v) of the Code. As generally accepted zoologically, Eriococcus is a large genus containing numerous species described from many places in the world. Borchsenius, however, restricted the genus zoologically to the single type-species buxi on the ground that it alone possessed a certain specialized type of tubular duct, and transferred the majority of other described Eriococcus species to the genus Acanthococcus Signoret, 1875, which has long been regarded as a synonym of Eriococcus. We have examined specimens of buxi and have studied the specialized ducts on which his action is based. Our present view is that a critical morphological study of the whole eriococcine fauna of the world should be undertaken before wholesale transfer is accepted completely. Hoy, 1962: 29-30, and 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 8, reviewed the situation and rejected the Borchsenius actions, regarding both Acanthococcus Signoret and Rhizococcus Signoret as synonyms of Eriococcus Targioni-Tozzetti.

Eriodes Betrem, 1937, Arch. v. Koffiecult. Nederland Indië 11:24, 99.

A lapsus for *Erioides* Green. This name, as spelled by Betrem, is preoccupied by *Eriodes* Geoffroy, 1829, in Mammalia.

Erioides Green, 1922, The Coccidae of Ceylon. Part V, p. 365.

TYPE-SPECIES: Erioides cuneiformis Green, 1922, by original designation.

This is a pseudococcid genus that has not been placed more precisely within that family. Lindinger, 1943b: 219, reviewed the nomenclatorial status of the name

and concluded that it is derived from the same Greek source as *Eriodes* Geoffroy, 1829, and is so close to it that it must be rejected for use. He also noted that the type-species had appeared as *Ripersia cuneiformis* Green in the Cockerell, 1899a, Check List. Ferris, 1953a: 404, noting the similarity of life habit of *Porococcus* Cockerell and *Erioides* offered his opinion that *Erioides* was a synonym of the former. We consider this doubtful. It has not been confirmed by any other worker.

Erioidococcus Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 219.

TYPE-SPECIES: Erioides cuneiformis Green, 1922, by substitution of Erioidococcus for Erioides Green.

Lindinger substituted this name for *Erioides* Green. On the basis of the application of Article 56(a) of the 1961 Code we consider this action unnecessary.

Eriopeltis Signoret, 1872, Soc. Ent. de France Ann. (ser. 5) 1: 429.

TYPE-SPECIES: Coccus festucae Fonscolombe, 1834, by original designation and monotypy.

The Fernald Catalogue, 1903b: 145, listed the type-species of this genus as Eriopeltis lichtensteinii Signoret, and under the citations to lichtensteinii cited as a preoccupied first reference "Eriopeltis festucae Sign. (non Fonsc.)" with page 430 of the reference given above as the place of publication. Subsequent type indications seem to have followed this pattern. We have reviewed Signoret's various comments on genus and included species, and consider that the conclusion presented in Fernald is not correct, and that festucae Fonscolombe, as interpreted by Signoret, 1872, is the proper name for the type-species of *Eriopeltis*. In his first proposal of Eriopeltis, Signoret, 1872: 429-430, remarked on the fact that the one species he was including forms a complete sac, "a mass of wool, so to speak, in the center of which is found the female . . ." In a later presentation where lichtensteinii was discussed, Signoret, 1876: 607, said, "I have always noted that there were two quite distinct types, one showing a sac of curled, woolly thread . . . and the other, on the contrary, a very dense felted sac . . . I have believed that it would be well to make a new species of this latter type that we called *Eriopeltis lichtensteinii*, keeping the name *festucae* for the species typical of Boyer de Fonscolombe, that we have and that shows the curled woolly sac." Lindinger, 1933a: 77, argued at some length for the use of Eriococcus Targioni-Tozzetti for this Eriopeltis zoological concept but his proposal seems based on his rigid concept that the type-species of a multiple species genus must be the first one listed, so it can be disregarded. This genus is a member of the group of "woolly" genera belonging to the Coccidae (str.). Borchenius, 1957: 40, 91, placed it in his Filippiinae.

Erium (Crawford MS) Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24: 35, nomen nudum; Cockerell, 1897, Amer. Nat. 31: 590.

TYPE-SPECIES: Dactylopius globosus Maskell, 1892, by subsequent designation by Cockerell and monotypy.

This combination of generic and author names is offered in Neave, 1939, Nomen. Zool. II: 288. Fernald, 1903b: 112, credited the genus to Crawford and the type-species to Maskell. Maskell's recording of "Erium globosum," a manuscript name attached to specimens by Crawford, following the description of Dactylopius globosus Maskell, makes Erium a nomen nudum under the negative restrictions of

Article 11(d) of the 1961 Code, as actually, though perhaps not formally, publication in synonymy. The first affirmative action in giving generic type status to *Erium* was that taken by Cockerell, as cited, where he definitely considered it to be a subgenus of *Dactylopius* [i.e. *Pseudococcus* of current usage] and cited *Dactylopius globosus* Maskell [1892] as the type-species. We therefore believe that the genus should stand as *Erium* Cockerell, 1897, with type-species *Dactylopius globosus* Maskell, 1892, by subsequent designation and monotypy.

Morrison and Morrison, 1922: 48, redescribed the type-species, globosum, and noted the serious misunderstanding of the genus that had resulted from the Maskell distribution to coccid workers of specimens from other than the type lot. The genus as redefined from the type specimens was shown to be a characteristic pseudococcine form, differing from the genus Trionymus Berg, as then constituted, primarily in the possession of a rotund rather than an elongate, parallelsided body. A tentative synonymical association was suggested in this discussion but was not made positive. Lindinger, 1935a: 121, definitely recorded the synonymy of Trionymus with Erium and transferred a considerable number of species names to Erium. In his 1937 list of coccid genera, he placed 9 additional names as synonyms of *Erium*, an action resulting largely from his acceptance of *Triony*mus and its numerous synonyms as identical with Erium. One name so placed by him, Amonostherium Morrison (p. 179), is clearly an error, as its type was definitely stated to be a common North American species having little or no morphological relationship with true Dactylopius globosus Maskell. The classificatory status of this genus remains in question. It seems to have been pretty much overlooked by more recent students of the Pseudococcidae and its typespecies, globosum, is much in need of restudy to establish Erium in a proper relation to the flood of new pseudococcid genera that have been proposed in recent years.

Essigaspis MacGillivray, 1921, The Coccidae, p. 306.

TYPE-SPECIES: Protodiaspis agrifoliae Essig, 1914, by original designation and monotypy.

Ferris, 1936a: 21, 24, 26, and 1937: SI-99, placed this name as a synonym of *Protodiaspis* Cockerell.

Eucalymmatus Lindinger, 1943, Arb. über Morph. u. Taxonom. Ent. 10: 147.

An emendation of Eucalymnatus Cockerell.

Eucalymnatus Cockerell, 1901, in Cockerell and Parrott, Canad. Ent. 33: 57.

TYPE-SPECIES: Lecanium tessellatum Signoret, 1873, by original designation and monotypy.

Its proposer presented this as a subgenus of *Lecanium* Burmeister, but it stands as a genus in the Fernald Catalogue, 1903b: 165, and has been used constantly by coccid students since its proposal.

Eudinaspis Lizer, 1942, La Plata Univ. Nac. Inst. Mus. Notas 7 (Zool. 56): 76–78.

TYPE-SPECIES: Eudinaspis jorgenseni Lizer, 1942, by monotypy.

Its proposer placed this genus in the Diaspidini with a suggested close relationship to *Dinaspis* Leonardi.

Eugreeniella Brimblecombe, 1958, Queensland Jour. Agr. Sci. 15: 87.

TYPE-SPECIES: Aonidia (Greeniella) pulchra Green, 1905, by original designation and monotypy.

The describer noted resemblances to *Greeniella* Cockerell and *Aonidia* Targioni-Tozzetti in the Aspidiotini but concluded that the proper assignment of this genus was in the Diaspidini with relationships to *Gymnaspis* Newstead and *Parlatoria* Targioni-Tozzetti. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 378, assigned it to the Parlatoriini, nearest to *Agrophaspis* Borchsenius and Williams, noting that its affinities were shown in the second-stage female.

Eulaingia Brimblecombe, 1958, Queensland Jour. Agr. Sci. 15: 80.

TYPE-SPECIES: Pseudaonidia stenophyllae Laing, 1929, by original designation and monotypy.

Its proposer suggested affinities with *Pseudotargionia* Lindinger and *Neo-morgania* MacGillivray in the Aspidiotini. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 384, confirmed its position in the Aspidiotini.

Eulecanium Cockerell, 1893, Amer. Ent. Soc. Trans. 20: 54.

TYPE-SPECIES: Coccus tiliae Linnaeus, 1758, by original designation.

Because of the enormous confusion that exists over the proper assignment and synonymy of the many specific names that have been proposed in the Coccidae (str.), to which Eulecanium assigns, and perhaps because of some early cataloguing confusion, the treatment accorded this genus has been variable. This name first appeared in print when Cockerell, 1893g: 54, presented it as a subgenus of Lecanium, "taking L. tiliae as the type." He stated that he was able to examine specimens of the 7 described species that he included in his "Third Series," and his specimens of *tiliae* are clearly defined by his presentation of adequate associated collection data. These particular specimens must be presumed to carry the burden of the zoological identity of the genus. However, they have not been located. Therefore, we assume that the genus stands for a complex which first began to take shape in terms of modern recognition when Marchal, 1908: 295, redescribed and redefined Lecanium coryli (Linnaeus) and placed Coccus tiliae Linnaeus as a synonym. Confusion over the probable identity of this type-species was compounded by the action of Sulc, 1932: 47, who used the name tiliae (Linnaeus) for the concept that Marchal called coryli and the name coryli (Linnaeus) for the concept that Marchal, 1908: 264, called corni (Bouché). Lindinger, 1937: 185, accepted Eulecanium as valid in his list of coccid generic names, dating it from 1896, and citing as type-species "E. aceris (Schr.)=coryli (L.)" because aceris was the first species included under Eulecanium by Cockerell, 1896b: 332, in his Check List.

The most recent broad treatment of this genus occurred in Borchsenius 1957: 384, 423. He accepted *Eulecanium* as valid, but cited as its type-species, *Coccus* mali Schrank, 1781, on the ground that *Coccus coryli* Linnaeus of authors has been applied, through the years, to several different species, and that the Linnaean name must be considered to be a nomen nudum because the original description is inadequate for acceptable recognition of the Linnaean species. Borchsenius dated the genus from 1896 and presented (p. 423) *Coccus tiliae* Linnaeus as a definitely recognizable form distinct from other elements of the

"coryli complex." Because of Cockerell's original positive action in 1893, we consider that the Borchsenius type designation is no more acceptable than was that of Lindinger in 1937. However, if *Coccus tiliae* Linnaeus is actually plainly recognizable today, as indicated by Borchsenius, there results no zoological dislocation of currently accepted understandings as he included it and *coryli* of authors in the same group of species. Various coccid workers from Sanders, 1909: 430, who retained the name "because it is impossible to eliminate *Lecanium* from our coccid nomenclature," through Šulc, 1932, to Kawecki, 1954–1961, have made use of the name *Lecanium* as a valid generic symbol for a particular group of species in the Coccidae (str.), usually with broader coverage than is implied by the name *Eulecanium*. While the Sanders statement is precisely correct, *see Lecanium* for a discussion of the status of the name as a zoologically valid nomenclatorial unit.

Eulepidosaphes Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13:384.

TYPE-SPECIES: Lepidosaphes marshalli Laing, 1925, by original designation and monotypy.

The authors placed this genus in the Diaspidini and noted differences from *Lepidosaphes* Shimer.

Euleucaspis Lindinger, 1905, Zool. Anz. 29: 252.

TYPE-SPECIES: (Leucaspis corsa Lindinger, 1905)=Leucaspis signoreti Targioni-Tozzetti, 1868, by monotypy.

This name was originally proposed for a "Sektion" of the genus *Leucaspis*. It was raised to the status of a subgenus by MacGillivray, 1921: 262, but with *Coccus pini* Hartig, invalidly nominated for type-species. Currently, *Euleucaspis* is accepted as a synonym of *Leucaspis* Targioni-Tozzetti, 1868, (or *Leucodiaspis* Signoret, 1869, according to Lindinger). See these names for further comment.

Eumargarodes Jakubski, 1950, Ann. and Mag. Nat. Hist. (ser. 12) 3: 397-399.

TYPE-SPECIES: Eumargarodes laingi Jakubski, 1950, by original designation and monotypy.

On present knowledge, this is a zoologically valid genus of the Margarodini.

Eumyrmecoccus Balachowsky, 1957, Rev. de Path. Veg. et d'Ent. Agr. de France 36:158-159, 162.

A lapsus for Eumyrmococcus Silvestri.

Eumyrmococcus Silvestri, 1926, Portici R. Scuola Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 18:271.

TYPE-SPECIES: *Eumyrmococcus smithii* Silvestri, 1926, by original designation and monotypy.

The describer associated this genus with *Xenococcus* Silvestri, 1924. It is an anomalous genus related to a few others reported from ant nests, of uncertain relationships but within the limits of the Dactylopiinae of the Fernald Catalogue, 1903b.

Euparlatoria Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:15.

TYPE-SPECIES: (Parlatoria calianthina Berlese and Leonardi, 1895) = Parlatoria oleae Colvée, 1880, by subsequent designation of MacGillivray, 1921: 247.

The describer originally proposed this as a subgenus of *Parlatoria*. The name is regarded by current coccid workers as a synonym of *Parlatoria* Targioni-Tozzetti.

Euphilippia Berlese and Silvestri, 1906, Redia (1905) 3: 396.

TYPE-SPECIES: Euphilippia olivina Berlese and Silvestri, 1906, by monotypy.

Although the authors evidently considered that this form was distinct from *Filippia* [or *Philippia*] oleae (Costa), and some writers on the Mediterranean coccid fauna have so treated it, Lindinger, 1937: 185, indicated that this genus is identical with *Filippia* Targioni-Tozzetti. Borchsenius, 1957: 188, 195, assigned both genus and species names to synonymy under *Filippia* oleae (Costa).

Eupulvinaria Borchsenius, 1953, Ent. Obozr. 33: 288.

TYPE-SPECIES: Eupulvinaria peregrina Borchsenius, 1953, by original designation.

The describer placed this genus in his Pulvinariini, Coccinae, Coccidae (str.), and included 5 previously described species in addition to the type-species. A close relationship to *Pulvinaria* Targioni-Tozzetti was indicated.

Euraspidiotus Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:131, 230-231.

TYPE-SPECIES: Aspidiotus ostreaeformis Curtis, 1843, by original designation.

The proposers of this unit presented it as a subgenus of *Aspidiotus* Bouché and included, in addition to the type-species, five related aspidiotine forms. The name is a synonym of *Quadraspidiotus MacGillivray*, 1921, by reason of community of type-species, and recent coccid workers have so accepted it.

Eurhizococcus Silvestri, 1936, Portici R. Ist. Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 30: 32-40.

TYPE-SPECIES: Margarodes brasiliensis Hempel, 1922, acc. to Silvestri; Wille, 1922, acc. to Morrison; by original designation.

According to our understanding of Article 50 of the 1961 Code, it is necessary to credit the type-species, *Margarodes brasiliensis*, to Wille rather than to Hempel. Wille apparently furnished all the descriptive information included in the Egatea, 7: 83-85, article which first presented the species, although he credited Hempel with the specific name. This represents a valid generic unit within the Margarodini, and currently includes one other species, *brevicornis* Silvestri, transferred from *Termitococcus* Silvestri.

Euripersia Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 61:955.

TYPE-SPECIES: Euripersia amnicola Borchsenius, 1948, by original designation and monotypy.

The describer, 1949: 179, incorporated this genus in the Pseudococcidae although he suggested that it was not too closely related to other genera of the

family. Williams, 1962: 24, assigned to it two species from the British Isles, described in *Ripersia* Signoret by Newstead. We suspect that it has phenacoccine relationships.

Eurrhizococcus Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 219.

A lapsus for Eurhizococcus Silvestri.

Eurycerus Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 19, 41.

A lapsus for Ericerus Guérin-Méneville.

Eurycoccus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:22,81.

TYPE-SPECIES: Pseudococcus jessica Hollinger, 1916, by original designation.

The describer placed this genus in the Pseudococcidae with an implied relationship to *Trionymus* Berg.

Eutaxia Green, 1926, Bul. Ent. Res. 17:60.

TYPE-SPECIES: Eutaxia moreirae Green, 1926, by original designation and monotypy.

The describer placed this genus in the Coccidae (str.) without more precise assignment and there has been no recent restudy of the genus.

- Euvoraspis Mamet, 1951, Inst. Sci. de Madagascar, Mém. Sér. A, 5: 227.
 - TYPE-SPECIES: Chionaspis cordiae Mamet, 1936, by original designation and monotypy.

Its describer considered this genus allied to *Voraspis* Hall, 1946. Ferris, 1955d: 47, discussed the type-species in the course of a review of *Phenacaspis* Cooley and Cockerell and placed the name as a synonym of *Phenacaspis*.

TYPE-SPECIES: Mytilaspis ampelodesmae Newstead, 1897, by original designation and monotypy.

The describer established this as a subgenus of "Mytilococcus" [Lepidosaphes auct.]. Balachowsky, 1954e: 21-23, 27, 147-148, 154, accepted it as an aberrant genus in his Lepidosaphedina.

Evaspidiotus Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:50(210), 74(232).

TYPE-SPECIES : Chermes hederae Vallot [?], by original designation.

The author presented this as a subgenus of *Aspidiotus* Bouché. The name is a synonym of *Aspidiotus* from community of type-species. *See Aspidiotus* for a discussion of the status of the name *Chermes hederae* Vallot.

208-496-66-66

Evallaspis Lupo, 1939, Portici R. Ist. Super. di Agri. Lab. Zool. Gen. e Agr. Bol. 31:130.

Exaeretopus Newstead, 1894, Ent. Monthly Mag. 30: 204.

TYPE SPECIES: Exacretopus formiceticola Newstead, 1894, by monotypy.

According to Lindinger, 1937: 185, and 1943b: 221, this name is a synonym of "Lecaniopsis" Targioni-Tozzetti, 1868. Borchsenius, 1957: 116, treated it as a valid genus which he associated with Lecanopsis Targioni-Tozzetti and Luzulaspis Cockerell in his Filippinae, Coccidae (str.).

Exeractopus Bodenheimer, 1928, Konowia 7: 192.

A lapsus for Exacretopus Newstead.

Exilipedronia Williams, 1960, Brit. Mus. (Nat. Hist.) Bul. Ent. 8: 397.

TYPE-SPECIES: Exilipedronia sutana Williams, 1960, by original designation and monotypy.

The describer placed this genus in the Pseudococcidae with a suggested closest relationship to *Pedronia* Green and *Pedrococcus* Mamet.

Exoerctopus Cockerell, 1894, Amer. Nat. 28:1051.

A lapsus for Exacretopus Newstead.

Exoeretopus Cockerell, 1896, Ill. State Lab. Nat. Hist. 4: 333.

A lapsus for *Exacretopus* Newstead.

Exuviaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-285.

TYPE-SPECIES: *Exuviaspis enceliae* Ferris, 1941, by original designation and monotypy.

Although the describer included this genus in the Diaspidini, he emphasized his inability to suggest any closer relationships for it. There has been no restudy of the type-species since the original presentation.

Fagisuga Lindinger, 1909, Ztschr. f. Wiss. Insektenbiol. 5: 107.

TYPE-SPECIES: Fagisuga triloba Lindinger, 1909, by monotypy.

This genus was assigned to the Conchaspididae, but Mamet, 1954b: 193, in his monograph of this group, concluded that Balachowsky, 1948b: 257, was correct in placing it in the Phoenicococcidae.

Fairmairea Lindinger, 1907, Ent. Wochenblatt 24:20.

An emendation of Fairmairia Signoret.

Fairmairia Signoret, 1872, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 5) 2: xxxvi; 1874, Soc. Ent. de France Ann. (ser. 5) 4: 98; 1875, Soc. Ent. de France Ann. (Bul. Ent.) (1874) (ser. 5) 4: vii.

TYPE-SPECIES : Fairmairia bipartita Signoret, 1872, by monotypy.

Signoret first presented this generic name in 1872, as cited, at which point he described the gross appearance of the insect to an extent sufficient, in our view, to validate the names under Article 16 of the 1961 Code. The generic name

Fairmairia was noted to be preoccupied by use in the Diptera, and Cockerell, 1899m: 332, replaced it in Coccoidea with Parafairmairia.

Farinococcus Morrison, 1922, Psyche 29:137.

TYPE-SPECIES: Farinococcus multispinosus Morrison, 1922, by original designation and monotypy.

Originally placed merely as belonging in the Pseudococcidae, this genus has been shown by more recent studies (Ferris, 1955: 2) to be a member of a group of mealybug genera provided with an abundance of marginal cerarian spines, present either in dense clusters or running continuously along the body margin.

Farrmairia Hempel, 1899, Canad. Ent. 31:131.

A lapsus for Fairmairia Signoret.

Fasisuga Brues and Melander, 1932, Mus. Comp. Zool. Harvard Bul. 73: 131.

A lapsus for Fagisuga Lindinger.

Fernaldanna MacGillivray, 1921, The Coccidae, p. 276.

TYPE-SPECIES: Mytilaspis indentata Green, 1900, by substitution of Fernaldanna for Fernaldella Leonardi.

This name was proposed as a replacement for *Fernaldella* Leonardi, 1903, preoccupied in Lepidoptera. Ferris, 1937a: 4, considered the unit zoologically valid. Balachowsky, 1954e: 23, accepted it, and placed it in his Lepidosaphedina.

Fernaldella Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:105-106,109,111.

TYPE-SPECIES: Mytilaspis indentata Green, 1900, by monotypy.

This name was replaced by *Fernaldanna* MacGillivray, 1921, on account of preoccupation in the Lepidoptera, a fact noted by Sanders, 1909a: 58.

Fernaldiella Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:4, 112.

Leonardi presented this spelling in his generic key; all (4) subsequent references in his paper were to *Fernaldella*. Sanders, 1906: 16, first accepted *Fernaldiella* for the Leonardi genus and then, 1909a: 58, modified it to the preoccupied *Fernaldella*. This "first reviser" action seems to us to dispose permanently of this name.

Ferrisaspis MacGillivray, 1921, The Coccidae, p. 388.

TYPE-SPECIES: Aspidiotus covilleae Ferris, 1919, by original designation and monotypy.

Ferris, 1937c: 51, 54, regarded this genus as not separable from *Diaspidiotus* Berlese and Leonardi. Later he, 1938a: SII-202, definitely placed the name as a synonym of *Clavaspis* MacGillivray.

Ferrisia Fullaway, 1923, Hawaii. Ent. Soc. Proc. 5: 309, 311.

TYPE-SPECIES: Dactylopius virgatus Cockerell, 1893, by original designation and monotypy.

This is currently accepted as a valid zoological unit in the Pseudococcidae.

Ferrisiana Takahashi, 1929, Formosa Nat. Hist. Soc. Trans. 19: 429.

Takahashi proposed this name to replace *Ferrisia* Fullaway on the grounds that the latter was preoccupied by *Ferrissia* Walker, 1903 (Mollusca). This usage had some currency for a time, but the change was unjustified, in our opinion, on the basis of earlier Code rules, and the 1961 Code in Article 56(a) forbids a change of generic name if there is so much as one letter difference, which applied in this instance.

Ferrisiaspis Balachowsky, 1956, Mus. Roy. du Congo Belge [Tervuren] Ann. (n.s.) Sci. Zool. 3:90.

A lapsus for Ferrisaspis MacGillivray.

- Ferrisicoccus Ezzat and McConnell, 1956, Md. Agr. Expt. Sta. Bull. A-84: 13, 31.
 - TYPE-SPECIES: Ferrisicoccus angustus Ezzat and McConnell, 1956, by original designation.

The describers assigned this genus to the Planococcini, Pseudococcidae.

Ferrisidiaspis Bodenheimer, 1951, Ent. Ber. 13: 329.

- TYPE-SPECIES: Diaspis syriaca Lindinger, 1912, by original designation and monotypy.
- Balachowsky, 1954e: 173, placed this name as a synonym of Diaspis Costa.
- Filippia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:33; 1869, 11:726.
 - TYPE-SPECIES: Philippia follicularis Targioni-Tozzetti, 1867, [Coccus oleae A. Costa, 1857, partim (non O. G. Costa, 1828)], by substitution of Filippia for Philippia and present designation.

Targioni-Tozzetti first presented this zoological unit in 1867 as *Philippia*. He change the spelling to *Filippia* in 1868: 33, without any explanation and in so doing escaped the priority problem set up by *Philippia* Gray, 1847 (Mollusca). It has been customary among coccid cataloguers and other workers to credit the type-species of this genus to O. G. Costa, 1828. However, Targioni-Tozzetti was specific in designating certain figures in a plate published in 1857 by A. Costa as the basis for his genus, and for Targioni-Tozzetti's *follicularis*. We have studied the descriptive material presented by O. G. Costa, 1828, and conclude that it contains only a presentation of the coccid species currently called *Saissetia oleae* (Bernard) and that there is no certain evidence that it contains any material that suggests the type-species of *Filippia*. We have also reviewed material presented by A. Costa, 1857, under the designation *Coccus oleae*, and consider that it, too, relates primarily to the *Saissetia oleae* of current understanding. We therefore conclude that it is best to designate the type-species of *Filippia* as *F. follicularis* (Targioni-Tozzetti), 1867. A. Costa, 1877, in the revised edition

of his 1857 paper, expressed similar conclusions respecting the material discussed in O. G. Costa, 1828, and A. Costa, 1857.

Finaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 517.

TYPE-SPECIES: Lepidosaphes distincta Hall, 1929, by original designation and monotypy.

The author described this genus in the Diaspidini, noting some affinities with *Africaspis* MacGillivray. He rejected the Lindinger, 1932f: 202, assignment of the type-species to *Pygalataspis* Ferris.

Fiorina, Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 8:845.

Signoret presented this name in his catalog of previously described species as "Fiorina?" in connection with his preliminary assignment of *Coccus buxi* Fonscolombe. We presume, since he used *Fiorinia* elsewhere in his monograph, that this is a lapsus.

Fiorinia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat., Atti 11: 42; 1869, 11: 735.

TYPE-SPECIES: (*Fiorinia pellucida* Targioni-Tozzetti, 1868) = *Diaspis fioriniae* Targioni-Tozzetti, 1867, by monotypy.

This generic name has been accepted consistently by coccid workers since its proposal. Numerous species are now included. Balachowsky, 1954e: 322, placed the genus in Diaspidini, Diaspidina, group II, chionaspiform.

Fisanotargionia Kaussari and Balachowsky, 1953, Rev. de Path. Veg. et d'Ent. Agr. de France 32: 277.

TYPE-SPECIES: Fisanotargionia quadrilobata Kaussari and Balachowsky, 1953, by original designation and monotypy.

The describers placed this genus in Aspidiotini, Targionina of the Balachowsky classification system, with an indicated relationship to *Targionia* Signoret.

Fissiventer Misra, 1924, Ent. Mtg. (Pusa, 1923) Proc. 5: 346.

TYPE-SPECIES: Walkeriana polei Green, 1896, by original designation.

This was listed as a subgenus of *Walkeriana* Signoret. Since *polei* Green is the type-species of *Labioproctus* Green, 1922, *Fissiventer* is a synonym of the older name.

Fissuraspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-56.

TYPE-SPECIES: Crypthemichionaspis ulmi Hoke, 1927, by original designation and monotypy.

The proposer placed this genus in the Diaspidini with no more precise suggestions as to its relationships. Balachowsky and Kaussari, 1951: 7, discussed its relation to certain other genera and compared it with *Salicicola davatchi*, new species. Lindinger, 1957: 544, assigned the type-species to *Anamefiorinia* Leonardi.

Fonscolombea Lindinger, 1908, Berlin. Ent. Ztschr. (1907) 52:94. An emendation of *Fonscolombia* Lichtenstein.

79

Fonscolombia Lichtenstein, 1877, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 5) 7: cviii.

TYPE-SPECIES: Fonscolombia graminis Lichtenstein, 1877 (which he believed to be identical with Coccus radicumgraminis Fonscolombe), by original designation and monotypy.

This is another coccoid genus with a most uncertain background and current status. Aside from the fact that most coccid workers who have mentioned the genus believe that *Coccus radicumgraminis* Fonscolombe, 1834, generally cited as the type-species, is not today recognizable with certainty, it seems clear to us that the genus, in any zoological sense, must be based on the specimens which Lichtenstein examined and discussed, and which he chose to call *Fonscolombia* graminis. We do not know if these specimens exist, or their location if still intact. As he based the genus on wingless adult males with secreted caudal filaments, a secondary complication to satisfactory placement results. No adequate scheme of coccid classification based on adult males exists today. The status of the genus has been further complicated by the introduction into it of *Chermes fraxini* Kaltenbach, a coccid species having a quite different habitus than does the type-species. As a result, the Fernald Catalogue, 1903b: 114, for example, placed both *Apterococcus* Newstead, 1898, and *Pseudochermes* Nitsche, 1895, as synonyms, but, we believe, wholly without warrant in the existing circumstances.

Assignments of the genus have been to the Dactylopiidae or Eriococcidae by Ferris, 1957c: 86, and to the Coccidae (str.) by Lindinger, 1943b: 221, as a synonym of Lecanopsis Targioni-Tozzetti, 1868. With respect to this last assignment, complications again are present. Borchsenius, 1957: 191, said that males are not known for Lecanopsis. An interesting sidelight on this problem is found in the lot number book of Mrs. Anna Botsford Comstock, which we have examined. Under lot 235, Sub 1, is listed a preparation of "Lecanopsis rhizophila ??" received 8 May 1882 from J. Lichtenstein. The specimen involved under this name has been examined and, although a very poor preparation on present-day standards, shows that it is a root-feeding pseudococcid having some, at least, of the characteristics of the genus Cryptoripersia Cockerell as this genus is currently accepted in the United States. The notebook entry also includes this note, evidently a comment by Lichtenstein, in lit.: "Fonscolombia is a synonym of Lecanopsis Targioni, yet it is under observation as I have two males (one winged and one apterous) and only one female, so I keep it in reserve until I get the whole cycle of life?" From this we conclude that the Lichtenstein concept of Fonscolombia and Lecanopsis actually was pseudococcid. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9, included Fonscolombia in the Eriococcidae on the basis that species previously referred to this genus are known to belong in that family.

It is our present conclusion first, that this generic name is nomenclatorially valid and is available when it can be associated critically with some coccid unit; second, that the concepts of its zoological identity which have been presented by the more recent coccid workers have not emerged with sufficient consistency or clarity to justify arbitrary proposals for its classificatory assignment; third, that the association and characteristics implied by its assignment in the Fernald Catalogue, 1903b: 114, must be regarded with a question because they actually are based primarily on a second, well-known species that was assigned arbitrarily to this genus.

Forbesaspis MacGillivray, 1921, The Coccidae, p. 388.

TYPE-SPECIES: Aspidiotus forbesi Johnston, 1896, by original designation and monotypy.

Ferris, 1938a: SII-255, placed this name as a synonym of *Quadraspidiotus* MacGillivray, and Balachowsky, 1950b: 397; 1958b: 210, agreed with his action.

Formicicoccus Lindinger, 1932, Konowia 11:197.

An emendation of *Formicococcus* Takahashi. Lindinger, 1937: 185, used the original spelling, not the emendation, in his generic list.

Formicococcus Takahashi, 1928, Formosa Nat. Hist. Soc. Trans. 18: 253.

TYPE-SPECIES: Formicococcus cinnamomi Takahashi, 1928, by original designation and monotypy.

This genus belongs to the Pseudococcidae and was treated in some detail in relation to related genera by Ezzat and McConnell, 1956: 35–37, who included it in their Planococcini.

Formicoccus Schmutterer, 1957, in Sorauer, Handb. der Pflanzenkrankheiten V (pt. 2):440.

A lapsus for Formicococcus Takahashi.

Formosaspis Takahashi, 1932, Soc. Trop. Agr. Jour. 4:47.

TYPE-SPECIES: Protodiaspis nigra Takahashi, 1930, by original designation.

The describer implied some relationship to *Chionaspis* Signoret and *Leucaspis* Targioni-Tozzetti in presenting this genus. Lindinger, 1937: 185, said "=*Anameforinia* Leonardi." Ferris, 1937d: 104, accepted it as probably valid.

Freenchia Balachowsky, 1937, Actualités Sci. et Indus., Ent. Appl. 526:49.

A lapsus for Frenchia Maskell.

Frenchia Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24: 56.

TYPE-SPECIES: Frenchia casuarinae Maskell, 1892, by monotypy.

This genus actually belongs in the Asterolecaniidae. See Morrison and Morrison, 1922: 17–20, for a redescription of the type-species.

Frogatiella Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202: 727.

A lapsus for Froggattiella Leonardi.

Froggattiella Leonardi, 1900, *in* Cockerell, Psyche 9:72 (rec'd USDA Lib. VI-1-1900); 1900, Riv. de Patol. Veg. 8:299-300 (publ. VIII-31-1900).

TYPE-SPECIES : Aspidiotus inusitatus Green, 1896, by monotypy.

Ferris, 1937a: 33, accepted this as a probably valid genus, and placed it in his Odonaspidini. Balachowsky, 1953g: 727, accepted it in the same way.

Fulaspis Balachowsky, 1952, Rev. de Path. Veg. et d'Ent. Agr. de France 31: 121.

TYPE-SPECIES: Fulaspis guilliermi Balachowsky, 1952, by original designation and monotypy.

The describer placed this genus in Diaspidinae, Diaspidini, Lepidosaphedina of his system of classification, and in his synoptic work, 1954: 142-143, confirmed the assignment.

Fulbrightia Ferris, 1950, Microentomology 15:7.

TYPE-SPECIES: Fulbrightia gallicola Ferris, by original designation and monotypy.

The describer placed this genus in the Eriococcidae as characterized by him. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9, confirmed this assignment.

Fundaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: Chionaspis americana Johnson, 1896, by original designation.

Ferris, 1936a: 21, 24, and Balachowsky, 1954e: 317, placed this name as a synonym of *Chionaspis* Signoret. Lindinger, 1937: 185, accepted it as a valid genus.

Fuparlatoria Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:15.

A lapsus for Euparlatoria Leonardi.

Furcadaspis Lupo, 1938, Portici R. Ist. Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 30:255.

A lapsus for Furchadaspis MacGillivray.

Furcaspis Lindinger, 1908, Berlin. Ent. Ztschr. (1907) 52: 98-99.

TYPE-SPECIES: Aspidiotus biformis Cockerell, 1893, by subsequent designation of Sanders, 1909a: 54.

This is a zoologically valid genus which Lindinger, 1910: 156, 330, placed in his Parlatoreae group. It has been associated more often with the aspidiotine series of genera by other authors; e.g., Ferris, 1942: SIV-446(33). Lindinger, 1937: 185, placed as synonyms: *Neofurcaspis* Green, *Paraonidiella* MacGillivray, *Separaspis* MacGillivray, *Stringaspidiotus* MacGillivray, and *Truncaspidiotus* MacGillivray.

Furchadaspis MacGillivray, 1921, The Coccidae, p. 310.

TYPE-SPECIES: Diaspis zamiae Morgan, 1890, by original designation and monotypy.

This is generally accepted as a valid zoological unit by coccid students. Balachowsky, 1954e: 212, placed the genus in his Diaspidina, diaspiform.

Furchadiaspis Ferris, 1936, Microentomology 1:21,24.

So far as can be determined this was a lapsus for *Furchadaspis* MacGillivray and unfortunately was followed by some other coccid workers who relied on Ferris rather than on the original presentation. Neave, 1950, Nomen. Zool. V: 100, charged the misspelling to Hall, 1941: 230, but the Ferris usage came earlier.

Furchaspis Ferris, 1938, Microentomology 3:46.

This spelling appeared in a list of generic names ending in "aspis" which Ferris compiled and published. From the fact that *Furcaspis* Lindinger is not included in the list, we presume that *Furchaspis* is a lapsus for it.

Furoaspis Lindinger, 1937, Ent. Jahrb. 46: 197.

A lapsus for Furcaspis Lindinger.

Fusilaspis MacGillivray, 1921, The Coccidae, p. 275.

TYPE-SPECIES: Mytilaspis phymatodidis Maskell, 1880, by original designation.

There seems to have been no modern restudy of this genus. Lindinger, 1937: 185, said, "=*Polyaspis* Mask." (i.e., *Poliaspis*), but there is no reason to suppose that this is a critical opinion resting on a study of the type-species.

Gadaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 509, 518.

TYPE-SPECIES: Chionaspis (Pinnaspis) combreti Hall, 1928, by original designation.

The describer related this genus to *Pinnaspis* Cockerell and *Contigaspis* Mac-Gillivray. Balachowsky, 1954e: 172, placed it in his Diaspidina, group II, chionaspiform.

Galeraspis Mamet, 1939, Roy. Ent. Soc., London, Trans. 89: 589.

TYPE-SPECIES: Galeraspis eugeniae Mamet, 1939, by original designation and monotypy.

Its describer offered no suggestions for the proper association of this genus, nor did Ferris, 1941a: 12, 17, who accepted it as valid and reillustrated it. As of now, the genus places as an aberrant diaspidine form.

Gallipalpus Signoret, 1869, Soc. Ent. de France Ann. (1868) (ser. 4) 8:832.

A lapsus for Callipappus Guérin-Méneville.

Gallipappus Signoret, 1868, Soc. Ent. de France Ann. (ser. 4) 8: 519– 520, 526; 1869 (ser. 4) 9: 103.

A lapsus for Callipappus Guérin-Méneville.

Gascardia Targioni-Tozzetti, 1893, in A. Gascard, Contribution a l'étude des gommes lacques des Indes & Madagascar, pp. 73, 88, 121.

TYPE-SPECIES: Gascardia madagascariensis Targioni-Tozzetti, 1893, by monotypy.

This genus is obviously a close relative of *Ceroplastes* Gray in the Coccidae (str.) and is similar in growth habit to Cockerell's subgenus *Ceroplastidia*. Mamet, 1951: 216, considered it a valid genus closely related to *Ceroplastes* and not belonging in the Lacciferidae.

Gassyparia Balachowsky, 1927, Soc. Ent. de France Ann. 96: 189.

A lapsus for Gossyparia Signoret.

Gasteralphe Icery, 1864, Mem. sur le pou à poche blanche, 8 p. (not seen); 1864 (or 1865), Ent. Soc. London, Trans. (ser. 3) 2: 55 (translation).

This name is included in Neave, 1940, Nomen. Zool. IV sup.: 736, but the reason for the inclusion is not evident. We have not seen the original Icery pamphlet, but the translated presentation cited above appears to offer this name only as a uninomial designation similar to those of Amyot, 1847, and so is without nomenclatorial standing. The insect involved is now considered to be properly called *Pulvinaria iceryi* (Signoret). See Mamet, 1958: 66–69, for detailed discussion.

Gasteralphes Guérin-Méneville, 1868, Rev. et Mag. de Zool. (ser. 2) 20: 127.

This author listed *Gasteralphes iceryi* Signoret as "The Gasteralphe of Icery." Mamet, 1958: 69, considered the Guérin-Méneville elevation of *Gasteralphes* to generic rank without standing in nomenclature. See Mamet for details.

Gasteralphus Guérin-Méneville, 1868, Soc. Imp. et Cent. d'Agr. de France, Bul. de Séances (ser. 3) 3:248.

An emendation of Gasteralphes Guérin-Méneville.

Genaparlatoria MacGillivray, 1921, The Coccidae, p. 248.

TYPE-SPECIES: Parlatoria pseudaspidiotus Lindinger, 1905, by original designation.

This genus has been accepted as zoologically valid by recent coccid students. Balachowsky, 1958b: 318, placed it in his Parlatorini, Parlatorina of the Diaspidinae.

Genistaspis Bodenheimer, 1949, The Coccoidea of Turkey, Ankara, Güney (Pub. Office No. 670): 26, 38, 83 (in Turkish); 1951, Ent. Ber. 13: 329 (in English).

TYPE-SPECIES : Genistaspis zelihiae Bodenheimer, 1949, by original designation and monotypy.

The describer placed this genus as close to *Targionia* Signoret, which was assigned by Balachowsky, 1951: 632, to his Targionina, Aspidiotini, Aspidiotinae.

Geococcus Green, 1902, Ent. Monthly Mag. 38: 262.

TYPE-SPECIES: Geococcus radicum Green, 1902, by original designation and monotypy.

Hambleton, 1946: 10, 12, associated this genus with an unnamed group of genera in the Pseudococcidae centering on *Rhizoecus* Künckel d'Herculais.

Getulaspis Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci., pp. 171, 365.

TYPE-SPECIES: Chionaspis (Phenacaspis) bupleuri Marchal, 1904, by original designation and monotypy.

The describer placed this genus in his Diaspidina, group II, chionaspiform, and noted that it had all of the general characters of *Voraspis* Hall.

Giganticoccus van der Goot, 1917, Proefsta. Midden-Java, Salatiga, Meded. No. 25: 31, nomen nudum. This name was presented as "Giganticoccus degueliae mihi i. 1."

Globulicoccus Lindinger, 1907, Ent. Bl. 3: 138.

TYPE-SPECIES: "L[ecanium] (Globulicoccus subg. n) fuscum (Gmel.) Dougl.," 1789, by original indication.

Although the type indication above does not conform to the 1961 Code rules covering type-species of genera (Art. 66-70), the assignment appears inevitable from Lindinger's manner of presentation. Lindinger, 1937:186, placed the name as a synonym of *Eulecanium* Cockerell, and Borchsenius, 1957:386, did likewise.

Gomezmenoraspis Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202: 907.

TYPE-SPECIES: Aonidia pinicola Leonardi, 1906, by original designation and monotypy.

Balachowsky placed this genus in his Parlatorini, Leucaspidina, Diaspididae.

- Gomphaspidiotus Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 384, 389.
 - TYPE-SPECIES: Aspidiotus cuculus Green, 1905, by original designation and monotypy.

The authors placed this genus in the *Pseudaonidia* group of genera of the Aspidiotini. They considered it closest to *Neomorgania* MacGillivray, *Diastolaspis* Brimblecombe, and *Dichosoma* Brimblecombe.

Gonaspidiotus MacGillivray, 1921, The Coccidae, p. 390.

TYPE-SPECIES: Aspidiotus minimus Leonardi, 1896, by original designation.

Balachowsky, 1950: 535, 545, accepted this as a zoologically valid unit and included it in his group of aspidiotine genera.

Gossiparia Chorbadzhiev, 1939, Izv. B'lgarsk. Ent. Druzh. for 1938, Sofia, 10: 89.

A lapsus for Gossyparia Signoret.

- Gossyparia Signoret, 1875, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 5) 4: ccxx; 1875, Soc. Ent. de France Ann. (ser. 5) 5: 16, 20.
 - TYPE-SPECIES: Coccus ulmi Geoffroy (non binomial) of Signoret, 1875, currently Coccus spurius Modeer, 1778, by subsequent designation of the describer.

Zoologically this genus is currently placed in the Eriococcidae. Ferris, 1957c: 85, made the name a synonym of *Eriococcus*, but Hoy, 1963, New Zeal. Dept. Sci.

and Indus. Res. Bul. 150: 9, considered the genus valid. Other workers considered it zoologically valid and assigned it within a comparable complex, either of family status or as a recognizable group of genera within the Pseudococcidae (Borchsenius, 1949: 9, 327). We believe that its final zoological status will be determined only when there has been a thorough taxonomic study of all the species which group with it.

Gossyperia Kuwana, 1907 [Japan] Imp. Cent. Agr. Expt. Sta. Bul. 1 (2): 213.

A lapsus for Gossyparia Signoret.

Gossypariella Borchsenius, 1960, Ent. Obozr. 39:920.

TYPE-SPECIES: *Rhizococcus siamensis* Takahashi, 1942, by original designation and monotypy.

Borchsenius placed this genus close to *Gossyparia* Signoret in the Eriococcidae. It was so accepted by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9, on the basis of the description and figure presented by Borchsenius.

Gramenaspis MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: Chionaspis africana Newstead, 1912, by original designation and monotypy.

Hall, 1946: 519, commented that while neither type nor any slides or material of the type-species have been found, the characters given by Newstead suggest the validity of the genus.

Graminococcus Kiritschenko, 1940, Rpt. Odessa Univ. Bion. Ser. 4: 187 (not seen); Borchsenius, 1949, Akad. Nauk Zool. Inst. (n.s. 38) 7: 208.

This genus is known to us only through the Borchsenius presentation where it was considered to be identical with *Phenacoccus* Cockerell.

Graphaspis MacGillivray, 1921, The Coccidae, p. 310.

TYPE-SPECIES: Chionaspis permutans Green, 1899, by original designation and monotypy.

Rao, 1949: 59-60, placed this name as a synonym of *Unaspis* MacGillivray, 1921, and Balachowsky, 1954e: 288, accepted his placement.

Greenacoccus MacGillivray, 1921, The Coccidae, p. 474.

This new name was proposed by MacGillivray for his *Greeniella* (p. 70) which was preoccupied by *Greeniella* Cockerell, 1897. Morrison, 1928: 163, placed the name as a synonym of *Drosicha* Walker, 1858.

Greenaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: Mytilaspis elongata Green, 1896, by original designation and monotypy.

This has been accepted by recent coccid workers as zoologically valid. Balachowsky, 1954e: 171, 276, suggested a relationship to *Pinnaspis* Cockerell and assigned it to his Diaspidina, chionaspiform.

Greenella MacGillivray, 1921, The Coccidae, pp. 75, 474.

A lapsus for Greeniella MacGillivray.

Greenica Matesova, 1960, Akad. Nauk Kazakh. SSR Inst. Zool. Trudy 11: 205.

A lapsus for Greenisca Borchsenius.

Greenidiella Fulmek, 1943, Ent. Beihefte aus Berlin-Dahlem 10: 34.

A lapsus for Greeniella Cockerell.

Greeniella Cockerell, 1897, American Nat. 31:703.

TYPE-SPECIES: Aonidia cornigera Green, 1896, by original designation and monotypy.

This genus has been accepted as zoologically valid by Ferris, 1937c: 51, 54; 1937e: 529, and by Balachowsky, 1958b: 269. Balachowsky, 1958b: 342, referred to a *Greeniella* Leonardi which he placed as a synonym of *Decoraspis* Ferris, and assigned to his Gymnaspidina, Parlatorini. In our opinion this action thoroughly confused the status of *Greeniella*. All Leonardi citations that we have seen credit this genus to Cockerell and the Ferris proposal of *Decoraspis* was entirely unnecessary since it was based on the same type-species as the validly established *Greeniella* Cockerell, 1897. See Decoraspis Ferris.

Greeniella (non Cockerell, 1897) MacGillivray, 1921, The Coccidae, pp. 70, 75, 474.

TYPE-SPECIES: Monophlebus stebbingii Stebbing, 1902, by original designation.

MacGillivray discovered the existence of *Greeniella* Cockerell, 1897, prior to the printing of his book and at its end (p. 474) substituted *Greenacoccus* for *Greeniella* MacGillivray, non Cockerell. Zoologically the concept seems identical with *Drosicha* Walker, 1858, so this and the other involved names have been placed in synonymy under *Drosicha* by Morrison, 1928: 163.

Greenisca Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 60: 502.

TYPE-SPECIES: *Eriococcus inermis* Green, 1915, by original designation and monotypy.

The genus places in the group currently called the Eriococcidae and is accepted there by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9.

Greenoidea MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES: Aspidiotus (Targionia) phyllanthi Green, 1905, by original designation and monotypy.

Ferris, 1941d: SIII-347, and Balachowsky, 1951: 587, placed this name as a synonym of *Melanaspis* Cockerell, 1897.

Greenoripersia Bodenheimer, 1929, in Bodenheimer and Theodor, Ergebnisse der Sinai Expedition 1927, iv: 112; 1951, Ent. Ber. 13: 329.

TYPE-SPECIES: Greenoripersia kaiseri Bodenheimer, 1921, by original designation and monotypy.

As is indicated by the describer, this genus belongs in the Pseudococcidae as currently accepted. The genus was validly established when presented and the reasons for its representation are not evident, although the later description does provide more detailed information on the generic characteristics.

Grewiacoccus Brain, 1918, Bul. Ent. Res. 9:108.

TYPE-SPECIES: Grewiacoccus gregalis Brain, 1918, by original designation and monotypy.

This gall-making genus was originally described as a member of the Pseudococcidae and the recent redescription of the type-species by De Lotto, 1958a; 82, has confirmed this assignment.

Grewiicoccus Lindinger, 1932, Konowia 11:197.

An emendation of Grewiacoccus Brain.

Grewiococcus Lindinger, 1937, Ent. Jahrb. 46: 186.

An emendation of Grewiacoccus Brain.

Guerinia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:39; 1869, 11:724.

TYPE-SPECIES: Guerinia tinctoria Targioni-Tozzetti, 1868, believed to be the same as Coccus serratulae Fabricius, 1775, by monotypy.

This name was preoccupied by earlier usage in other groups and was replaced by *Gueriniella* Fernald.

Gueriniella Fernald, 1903, Mass. Agr. Expt. Sta. Spec. Bul. 88: [331].

TYPE-SPECIES: Guerinia tinctoria Targioni-Tozzetti, 1868, believed to be the same as Coccus serratulae Fabricius, 1775; by substitution of Gueriniella for Guerinia Targioni-Tozzetti.

This was presented as a replacement for *Guerinia* Targioni-Tozzetti. It assigns to the Margarodidae.

Guerinococcus Berlese, 1909, Gli Insetti, p. 498.

This is another replacement proposed for *Guerinia* Targioni-Tozzetti. It stands as a synonym of *Gueriniella* Fernald.

Guineaspis Balachowsky, 1952, Soc. Ent. de France Bul. 57: 98.

TYPE-SPECIES: Guincaspis mignardi Balachowsky, 1952, by original designation and monotypy.

Balachowsky placed this genus close to *Pinnaspis* Cockerell in his Diaspidina, chionaspiform.

Gymnaspis Newstead, 1898, Ent. Monthly Mag. 34:92.

TYPE-SPECIES : Gymnaspis aechmeae Newstead, 1898, by monotypy.

This genus has been accepted since its establishment. The latest assignment is that of Balachowsky, 1958b: 342, to his Gymnaspidina, Parlatorini.

Gymnococcus Douglas, 1888, Ent. Monthly Mag. 25: 150; Cockerell, 1896, Ill. State Lab. Nat. Hist. 4: 323.

TYPE-SPECIES: Coccus agavium Douglas, 1888, by monotypy.

The citations given above are presented in Neave, 1939, Nomen. Zool. II: 529. If the Douglas reference is rejected as a basis for establishment of the genus, an action which we consider to be proper, then status for the name as a coccid genus dates from Cockerell, 1893dd: 1049. The point is of academic interest only, however, since Kloet, 1944: 86, noted the use of *Gymnococcus* by Zopf in the Protozoa in 1884 and proposed the name *Ovaticoccus* as a substitute for the coccid *Gymnococcus*.

Haematococcus Reyne, 1961, Beaufortia (Zool. Mus. Amsterdam) 8: 127.

TYPE-SPECIES: Haematococcus obtusispinus Reyne, 1961, by original designation.

Reyne placed this genus in the Eriococcidae as defined by Ferris, 1957c: 82-83, a placement confirmed by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9. The name is preoccupied, having been proposed previously in the Protozoa.

Halimococcoides Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 221.

TYPE-SPECIES: Fiorinia kewensis Newstead, 1901, by original designation and monotypy.

This genus assigns to the Phoenicococcidae. According to Lindinger, Halimococcus borassi Green, 1902. is identical with kewensis Newstead. Ferris, 1952: 3, assigned kewensis to Colobopyga Bréthes, 1912, with Halimococcus nesiotes Laing a synonym. There is no evidence that Ferris was familiar with Lindinger's genus Halimococcoides, but his treatment of its type-species, kewensis, will result in its placement as a synonym of Colobopyga.

Halimococcus Cockerell, 1902, Entomologist 35:15.

TYPE-SPECIES: Halimococcus lampas Cockerell, 1902, by monotypy.

Stickney, 1934: 6, who studied this and related genera critically, assigned it to his Phoenicococcinae.

Hallaspidiotus Mamet, 1951, Inst. Sci. de Madagascar, Mem. Ser. A, 5:217.

TYPE-SPECIES: Gymnaspis africana Newstead, 1913, by original designation and monotypy.

Lindinger, 1957: 549, placed the type-species as "Cryptaspidiotus africanus (Newst.) 1913," which creates a question as to the status of the genus.

Balachowsky, 1954e: 77, considered this name synonymous with *Africonidia* McKenzie, 1947. Despite Newstead's original generic placement, the type-species is currently accepted to be aspidiotine.

Halococcus Takahashi, 1951, Mushi 22:1.

TYPE-SPECIES : *Halococcus formicarii* Takahashi, 1951, by original designation and monotypy.

Takahashi assigned this genus to the Coccidae (str.).

Haplaspis Borchsenius, 1949, Akad. Nauk SSSR Dok. (n.s.) 64: 735.

TYPE-SPECIES: Haplaspis calligoni Borchsenius, 1949, by original designation and monotypy.

Balachowsky, 1954e: 118, 125, placed this name as a synonym of *Mercetaspis* Gómez-Menor, 1927. It was preoccupied by *Haplaspis* Townes, 1944, in the Hymenoptera.

Helaspis McKenzie, 1963, Calif. Dept. Agr. Bul. 52 (1):34.

TYPE-SPECIES : *Helaspis mexicana* McKenzie, 1963, by original designation and monotypy.

The author established this genus in the Aspidiotini, noting a certain superficial relationship to *Aspidiotus* Bouché.

Heliococcus Šulc, 1912, Českoslov. Společ. Ent. Casopis 9:39.

TYPE-SPECIES : Heliococcus bohemicus Šulc, 1912, by monotypy.

This is currently accepted as a zoologically valid genus in the Pseudococcidae.

Hemaspidis MacGillivray, 1921, The Coccidae, p. 474.

TYPE-SPECIES: Lepidosaphes hemichionaspiformis Green, 1916, by substitution of Hemaspidis for Hemiaspis MacGillivray, 1921.

This name was presented as a substitute for Hemiaspis, preoccupied.

Hemaspidoproctus Morrison, 1927, Biol. Soc. Wash. Proc. 40: 104.

TYPE-SPECIES: Walkeriana cinerea Green, 1908, by original designation.

This genus was assigned to the Margarodidae, Monophlebinae, Monophlebini.

Hemiaspidis Ferris, 1936, Microentomology 1:21.

This is an erroneous spelling of *Hemaspidus* MacGillivray which Ferris, 1937: 4, used in expressing the opinion that the genus is zoologically valid. Unfortunately this Ferris spelling of the generic name was also used by Balachowsky, 1954e: 172, in placing the genus in his Diaspidina, group II, chionaspiform, and by Brimblecombe, 1960a: 193, in his comparison of the genus with his new genus *Doriopus*.

Hemiaspis MacGillivray, 1921, The Coccidae, pp. 275, 474.

TYPE-SPECIES: Lepidosaphes hemichionaspiformis Green, 1916, by original designation and monotypy.

This generic name was preoccupied by prior use in Reptilia and elsewhere and was replaced by *Hemaspidis* MacGillivray.

Hemiberleisa Balachowsky, 1956, Mus. Roy. du Congo Belge [Tervuren] Ann. (n.s.) Sci. Zool. 3:130.

A lapsus for *Hemiberlesia* Cockerell.

Hemiberlesea Lindinger, 1908, Berlin. Ent. Ztschr. (1907) 52:96.

An emendation of Hemiberlesia Cockerell.

Hemiberlesia Cockerell, 1897, in Leonardi, Riv. di Patol. Veg. 5:375; 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6:9, 12, 30.

TYPE-SPECIES: Aspidiotus rapax Comstock, 1881, through substitution of *Hemiberlesia* for preoccupied Aspidites Berlese and Leonardi, 1896.

Fernald, 1903b: 277, erroneously listed the first usage of *Hemiberlesia* as by Saccardo, 1895: 50, the combination there being "Aspidiotus cameliae." The citations offered above do not coincide with the one presented in Neave, 1939, Nomen. Zool. II: 602, which we think is not the earliest citation of the genus. Recent coccid students have accepted *Hemiberlesia* as a zoologically valid aspidiotine genus, but have differed on the species that may properly be included under it.

Hemiberlesiana Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:132, 230, 232.

TYPE-SPECIES: "cameliae"---presumed to be Aspidiotus camelliae Signoret, 1869, by original designation.

The peculiarities of the Thiem and Gerneck taxonomic method are such that information is difficult to extract from the text, but the page 232 citation does appear to include a positive type fixation although it is not certain whose "cameliae" is involved. The name becomes a synonym of *Hemiberlesia* through identity of type-species, for rapax Comstock and camelliae Signoret are believed to denote the same species.

Hemiberlesiella Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:132, 230, 232.

TYPE-SPECIES: [Aspidiotus] canariensis [Lindinger], 1911, by original designation.

Ferris, 1943a: 99, and Balachowsky, 1951: 650; 1958b: 288, placed this name as a synonym of *Rhizaspidiotus* MacGillivray, 1921.

Hemichionaspis Cockerell, 1897, Amer. Nat. 31: 592.

TYPE-SPECIES: Chionaspis aspidistrae Signoret, 1869, by original designation.

The author presented this as a subgenus of *Chionaspis* Signoret. The name is currently considered a synonym of *Pinnaspis* Cockerell, 1892. See Ferris and Rao, 1947: 25–27.

Hemiclonaspis Singh, 1960, The Mango, London, p. 300.

A lapsus for Hemichionaspis Cockerell.

Hemicoccus Lameere, 1936, Précis de Zoologie, Inst. Zool. Torley-Rousseau, Brussels, 4:415.

This name was used as an alternate to *Kermes*; e.g., "*Hemicoccus* (Kermes) *vermilio* et *ilicis*" and has no nomenclatorial standing.

208-496-66-7

Hemigymnaspis Lindinger, 1934, Ent. Rundshau 51:46; 1943. Ztschr. der Wien. Ent. Gesell. 28:221.

TYPE-SPECIES: Melanaspis (Hemigymnaspis) eugeniae Lindinger, 1934, by monotypy.

The author presented this as a subgenus of *Melanaspis* Cockerell and in 1943 raised it to full generic status.

Hemilecanium Newstead, 1906, Liverpool Univ., Inst. Com. Res. in Tropics Quart. Jour. 1: 71, nomen nudum; 1908, Jour. Econ. Biol. 3: 39.

TYPE-SPECIES: (Hemilecanium theobromae Newstead, 1908) = Lecanium imbricans Green, 1903, by monotypy.

The author placed this genus in the Lecaniinae. Hall, 1932: 195, compared specimens of *theobromae* from Pretoria with examples of *imbricans* Green from India and found them to be identical. Steinweden, 1929: 236, presented a detailed description of *imbricans* which indicated well the generic characters.

Hemisphaerococcus Borchsenius, 1934, Survey of the Coccid Fauna of the Black Sea Coast of the Caucasus, p. 12, nomen nudum.

TYPE-SPECIES: Hemisphaerococcus rubi Borchsenius, 1934, by monotypy.

These genus and species names were presented with collection data only. Borchsenius, 1949: 300, placed them in synonymy with *Coccura* [Šulc] *comari* (Künow).

Hendaspidiotus MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Aspidiotus ulmi Johnson, 1896, by original designation.

The validity of this genus has not been accepted by coccid workers. Ferris, 1938a: SII-202, and Balachowsky, 1956: 90, considered the name a synonym of *Clavaspis* MacGillivray.

Heteraspis Leonardi, 1914, Portici R. Scuola Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 8:197.

TYPE-SPECIES: Aspidiotus replicatus Lindinger, 1909, by monotypy.

This was presented as a subgenus of *Aspidiotus* Bouché. According to Neave, 1939, Nomen. Zool. II: 632, the name was preoccupied by use in the Coleoptera in 1835. Ferris, 1938: 45; McKenzie, 1938: 3, and Balachowsky, 1956: 22, placed it as a synonym of *Aonidiella* Berlese and Leonardi.

Heterococcopsis Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 61:955.

TYPE-SPECIES: *Heterococcopsis lonicerae* Borchsenius, 1948, by original designation and monotypy.

The describer placed this genus in the Pseudococcidae, close to *Heterococcus* Ferris.

Heterococcus Ferris, 1918, Stanford Univ. Pub. (Univ. Ser.) 78:34, 65.

TYPE-SPECIES: *Heterococcus arenae* Ferris, 1918, by original designation and monotypy.

The describer placed this pseudococcine genus in the *Phenacoccus* Cockerell series. *See* Morrison, 1945, for detailed discussion of characteristics, relationships, etc.

Heterodera Philippi, 1884, Soc. Nac. de Agr. de Chili Bol. 15: 226 (not seen).

TYPE-SPECIES: Heterodera vitis Philippi, 1884, by monotypy.

Believing it to be a nematode, Philippi designated as *Heterodera vitis* ("perla de tierra") the species known today as *Margarodes vitium* Giard.

Hippeococcus Reyne, 1954, Leyden Rijks Mus. van Natuurlijke Hist. Zool. Meded. 32:237.

TYPE-SPECIES: Hippeococcus rappardi Reyne, 1954, by original designation.

The author placed this genus in the Pseudococcidae more closely allied to the myrmecophilus genera *Allomyrmococcus* Takahashi and *Paramyrmococcus* Takahashi than to others.

Horvardia Schumacher, 1918, Naturw. Ztschr. Forestl.-und Landw. 16:228.

A lapsus for Howardia Berlese and Leonardi.

Houardia Marchal, 1909, Soc. de Biol. [Paris] Compt. Rend. 66: 586.

TYPE-SPECIES: Houardia troglodytes Marchal, 1909, by monotypy.

The author presented a detailed description of this lecanine genus. We have found no further treatment of it or its type-species.

Hovaspis Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Ser. E. Ent.) 4:55-56.

TYPE-SPECIES: Hovaspis perinetensis Mamet, 1954, by original designation and monotypy.

The author placed this genus in the Diaspidini but did not suggest relationship to any other genus. Lindinger, 1957: 549, assigned the type-species to his *Cryptaspidus*.

Howardia Berlese and Leonardi, 1896, Riv. di Patol. Veg. 4: 347.

TYPE-SPECIES: Chionaspis (?) biclavis Comstock, 1883, by subsequent designation of Cockerell, 1896a: 256.

This genus has been accepted consistently by coccid workers since its description. Balachowsky, 1954e:167, 216, 250-252, placed it as an aberrant Diaspidini, Diaspidina; Williams, 1960c: 393, as an aberrant genus in the Lepidosaphina.

Hsuia Ferris, 1950, Microentomology 15:70-71.

TYPE-SPECIES: *Hsuia vitrea* Ferris, 1950, by original designation and monotypy.

The describer placed this genus in the Asterolecaniidae. most closely approaching *Pollinia* Targioni-Tozzetti. Borchsenius, 1960d: 167, accepted the genus, and described a new species in it.

Hulaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 520.

TYPE-SPECIES: Howardia dombeyae Hall, 1929, by original designation and monotypy.

Mamet, 1953: 251, accepted this genus, noted the occurrence of its type-species in Madagascar, and, 1954: 58, described a second species from Madagascar. Balachowsky, 1954e: 167, placed it in his Diaspidina, group I, diaspiform. Lindinger, 1957: 549, said the type-species "=Howardia."

Humococcus Ferris, 1953, Atlas of the Scale Insects of North America 6: 370.

TYPE-SPECIES: Ripersia hilariae Ferris, 1919, by original designation.

The author placed this genus in the Pseudococcidae.

Hyalococcus Borchsenius, 1950, Akad. Nauk SSSR Dok. 71: 782.

TYPE-SPECIES: Hyalococcus mali Borchsenius, 1950, by original designation and monotypy.

The author placed this genus in the Asterolecaniidae, near Asterolecanium Targioni-Tozzetti.

Hybridaspis Green, 1926, Bul. Ent. Res. 17:64.

TYPE-SPECIES: *Hybridaspis producta* Green, 1926, by original designation and monotypy.

The author placed this genus as allied to *Fiorinia* Targioni-Tozzetti. Lindinger, 1937:186, said "=*Anamefiorinia* Leon." Ferris, 1937a:4, considered the genus worthy of recognition after previously, 1936a:26, placing the name as a synonym of *Trulliforinia* Leonardi, 1906. Brimblecombe, 1960c:193, accepted it and noted the close relationship of his genus *Doriopus* with it.

Hypaspidiotus Takahashi, 1956, Insecta Matsumurana 20:23.

TYPE-SPECIES: Aspidiotus jordani Kuwana, 1902, by original designation and monotypy.

The author noted that the relationships of this to other genera were not traceable.

Hypericicoccus Williams, 1961, Ent. Monthly Mag. 97: 93.

TYPE-SPECIES: Trachycoccus hyperici Ferris, 1955, by substitution of Hypericicoccus for Trachycoccus Ferris.

The author proposed this new name for *Trachycoccus* Ferris, 1955a: 215, homonym of *Trachycoccus* Borchsenius, 1950a: 781-782.

Hypogeococcus Rau, 1938, Canad. Ent. 70:159.

TYPE-SPECIES: Hypogeococcus barbarae Rau, 1938, by monotypy.

The author placed this genus in the Pseudococcidae.

Iachnaspis Dunham, 1954, Bol. Inst. Biol. [Bahia] 1:66.

A lapsus for Ischnaspis Douglas.

Iberococcus Gómez-Menor, 1928, Eos 4:356.

TYPE-SPECIES: *Iberococcus andalusicus* Gómez-Menor, 1928, by original designation and monotypy.

The describer placed this genus close to *Dactylopius* Costa and *Trabutina* Marchal in the Pseudococcidae. Ferris, 1957c: 86, suggested its reference to the Eriococcidae, and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 9, agreed.

Iceria Signoret, 1875, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 5) 5: vi.

The word *Iceria* was presented here as a generic name, with a definite description but without included type-species. It appears to be a lapsus for the previously published *Icerya* Signoret.

Icerya Signoret, 1875, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 5) 4: cclviii; 1875, Soc. Ent. de France Ann. (ser. 5) 5: 350-351.

TYPE-SPECIES: (Coccus sacchari Guérin-Méneville, 1867) = Dorthesia seychellarum Westwood, 1855, by monotypy.

The author established this margarodid genus for the single species, but over the years many more have been assigned to it. Morrison, 1928: 203, discussed it and placed it in the Iceryini, Monophlebinae. It is the most numerous in number of species and most widely distributed of the genera in this subfamily.

Iceryas Herrera, 1903, Mexico Comis. de Parasitol. Agr. Bol. (1901–1903) 1:455.

A lapsus for Icerya Signoret.

Idiococcus Takahashi and Kanda, 1939, Insecta Matsumurana 13: 52.

TYPE-SPECIES: Idiococcus bambusae Takahashi and Kanda, 1939, by original designation and monotypy.

The authors noted the resemblance of this genus to *Ourococcus* Fuller and suggested placement in the Cylindrococcinae. We assign it to the Antonininae, Pseudococcidae.

Idiosaissetia Brain, 1920, Bul. Ent. Res. 11:40.

TYPE-SPECIES: Idiosaissetia peringueyi Brain, 1920, by original designation and monotypy.

The author assigned this genus to the Lecaniinae.

Imerinaspis Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Ser. E. Ent.) 4:18,60.

TYPE-SPECIES: Imerinaspis perinetensis Mamet, 1954, by original designation and monotypy.

The author assigned this genus to the Diaspidini. Lindinger, 1957: 549, called the type-species *Cryptaspidus similis*, new name, because he had already (earlier on p. 549) placed *Hovaspis perinetensis* Mamet in *Cryptaspidus*. Mamet, 1959a: 380, did not accept this action.

Inchoaspis MacGillivray, 1921, The Coccidae, p. 310.

TYPE-SPECIES: (Chionaspis amaniensis Lindinger, 1910) = Chionaspis dentilobis Newstead, 1910, by original designation and monotypy.

The author placed this genus in the Diaspidini and it was so listed by Ferris, 1936a: 22, without comment. Hall, 1946a: 521, accepted the genus as valid and presented a characterization. He noted that Lindinger, 1913: 75, had placed *amaniensis* in synonymy with *dentilobis* Newstead, the type-species of *Remotaspis* MacGillivray. This made *Inchoaspis* and *Remotaspis* isogenotypic, but *Inchoaspis*, with page priority retains validity. Balachowsky, 1954e: 171, placed the genus in the Diaspidina, group II, chionaspiform.

Inciaspis MacGillivray, 1921, The Coccidae, p. 311.

A lapsus for *Incisaspis* MacGillivray. While the above spelling was given on page 311, the author subsequently used *Incisaspis* in discussion of the single included species and in the index.

Incisaspis MacGillivray, 1921, The Coccidae, pp. 311, 361, 487.

TYPE-SPECIES: Diaspis pugionifera Lindinger, 1909, by original designation and monotypy.

The author placed this genus in the Diaspidini. This spelling was accepted by Ferris, 1936a: 22, and Hall, 1946a: 522, 547. Lindinger, 1937: 187, placed the name in synonymy with *Diaspis* Costa.

Inglina Signoret, 1882, Soc. Ent. de France Ann. (Bul. Ent.) (1881) (ser. 6) 1: clvii.

This is presumably a lapsus for Maskell's Inglisia.

Inglisia Maskell, 1879, New Zeal. Inst. Trans. and Proc. (1878) 11: 213.

TYPE-SPECIES: Inglisia patella Maskell, 1879, by monotypy.

See Morrison and Morrison, 1922: 75, for a study of taxonomic anatomy and relationships of this coccine genus.

Inglisian Dop, 1923, Rev. Agr. New Caledonia 93:2.

A lapsus for Inglisia Maskell.

Insaspidiotus Barreda, in Herrera et al., 1901, Mexico Comis. de Parasitol. Agr. Bol. (1900-1903) 1:104, 229.

A "formula" name used for species *ficus*, *agavis* and *perniciosus*, without status in zoological nomenclature.

Inschionaspis Barreda, in Herrera et al., 1901, Mexico Comis. de Parasitol. Agr. Bol. (1900–1903) 1: 125–128, 222.

A "formula" name without status in zoological nomenclature.

Ins-coccus Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900–1903) 1:456.

A "formula" name without status in zoological nomenclature.

Ins-dactylopius Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900–1903) 1:457.

A "formula" name without status in zoological nomenclature.

Insiceryas Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900-1903) 1:5,457.

A "formula" name without status in zoological nomenclature.

Inslechanius Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900–1903) 1:207–208, 457.

A "formula" name without status in zoological nomenclature.

Insmytilaspis Herrera et al., 1900, Mexico Comis. de Parasitol. Agr. Bol. (1900–1903) 1:6.

A "formula" name without status in zoological nomenclature.

Insneolecanius Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900-1903) 1:457-458.

A "formula" name without status in zoological nomenclature.

Inspseudococcus Herrera et al., 1903, Mexico Comis. de Parasitol. Agr. Bol. (1900-1903) 1:458.

A "formula" name without status in zoological nomenclature.

Insulaspis Mamet, 1950, Inst. Sci. de Madagascar, Mém. Sér. A, 4: 32-33.

TYPE-SPECIES: Lepidosaphes vermiculus Mamet, 1937, by original designation.

The author considered this genus close to *Aonidomytilus* Leonardi and definitely separable from *Lepidosaphes* Shimer. Balachowsky, 1954e: 28, 30, placed the name in synonymy with *Lepidosaphes*.

Ischinaspis Kuwana, 1917, A Check List of the Japanese Coccidae, p. 18.

A lapsus for Ischnaspis Douglas.

Ischnafiorinia MacGillivray, 1921, The Coccidae, p. 372.

TYPE-SPECIES: Fiorinia bambusae Maskell, 1896, by original designation and monotypy.

Ferris, 1936a: 22, 25, accepted this as a valid genus and, 1937e: 529, rejected Lindinger's, 1937: 187, assertion that it equaled *Fiorinia* Targioni-Tozzetti.

Ischnaspis Douglas, 1887, Ent. Monthly Mag. 24:21.

TYPE-SPECIES: (Ischnaspis filiformis Douglas, 1887) = Mytilaspis longirostris Signoret, 1882, by monotypy.

This genus has been accepted as valid since its establishment. It is currently placed in Diaspidini, Lepidosaphedina, by Balachowsky, 1954e: 25, 134.

Ischnofiorinia Vesey-Fitzgerald, 1940, Bul. Ent. Res. 31: 270.

A lapsus for Ischnafiorinia MacGillivray.

Jaapia Lindinger, 1914, Ztschr. f. Wiss. Insektenbiol. 10: 158.

TYPE-SPECIES: Mytilaspis (Lepidosaphes) uniloba Kuwana, 1909, by monotypy.

Lindinger, 1937: 186, 188, maintained the validity of this genus. Ferris and Rao, 1947: 27, considered the name a synonym of *Pinnaspis* Cockerell.

Kaicoccus Takahashi, 1958, Univ. Osaka (Prefecture) Bul. (ser. B) (1957) 7:3, 5-6.

TYPE-SPECIES: *Pseudococcus kaiensis* Kanda, 1932, by original designation and monotypy.

The author placed this genus near Dysmicoccus Ferris in the Pseudococcidae.

Kandraspis Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:439-440.

TYPE-SPECIES: Kandraspis euphorbiae Mamet, 1959, by original designation and monotypy.

The author assigned this genus to the Diaspidini but could not associate it with any particular member of the group.

Karteria Berlese, 1894, Riv. di Patol. Veg. 3:66 (footnote 1).

An emendation or lapsus for *Carteria* Signoret. Lindinger, 1937: 187, said "=Kerria Targioni."

Kermes Boitard, 1828, Les Gallinsectes, *in* Manuel d'Entomologie ou Histoire Naturelle des Insectes, v. 2:171.

TYPE-SPECIES: (Coccus variegatus Gmelin, 1789) == Chermes roboris Fourcroy, 1785, by subsequent designation of Fernald, 1903b: 60.

This presents one of the more difficult problems in coccid nomenclature. In coccidological application, in recent years, *Kermes* has rather consistently been credited to Boitard, l. c., where it was presented as one of the three coccid genera considered in this book. This was its first actual usage as a generic name, its prior appearances in literature having been as a common or group name. Silvestri, 1911: 148, substituted his *Kermococcus* for *Kermes*, without indicated reason, and named *Chermes vermilio* Planchon type-species. Borchsenius, 1960d: 26, accepted this replacement as valid for *Kermes* auct. He considered *polonicus* Linnaeus, as first-included species, the type-species of *Kermes*, which made that genus isogenotypic with *Porphyrophora* Brandt. We do not accept either of these actions, and believe that *Kermes* Boitard is nomenclatorially valid and available for the oak-infesting species now going under that name. *Sce* also under *Talla* Heyden.

Kermesococcus Cromartie, 1959, Ann. Rev. Ent. 4:61.

Editorial lapsus for Kermes Boitard or Coccus Linnaeus.

Kermesoides Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 8:862.

TYPE-SPECIES: Targionia nigra Signoret, by implication.

Signoret stated, "Targ. nigra Signoret, nov. spec. (Kermesoides id. olim)." Lindinger, 1933e: 68, and Ferris, 1943a: 91, accepted Kermesoides as an alternate specific name for nigra. We disagree with this interpretation and consider it to be a generic name that Signoret had earlier placed on specimens of nigra.

Kermicus Newstead, 1897, Ent. Monthly Mag. 33:170.

TYPE-SPECIES : Kermicus wroughtoni Newstead, 1897, by monotypy.

This genus assigns to the Pseudococcidae.

Kermococcus Silvestri, 1911, Dispense di Entomologia Agraria secondo le Lezioni del Prof. F. Silvestri raccolte dal Dott. Guido Grandi. Parte Speciale. Portici, p. 148.

TYPE-SPECIES: Chermes roboris Fourcroy, 1785, by substitution of Kermococcus for Kermes Boitard.

The author presented this, without comment, as a new name for Kermes Boitard, accompanied by a discussion of one species, vermilio Planchon. Leonardi, 1920: 266 (footnote), quoted Silvestri's reason for the change as the similarity of the name Kermes to Chermes, of earlier date, used in the Aphidoidea. Silvestri, 1939: 692, definitely cited Chermes vermilio Planchon as the type-species of this genus. Ferris, 1921: 157, rejected the Silvestri substitution as not justified under the International Code. Lindinger, 1928: 107, listed Kermococcus as a synonym of Kermes and later, 1933a: 117, replaced Kermes with Talla Heyden. Borchsenius, 1960d: 25-26, accepted and used Kermococcus as a proper replacement for Kermes auct. See under Kermes.

Kerria Targioni-Tozzetti, 1884, Min. di Agr. Indus. e Com., Ann. di Agr. 1884 (Nos. 86-89) : 410.

TYPE-SPECIES : Coccus lacca Kerr, 1782, by monotypy.

Targioni's manner of presenting this name implied that he had proposed it prior to the presentation of the name *Carteria* Signoret, 1874. We have found no trace of it in any earlier Targioni literature. *See* discussion under *Laccifer* Oken.

Kiritshenkella Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 63: 583.

TYPE-SPECIES : Kiritshenkella stataria Borchsenius, 1948, by original designation and monotypy.

The author placed this genus close to *Neotrionymus* Borchsenius in the Pseudo-coccidae.

Koroneaspis Bodenheimer, 1943, Iraq. Dir.-Gen. Agr. Bul. 28: 9.

TYPE-SPECIES : Lepidosaphes aegilopos Koronéos, 1934, by monotypy.

Balachowsky, 1954e: 24, 98–99, accepted this as a valid genus close to *Lepidosaphes* Shimer. Borchsenius, 1949b: 343, added a second species, *lonicerae*.

99

Kuwanaia Lindinger, 1953, Ztschr. der Wien. Ent. Gesell. 28: 221.

An emendation of Kuwania Cockerell.

Kuwanaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES : Chionaspis (?) hikosani Kuwana, 1902, by original designation and monotypy.

This genus is accepted as valid in the Diaspidini by modern coccid workers. Balachowsky, 1954e: 264, placed it in the Diaspidina, group II, chionaspiform, near *Stramenaspis* Ferris and *Madagaspis* Mamet.

Kuwaneia Lindinger, 1937, Ent. Jahrb. 46:187.

An emendation of Kuwania Cockerell.

Kuwania Cockerell, 1903, in Fernald, Mass. Agr. Expt. Sta. Spec. Bul. 88: 32.

TYPE-SPECIES : Sasakia quercus Kuwana, 1902, by substitution of Kuwania for Sasakia Kuwana.

This name was first presented in the Fernald Catalogue as a replacement for *Sasakia* Kuwana, preoccupied, but with definite credit to Cockerell as author. Cockerell, 1909: 56, included the genus in a table of genera allied to *Xylococcus* Löw (Margarodinae, Xylococcini). Morrison, 1928: 64, placed it with *Neosteingelia* Morrison in the Kuwaniini and redescribed the genus as limited to the type-species.

Kuwanina Cockerell, 1903, in Fernald, Mass. Agr. Expt. Sta. Spec. Bul. 88: 121.

TYPE-SPECIES: Sphaerococcus parvus Maskell, 1897, by original designation and monotypy.

This generic name appeared first in the Fernald Catalogue with Cockerell as author. Green, 1915a: 181, redescribed the type-species in detail. Ferris, 1918b: 324, grouped the genus with his new genera *Ehrhornia* and *Paludicoccus* in the Dactylopiinae (of the Fernald Catalogue). In 1941 he added *Rhodania* Goux and *Cucullococcus* Ferris to the group, and suggested the possibility of their inclusion in the Pseudococcidae. Mamet, 1954: 30, noted a relationship with his pseudococcid genus *Paulianodes*. Takahashi, 1958: 1, also suggested reference of *Kuwanina* to the Pseudococcidae.

Labidaspis Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 378.

TYPE-SPECIES: Fiorinia myersi Green, 1929, by original designation and monotypy.

The authors placed this genus in the Parlatoriini and noted that its relationships are rather obscure but that the second-stage female comes nearest to *Doriopus* Brimblecombe.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 101

Labioproctus Green, 1922, The Coccidae of Ceylon. Part V, p. 453.

TYPE-SPECIES: Walkeriana polei Green, 1896, by original designation and monotypy.

The author placed this genus in the Monophlebinae, allied to *Aspidoproctus* Newstead. Morrison, 1928: 145, assigned it to group 2 of the Monophlebini. Only the type-species has been assigned to the genus.

Laboulbenia Lichtenstein, 1877, Schweiz. Ent. Gesell. Mitt. 5: 299.

TYPE-SPECIES: Laboulbenia brachypodii Lichtenstein, 1877, by monotypy.

The author presented this name with brief habit notes. Three pages later, in a footnote, he expressed the opinion that this insect was *Antonina purpurea* of Signoret, a synonymy that has been accepted by subsequent coccid workers.

Lac Anderson, 1790, Asiatic Researches (Asiatic Soc. Bengal, Trans.) 2:359.

In his introductory letter to the Roxburgh 1790 article describing the lac insect, Anderson said: "Mr. Roxburgh's discovery will bring Lac a genus into the class Hemiptera of Linnaeus." There was no obvious use of the binomial system in this presentation.

Lacanium Lelong, 1890, Calif. State Bd. Hort. Ann. Rpt. for 1889: 193.

A lapsus for Lecanium Burmeister.

Lacca Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 8: 848.

Lacca alba Pearson, Trans. Phil. (1794): 383, was cited as a synonym of Ceroplastes ceriferus Anderson.

Laccifer Oken, 1815, Lehrbuch der Naturgeschichte, Sect. 3 (Zool. 1): 430.

TYPE-SPECIES: Coccus lacca Kerr, 1782, by monotypy.

Kirkaldy, 1906: 249, first noted the priority of this name over Tachardia Blanchard, 1886, and it was again resurrected by Cockerell, 1924: 47. Chamberlin, 1925, accepted Laccifer as a substitute for Tachardia R. Blanchard and since then the name has found general use in entomological literature. Lindinger, 1933b: 228, pointed out that the names in the Oken Lehrbuch were not consistently binomial, hence not valid, and restored Tachardia for this zoological unit. Later in the same year, 1933a: 166, he reported that the name Kerria Targioni-Tozzetti, 1884, had priority over Tachardia and hence must replace it. Other authors have not accepted this action. The International Commission on Zoological Nomenclature (Bul. Zool. Nomen., 11 May 1954, 9(7): 193-218) undertook an extended study of the Oken Lehrbuch and produced an informal finding that Lehrbuch volume 3 is not consistently binomial and that its names therefore do not acquire availability from such publication. This seems to confirm the Lindinger conclusion, although the Oken presentation of this particular genus was strictly binomial. It is concluded that further changes in the basic name of the lac insects will not be seriously disruptive since several have already been made (from Carteria Signoret to Tachardia to Laccifer to Kerria) and since many of the species already described in Tachardia have been transferred to other genera in consequence of Chamberlin's work.

Lachnocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 503.

A monomial designation to replace a generic and specific name. It has no validity as a generic name.

Lachnodiella von Ihering, 1907, Bot. Jahrb. 39: 680, nomen nudum; Hempel, 1910, Rev. Mus. Paulista [Sao Paulo] 8: 52.

TYPE-SPECIES: Lachnodiella cecropiae Hempel, 1910, by original designation and monotypy.

Ferris, 1955: 2, redescribed the type-species of this pseudococcine genus and noted certain resemblances to *Lachnodius* Maskell.

Lachnodiopsis Borchsenius, 1960, Ent. Obozr. 39:923.

TYPE-SPECIES: Lachnodiopsis szemaoensis Borchsenius, 1960, by original designation.

The author placed this genus close to *Delococcus* Ferris and *Lachnodiella* Hempel in the Pseudococcidae.

Lachnodius Maskell, 1896, New Zeal. Inst. Trans. and Proc. (1895) 28:400.

TYPE-SPECIES : Dactylopius eucalypti Maskell, 1892, by designation of Fernald, 1903b : 95.

Morrison and Morrison, 1922: 44-48, redescribed this genus and its type-species. They expressed the opinion that it was not closely related to the *Pseudococcus* Westwood group of genera and suggested a possible connection with *Sphaerococcopsis* Cockerell. Ferris, 1955: 1, also commented on the uncertainty of its position in the Pseudococcidae.

Lackshadia Mahdihassan, 1931, Zool. Anz. 94:296.

A lapsus for Lakshadia Mahdihassan.

Lacombia Goux, 1940, Soc. d'Hist. Nat. l'Afrique du Nord, Bul. 31: 62.

TYPE-SPECIES: Ripersia bouhelieri Goux, 1938, by original designation and monotypy.

The author presented this as a subgenus of *Ripersia* Signoret, characterized chiefly by the absence of multilocular glands.

Lacsha Roxburgh, 1790, Asiatic Researches (Asiatic Soc. Bengal, Trans.) 2: 361.

Mahdihassan, 1935a, stated that this name has priority over *Laccifer* Oken, 1815. We have found no hint of a binomial treatment of the name in this citation and consider it a colloquial or common name.

Lagosinia Cockerell, 1899, Canad. Ent. 31: 332.

TYPE-SPECIES: Lecanium strachani Cockerell, 1898, by original designation and monotypy.

This genus and species of the Coccidae (str.) have not been studied since Cockerell's original treatment. Laingaspis Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 364.

TYPE-SPECIES: Poliaspis lanigera Laing, 1929, by original designation and monotypy.

The authors placed this genus in the Diaspidini, set apart from other members of the tribe by the position and character of the pygidial ducts.

Laingiococcus Morrison, 1945, Wash. Acad. Sci. Jour. 35: 54.

TYPE-SPECIES: *Heterococcus painei* Laing, 1930, by original designation and monotypy.

Williams, 1960: 400, accepted this genus in the Pseudococcidae and redescribed the type-species.

Lakshadia Mahdihassan, 1923, Vizianagaram, India, Maharajah's Col. Sci. Assoc. Jour. 1: 98.

TYPE-SPECIES: Lakshadia indica Mahdihassan, 1923, new name for Tachardia lacca (Kerr), by substitution.

The author proposed the use of this name derived from laksha, the Sanskrit word for lac, to indicate the true lac insect and the retention of *Tachardia* for the pseudolac insects. No definite type designation was made but the name *Lakshadia indica* was substituted for the *Tachardia lacca* found on *Butea frondosa*. The situation was further confused by the proposal of several new specific names for various components of the previous *Coccus lacca* of authors complex, based largely on the color of the lac produced. Coccid workers have not accepted this generic substitution and the International Rules of Nomenclature do not permit it.

Laminicoccus Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8: 402.

TYPE-SPECIES: Tylococcus giffardi Ehrhorn, 1916, by original designation.

The author described this genus in the Pseudococcidae. He noted that it lacked a claw denticle but showed some other similarities to *Rastrococcus* Ferris and *Puto* Signoret of the *Phenacoccus* Cockerell series.

Lapazia Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-68.

TYPE-SPECIES: Lepidosaphes obtecta Ferris, 1921, by original designation and monotypy.

The author assigned this genus to the Diaspidini with the suggestion of a connection with *Pallulaspis* Ferris and perhaps *Situlaspis* MacGillivray. Balachowsky, 1954e: 23, included it in his Lepidosaphedina.

Lattaspidiotus MacGillivray, 1921, The Coccidae, pp. 457-458.

TYPE-SPECIES: Aspidiotus (Diaspidiotus) tesseratus de Charmoy, 1899, by original designation.

The author assigned this genus to the Aspidiotini. The name was placed as a synonym of *Duplaspidiotus* MacGillivray by Ferris, 1937c: 51, 55, 1938a: SII-226; and Balachowsky, 1951: 680, 1953i: 1512.

Leacaspis Schmidt, 1956, Bioloski Glasnik (1955) 8:79.

A lapsus for Leucaspis Targioni-Tozzetti.

Leachia Signoret, 1876, Soc. de France Ann. (1875) (ser. 5) 5: 359.

TYPE-SPECIES: Monophlebus fuscipennis Burmeister, 1835, by subsequent designation of Cockerell, 1902q: 233.

Replaced by *Palaeococcus* by Cockerell, 1894: 36, because of preoccupation in Mollusca. See Morrison, 1928, for details.

Lecamium Leuckart, 1858, Zur Kenntniss des Generations Wechsels und der Parthenogenesis bei den Insecten, pp. 38, 43, 112.

A lapsus for Lecanium Burmeister.

Lecaniochiton Lindinger, 1932, Konowia 11:197.

An emendation of Lecanochiton Maskell.

Lecaniodiaspis Signoret, 1870, Soc. Ent. de France Ann. (ser. 4) 10: 272.

A lapsus for Lecanodiaspis Targioni-Tozzetti, 1869. See Lecanodiaspis.

- Lecaniodrosicha Takahashi, 1930, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 48: 29-30.
 - TYPE-SPECIES: Lecaniodrosicha lithocarpi Takahashi, 1930, by original designation and monotypy.

The describer related this genus to *Aspidoproctus* Newstead and its allies in the Margarodidae.

Lecaniopsis Lindinger, 1923, Ent. Jahrb. 32: 148-149.

An emendation of Lecanopsis Targioni-Tozzetti.

Lecanium Burmeister, 1835, Handb. der Ent. 2 (1):69.

TYPE-SPECIES: Coccus hesperidum Linnaeus, 1758, by subsequent designation of Cockerell, 1893g: 49.

Burmeister was the first to present this name in print, crediting it to Illiger, but nothing has been found in literature to justify acceptance of Illiger as author. No definite type designation was made but detailed descriptions were given for five species of which L. hesperidum (Coccus hesperidum Linnaeus) stood first. A final paragraph listed five other species "which must belong in this genus," among them Coccus tiliac Linnaeus and Coccus coryli Linnaeus. Westwood, 1840:118, listed "Lecanium Ill. (L. hesperidum Linn., Burm . . .)" which has been accepted by some as a type designation. However, the first definite type designation was made by Cockerell, 1893g: 49, when, discussing the Signoret 1873 division of the genus *Lecanium* into six groups of genera, he stated : "First Series. Consists of flat and often viviparous species of which L. hesperidum L. may be taken as type." In the same article he proposed Eulecanium as a subgeneric name "taking L. tiliae as the type," for the third series, "hemispherical species with skin more or less tessellated, living on trees and shrubs in North America and Europe." This described the zoological unit that has appeared in literature over the years under the name of Lecanium.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 105

Cockerell, 1901c: 91, and 1902k: 453, reported that Lecanium Burmeister, 1835, with the same type-species as *Calymnatus* Costa, 1828, must be abandoned in favor of the prior genus. Fernald, 1903b: 167, accepting Cockerell's conclusion. placed Lecanium and the Costa genera Calymmata and Calypticus as synonyms of Coccus Linnaeus with type-species hesperidum Linnaeus. Green, 1904d: 248 and 1922:461, recognized the suppression of Lecanium in favor of Coccus, but continued to use the name Lecanium for this zoological unit that "has never been known under any other generic name." Sanders, 1909: 430, autocratically set persicae (Fabricius) as type-species of Lecanium, because "all the species Burmeister really placed under this genus have been removed to other genera except persicae" and "it is impossible to eliminate Lecanium from our Coccid nomenclature." There is no rule that will permit this action. Steinweden, 1929: 225, accepted this genus as Lecanium Illiger with type-species "Coccus tiliae Linnaeus or Coccus coryli Linnaeus" but the facts detailed above show no justification for such a presentation. Sulc. 1908: 36, recognized Eulecanium Cockerell as a genus that included most Palearctic species (not in hot houses) of the genus Lecanium (sensu Signoret) and proposed the removal of certain of the species having salient differential characters to three new genera. In his 1923 paper, Šulc used the name Lecanium, demoting to subgenera the four previously recognized genera-Eulecanium Cockerell, Palaeolecanium Šulc, Parthenolecanium Šulc, and Sphaerolecanium Šulc. Kawecki, 1958, followed this Šulc usage. Borchsenius, 1957: 384, 423, acceded to the suppression of *Lecanium*, and accepted the three Sulc subgenera and Eulecanium Cockerell as valid genera. See Eulecanium for further details.

Lecanochiton Maskell, 1882, New Zeal. Inst. Trans. and Proc. (1881) 14:222.

TYPE-SPECIES: Lecanochiton metrosideri Maskell, 1882, by monotypy.

Morrison and Morrison, 1922: 69-75, redescribed this coccine genus and its type-species, but were unable to offer suggestions as to its relationships.

Lecanodiaspis Targioni-Tozzetti, 1869, Soc. Ent. Ital. Bul. 1: 261.

TYPE-SPECIES: Lecanodiaspis sardoa Targioni-Tozzetti, 1869, by monotypy.

Signoret, 1870: 285, used this spelling, agreeing with the Targioni original presentation, in his index and in his detailed treatment of the genus and its single associated species. The spelling *Lecaniodiaspis*, which appeared on page 272 of Signoret's work, we believe to be a lapsus and, although it has been in general use in literature for many years, should give way to *Lecanodiaspis* Targioni-Tozzetti, 1869. Borchsenius, 1959a: 840, erected a new family, the "Lecaniodiaspididae," to include this genus and several others previously placed in the Asterolecaniidae.

Lecanopsis Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:36; 1869, 11:729.

TYPE-SPECIES: Lecanopsis rhyzophila Targioni-Tozzetti, 1868, by monotypy.

Targioni, 1867: 23, first mentioned this lecanine hypogeous genus as *Rhizobium*, referring to it a "large species found near the roots of an *Asperula*." This name, emended to *Rhyzobium*, appeared in his catalog, 1868: 36, as a synonym of "*Lecanopsis* nob., gen. nov." with species "*rhyzophila* nob., n. sp." Signoret, 1874: 93, published the first formal characterization of the genus as quoted notes

and two drawings sent to him by Targioni. The type-species has never been rediscovered. The present-day concept of the genus began with Newstead, 1893e: 205, who extended the characters of the genus to include his new species *formicarum*. The number of species referred to this genus by various authors has reached 15, according to Borchsenius, 1957: 91, who published the most recent review of the genus. He placed *Lecanopsis* in the Filippinae of the Coccidae (str.) and presented a precise generic recharacterization based on published descriptive notes of other authors and the species he had described.

Leconium Kirchner, 1856, Lotus 6:218.

A lapsus for Lecanium Burmeister.

- Ledaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 522.
 - TYPE-SPECIES: Chionaspis (Dinaspis) mashonae Hall, 1928, by original designation.

The author placed this genus in a group of genera of the *Phenacaspis* Cooley and Cockerell complex of the Diaspidini, closest to *Tecaspis* Hall. Balachowsky, 1954e: 549, accepted it as a member of the Diaspidina, group II, chionaspiform.

Lefroya Lindinger, 1937, Ent. Jahrb. 46:187.

A lapsus for Lefroyia Green.

Lefroyia Green, 1908, India Dept. Agr. Mem., Ent. Ser. 2:21.

TYPE-SPECIES: Lefroyia castaneae Green, 1908, by original designation and monotypy.

Preoccupied by *Lefroyia* Jones, 1874, in Pisces, according to Neave, 1939, Nomen. Zool. II: 884. The type-species is synonymous with *Pseudopulvinaria sikkimensis* Atkinson, hence the name falls into synonymy with *Pseudopulvinaria* Atkinson.

Leocaspis Gómez-Menor, 1957, Eos 33:49.

A lapsus for Leucaspis Targioni-Tozzetti.

Leococcus Kanda, 1959, Kontyu 27: 239-240.

TYPE-SPECIES: Leococcus erigeroneus Kanda, 1959, by original designation and monotypy.

The author considered this genus closely allied to *Puto* Signoret or *Ceroputo* Šulc in the Pseudococcidae.

Leonardaspis MacGillivray, 1921, The Coccidae, p. 274.

TYPE-SPECIES: Mytilaspis wilga Leonardi, 1903, by original designation and monotypy.

The author assigned this genus to the Lepidosaphini. Lindinger, 1937: 187, placed it in synonymy with *Mytilococcus* Amerling (*Lepidosaphes* Shimer). Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 366, considered it a distinct genus, in certain features close to *Berlesaspis* MacGillivray.

Leonardianna MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Aspidiotus pimentae Newstead, 1917, by original designation.

Lindinger, 1937: 188, placed this name as a synonym of *Dycryptaspis* Cockerell. Ferris, 1941d: SIII-345, accepted it as valid and placed it in the Aspidiotini. Balachowsky, 1953g: 727, 731, attached it provisionally to the Odonaspidina.

Lepidaspidis MacGillivray, 1921, The Coccidae, p. 275.

TYPE-SPECIES: Mytilaspis uniloba Kuwana, 1909, by original designation and monotypy.

The author placed this genus in the Lepidosaphini. Lindinger, 1937: 188, said, "=Jaapia Ldgr." Ferris and Rao, 1947: 26-27, placed the name in synonymy with *Pinnaspis* Cockerell.

Lepidaspis Riley, 1923, Zool. Rec. for 1921, p. 249.

A lapsus for Lepidaspidis MacGillivray. Lindinger, 1937: 188, said, "=Jaapia Ldgr."

Lepidosaphes Shimer, 1868, Amer. Ent. Soc. Trans., pp. 372–373.

TYPE-SPECIES: (Coccus conchiformis Gmelin, 1789, of Shimer)=Coccus ulmi Linnaeus, 1758, of current concepts, by monotypy.

Signoret, 1870: 91, claimed that Mytilaspis Targioni-Tozzetti, 1868, was published earlier than Lepidosaphes, but we have found nothing to confirm this. Lindinger, 1936: 148-149, insisted that the generic name Mytilococcus Amerling, 1858, had precedence over Lepidosaphes Shimer, 1868. For good reasons we question this substitution. The name appeared in three different spellings in the year of its publication, first as Mytillicoccus Amerling without included species, second as Mytilococcus Amerling with included species and illustrations but no actual descriptions, and third as Mytilicoccus in a review by von Schlechtendal of Amerling's work. There is no generic description to associate with the name and no specific descriptions associated with any of the forms named in association with Mytilococcus. A few coccid workers have utilized the name Mytilococcus since its rediscovery by Lindinger, but most current workers (Balachowsky, Borchsenius, Ferris, Hall, Schmutterer, Takahashi) have continued to use Lepidosaphes. Thus far Mytilococcus has been used in coccid literature perhaps 150 to 200 times; Lepidosaphes has built up a usage running to 3,500 to 4,000 times, and is common in current usage. There are practical advantages in continuing the use of the latter name, and we believe that its use should be accepted, and stabilized by formal action if necessary.

The question of the status of the type-species of Lepidosaphes and its synonyms presents its own problems. Cockerell, 1899j: 275, apparently was the first to note that Coccus ulmi Linnaeus, 1758: 455, was based on Reaumur's "Insectes 4. t. 2, 5. f. 5–7." Fernald, 1903b: 314, placed Coccus linearis Modeer, 1778, and Coccus conchiformis Gmelin, 1789, both bearing their author's citations to the same Reaumur plate figures noted above, in synonymy with Coccus ulmi Linnaeus. The acceptance of ulmi Linnaeus over the several other names used for this species, first in Mytilaspis and after publication of the Fernald Catalogue, 1903b, in combination with Lepidosaphes, has become very widespread, if not universal, and we believe it is correct. We believe further that continued use of conchiformis (Gmelin) as a valid name (see Balachowsky, 1954e: 64), and the attempt to resurrect the name linearis (see Lindinger, 1954: 617) are arbitrary actions not legitimate under the Rules of the 1961 Code.

208-496-66----8

Lepidosaphoides Lindinger, 1930, Hamburg. Inst. f. Angew. Bot. Jahresber. (1929): 106.

TYPE-SPECIES: Leucaspis bambusae Kuwana, 1902, by monotypy.

Balachowsky, 1954e: 264; Borchsenius and Hadzibejli, 1950: 12; and Ferris, 1936a: 22-25, have accepted this name as a synonym of *Kuwanaspis* Mac-Gillivray, 1921.

Leptococcus Reyne, 1961, Beaufortia (Zool. Mus. Amsterdam) S: 145.

TYPE-SPECIES: Leptococcus metroxyli Reyne, 1961, by original designation and monotypy.

The author placed this genus in the Pseudococcidae allied to *Pseudococcus* Westwood.

Leptopulvinaria Kanda, 1960, Kontyu 28:118.

TYPE-SPECIES: Leptopulvinaria elaeocarpi Kanda, 1960 by original designation and monotypy.

The author noted resemblance of this genus to Pulvinaria Targioni-Tozzetti.

Leucamium Brever, 1862, Soc. Ent. Belge Ann. 6:97.

A lapsus for Lecanium Burmeister.

Leucanium Schaum, 1850, Arch. f. Naturgesch. 16, Bd. 2: 248-249.

Lindinger, 1954: 616, claimed valid status for this as a generic name and maintained that it should replace *Eulecanium* Cockerell. After careful examination of the publication by Schaum, we reject Lindinger's conclusions and consider that this spelling is a lapsus for *Lecanium* Burmeister.

Leucaspidopsis Lindinger, 1932. Konowia 1: 202-203.

TYPE-SPECIES: Leucaspis vayssierei Balachowsky, 1928, by original designation.

The author presented this genus with a brief descriptive note and included also *Fiorinia maskelli* Brittin. Ferris, 1937d: 104, considered the genus possibly valid but the name was placed as a synonym of *Salicicola* Lindinger by Balachowsky and Kaussari, 1951: [1], and by Balachowsky, 1953g: 882-883.

Leucaspis Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11: 41; 1869, 11: 734; Signoret, 1870, Soc. Ent. de France Ann. (ser. 4) 10: 100.

TYPE-SPECIES: (Leucaspis candida Targioni-Tozzetti, 1868)=Coccus pini Hartig, 1839, by subsequent designation of Targioni-Tozzetti, 1881: 160.

The author presented this generic name in his 1868 catalog with no descriptive or other associated information, but with two included species names: "Sp. 1. Leucaspis candida nob. (Diaspis candida nob. 1867)" and "Sp. 2. Leucaspis signoreti nob. n. sp. 1868 (D. signoreto recepta, Pini sp. incola)." We have failed to find Diaspis candida in any other Targioni publication. Signoret, 1870: 100-102, gave substance to Leucaspis, which he credited to Targioni, with descriptions of the genus and the two species that had been included, but placed

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 109

candida Targioni as a synonym of Coccus pini Hartig, 1839. We consider Targioni's, 1881: 160, comment, "We are not even now in a position to determine whether a species sent to Signoret by us as type of the genus (Leucaspis candida) is or is not distinct from Leucaspis pini described by Hartig," a definite type designation. Burmeister, 1835, Arch. f. Naturgesch. 1 (2): 47, in commenting on Walker's treatment of a chalcid family, Leucopsidae, stated in a footnote that the generic name, Leucopsis, was erroneously formed and should be Leucaspis. On this fact certain coccid workers have based their opinion that the name Leucaspis could not be used in the Coccoidea because of preoccupation in the Hymenoptera. Hymenopterists, in general, have not accepted this as a valid chalcid genus, and Peck, 1963, Catalogue of Nearctic Chalcidoidea, p. 893, cites Leucaspis Burmeister, 1835, as an invalid emendation of Leucospis Fabricius.

Leucaspis Targioni, 1868, has been accepted as a valid genus in the Parlatoriini by most coccid workers with the exception of Lindinger, who has insisted on replacing it with Leucodiaspis Signoret, 1869. Lindinger, 1906: 10, also rejected the use of the Hartig name as type-species on the grounds that three different coccid species can stand under it, and he, 1937: 188, cited L. signoreti Targioni as type-species for Leucodiaspis, which he, 1910: 190, substituted for Leucaspis. Later, 1943b: 222, Lindinger reversed himself and cited L. candida Targioni as type-species. We have not seen the Hartig paper but Lindinger's 1906: 32, quotations from it present so inadequate a picture as to support his questioning the use of pini Hartig in place of candida Targioni. However, the majority of European writers have accepted the concept that *pini* Hartig was the first name proposed for the insect listed as Leucaspis candida by Targioni, 1868, and so, by usage, including the latest revisionary work (Balachowsky, 1953g: 127), Leucaspis pini has come to be the accepted name for both the type-species and the valid species. We believe that no accurate factual decision on this identity can ever be reached, and it seems preferable to fix the Hartig name in this status and to place the name candida Targioni in synonymy under pini.

Leucodiaspis Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 9:99; Lindinger, 1908, Jahrb. der Hamburg. Wiss. Anst. (1907) 25 Beih. 3:121.

TYPE-SPECIES: Leucaspis candida Targioni-Tozzetti, 1868, by substitution of Leucodiaspis for Leucaspis Targioni-Tozzetti.

This generic name first appeared in Signoret, 1869, in the brief introductory characterization of genera and in the index, associated with *Leucaspis*. Accepting *Leucaspis* Targioni, 1868, as preoccupied by *Leucaspis* Burmeister, 1835, in the Hymenoptera (*see Leucaspis*), Kirkaldy, 1904a: 257, suggested its replacement by *Leucodiaspis* Signoret, 1869. Lindinger, 1908d: 121, repeated this proposal and subsequently insisted on its acceptance. Ferris, 1936a: 22, 25, rejected this action, considering *Leucodiaspis* of Signoret a misspelling of *Leucaspis*. We agree with the Ferris opinion that it was an unnecessary substitution. Some authors, i.e., Zimmerman, 1948: 374, and Zahradnik, 1952a: 449, have continued to use *Leucodiaspis*.

Lichstensia Fuller, 1899, Ent. Soc. London, Trans., pp. 457-458.

A lapsus for Lichtensia Signoret.

Lichtensia Signoret, 1873, Soc. Ent. de France Ann. (ser. 5) 3: 27.

TYPE-SPECIES : Lichtensia viburni Signoret, 1873, by monotypy.

Steinweden, 1929: 236, placed this name as a synonym of *Filippia* Targioni-Tozzetti, considering that the type-species were congeneric. Borchsenius, 1957: 188, accepted this conclusion.

Ligulaspis MacGillivray, 1921, The Coccidae, p. 388.

TYPE-SPECIES: Odonaspis janeirensis Hempel, 1900, by original designation and monotypy.

The validity of this aspidiotine genus has not been accepted by coccid workers. The name is placed in synonymy with *Odonaspis* Leonardi.

Limacoccus Bondar, 1929, Bol. Biol. [Sao Paulo] 16: 59.

TYPE-SPECIES: Limacoccus serratus Bondar, 1929, by original designation and monotypy.

The author placed this genus in the Pseudococcinae but it is currently included in the Phoenicococcidae.

Lindingaspis MacGillivray, 1921, The Coccidae, p. 388.

TYPE-SPECIES: Melanaspis samoana Lindinger, 1911, by original designation and monotypy.

Ferris, 1938a: SII-245, accepted this genus as distinct, but noting the inadequacy of the original description, based his concept of the genus on *Aspidiotus rossi* Maskell, which he considered congeneric with the type-species. McKenzie, 1950: 98, reviewed the genus and recognized *samoana* Lindinger as type-species, but followed Ferris in basing the morphological details of his generic characterization on *rossi*.

Lindingeria MacGillivray, 1921, The Coccidae, p. 248.

TYPE-SPECIES: Gymnaspis aberemoae Lindinger, 1910, by original designation and monotypy.

The author placed this genus in the Parlatoriini. Coccid workers have not accepted it as valid and distinct from *Gymnaspis* Newstead.

Lineaspis MacGillivray, 1921, The Coccidae, p. 308.

TYPE-SPECIES: Chionaspis striata Newstead, 1897, by original designation and monotypy.

Coccid workers have accepted this genus as valid in the Diaspidini. Balachowsky, 1954e: 401, assigned it to his Diaspidina, group II, chionaspiform.

Lipidosaphes Borchsenius, 1958, Acta Ent. Sinica 8:168.

A lapsus for Lepidosaphes Shimer.

Liuaspis Borchsenius, 1960, Akad. Nauk SSSR Zool. Inst. (n.s. 77) 8: 174.

TYPE-SPECIES: Liuaspis sinensis Borchsenius, 1960, by original designation and monotypy.

The author assigned this genus to the Asterolecaniinae.

Liucoccus Borchsenius, 1960, Ent. Obozr. 39:930.

TYPE-SPECIES: *Liuococcus ehrhorniodes* Borchsenius, 1960, by original designation and monotypy.

The author placed this genus close to *Miscanthicoccus* Takahashi in the Pseudococcidae.

Llavea Lindinger, 1937, Ent. Jahrb. 46:188.

An emendation of Llaveia Signoret.

Llaveella Lindinger, 1937, Ent. Jahrb. 46:188.

An emendation of Llaviella Morrison.

Llaveia Signoret, 1876, Soc. Ent. de France Ann. (1875) (ser. 5) 5: 370.

TYPE-SPECIES : Coccus axin Llave, 1832, by monotypy.

Morrison, 1928: 182–183, assigned this genus to the Monophlebinae, Llaveiini, and reviewed the species previously assigned to it.

Llaveiella Morrison, 1927, Biol. Soc. Wash. Proc. 40:108.

TYPE-SPECIES: Llaveiella taenechina Morrison, 1927, by original designation and monotypy.

The type-species of this genus is the species referred to by Cockerell, 1897u: 271, as *Llaveia axin* (Llave). Morrison, 1928: 182, assigned the genus to the Llaveiini, Monophlebinae.

Loemica Laing, 1929, Ann. and Mag. Nat. Hist. (ser. 10) 4:476.

TYPE-SPECIES: Loemica ghesquierei Laing, 1929, by original designation and monotypy.

The author assigned this genus to the Coccinae (str.), closely related to *Lecanopsis* Targioni-Tozzetti, with which it agrees in many microscopic characters.

Lomatococcus Borchsenius, 1960, Ent. Obozr. 39:920.

TYPE-SPECIES: Lomatococcus ficiphilus Borchsenius, 1960, by original designation and monotypy.

The author placed this genus close to *Planococcoides* Ezzat and McConnell in the Pseudococcidae.

Longisomus Kiritchenko, 1931, Inst. Zashch. Rast. (1930) 7: 312, nomen nudum.

TYPE-SPECIES : Longisomus festucae Kiritchenko, 1931, by monotypy.

The author presented this name in a list of coccids, with associated collection data. Borchsenius, 1949: 185, cited it as a synonym of *Metadenopus* Šulc, 1933.

Lophococcus Cockerell, 1902, Entomologist 34: 227, 248.

TYPE-SPECIES: Lophococcus mirabilis Cockerell, 1902, by original designation and monotypy.

A synonym of *Aspidoproctus* Newstead, 1901. See Morrison, 1928: 151, for details.

Lopholeucaspis Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202: 875.

TYPE-SPECIES: Leucaspis japonica Cockerell, 1897, by original designation. The author assigned this genus to his Parlatorini, Leucaspidina.

Lopococcus Handlirsch, 1925, in Schröder's Handbuch der Entomologie, p. 1136.

A lapsus for Lophococcus Cockerell.

Loranthaspis Cockerell and Bueker, 1930, Amer. Mus. Nat. Hist. Amer. Mus. Novitates 424:4.

TYPE-SPECIES: Loranthaspis microconcha Cockerell and Bueker, 1930, by monotypy.

Ferris, 1937c: 51, 55, considered this genus valid and associated it with *Pygidiaspis* MacGillivray in the Aspidiotini.

Lusitanococcus Neves, 1954, Portugaliae Acta Biol. (ser. B) 4:239-240.

TYPE-SPECIES: Lusitanococcus arrabidensis Neves, 1954, by monotypy.

A synonym of Cucullococcus Ferris.

Luzulaspis Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9:25. TYPE-SPECIES: Aspidiotus luzulae Dufour, 1864, by original designation and monotypy.

This genus has been accepted as distinct and valid by most modern workers. Borchsenius, 1957: 87, placed it in the Filippinae, Coccidae (str.).

Lyraspis Ferris, 1938, Microentomology 3: 45-46; 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-149.

TYPE-SPECIES: Lepidosaphes ilicis Hoke, 1927, by original designation.

The author, 1941d: SIII-302, placed this name as a synonym of *Niveaspis* MacGillivray. This action was accepted by Lepage, 1939: 313, and Balachowsky, 1954e: 23.

Maconellicoccus Ezzat, 1958, Soc. Ent. d'Egypte Bul. 42: 380.

TYPE-SPECIES: *Phenacoccus hirsutus* Green, 1908, by original designation and monotypy.

The author placed this genus close to *Paracoccus* Ezzat and McConnell in the Planococcini.

Macracanthopyga Lizer y Trelles, 1955, Soc. Ent. de France Bul. 60: 37-38.

TYPE-SPECIES: Macracanthopyga verganianus Lizer y Trelles, 1955, by original designation and monotypy.

The author placed this genus in the Eriococcidae, doubtfully. Ferris, 1957, by 87, and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150; 10, accepted this placement.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 113

Macrancanthopyga Ferris, 1957, Microentomology 22:66.

A lapsus for Macracanthopyga Lizer y Trelles.

Macrocepicoccus Morrison, 1919, Ent. Soc. Wash. Proc. 21: 197-202.

TYPE-SPECIES: Macrocepicoccus loranthi Morrison, 1919, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, more closely related to *Pseudococcus* Westwood than to any other genus.

Macrocerococcus Leonardi, 1907, Portici R. Scuola Super. di Agr., Lab. Zool. Gen. e Agr. Bol. 1:151.

TYPE-SPECIES: Macrocerococcus superbus Leonardi, 1907, by monotypy.

This name was placed as a synonym of *Puto* Signoret by Ferris, 1950: 190, and accepted as such by Balachowsky, 1953n: 301. Borchsenius, 1949: 289, and Reyne, 1954a: 323, did not share this view and considered *Macrocerococcus* a valid genus.

Maculicoccus Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8: 403.

TYPE-SPECIES: Trionymus malaitensis Cockerell, 1929, by original designation and monotypy.

The author placed this genus in the Pseudococcidae with no suggestion of relationship to any particular genus.

Madacanthococcus Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:396.

TYPE-SPECIES: Madacanthococcus philippicolus Mamet, 1959, by original designation and monotypy.

The author placed this genus in the Pseudococcidae near Synacanthococcus Morrison and Echinococcus Balachowsky.

Madagaspis Mamet, 1950, Inst. Sci. de Madagascar, Mém. (Sér. A) 4: 34-35.

TYPE-SPECIES: Madagaspis pauliani Mamet, 1950, by original designation and monotypy.

The author placed this genus in the Diaspididae near *Dentaspis* MacGillivray. Balachowsky, 1954e: 265, suggested its closeness to *Kuwanaspis* MacGillivray.

Madarococcus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146:151.

TYPE-SPECIES: Rhizococcus pulchellus Maskell, 1890, by original designation.

The author placed this genus in the Eriococcidae, closely associated with *Eriococcus* Targioni-Tozzetti, but distinguished by complete absence of the *Eriococcus* type of tubular ducts.

Madeurycoccus Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:398.

TYPE-SPECIES: Madeurycoccus guari Mamet, 1959, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to *Eurycoccus* Ferris and *Trionymus* Berg.

Madhalimococcus Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:423-425.

TYPE-SPECIES: Madhalimococcus hyphaeneae Mamet, 1959, by original designation and monotypy.

The author placed this genus in the Phoenicococcinae of the Diaspididae close to *Halimococcus* Cockerell. Adult females of these two genera are difficult to separate but distinctive characters are present in eggs and first- and secondstage females.

Malaicoccus Takahashi, 1950, Insecta Matsumurana 17:65.

TYPE-SPECIES: Malaicoccus riouwensis Takahashi, 1950, by original designation and monotypy.

This genus was assigned by the author to the Pseudococcinae near Allomyrmococcus Takahashi.

Malleolaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-290.

TYPE-SPECIES: Malleolaspis sculpta Ferris, 1941, by original designation.

The author placed this genus in the *Pseudoparlatoria* Cockerell group of Diaspidinae, Diaspidini.

Mallococcus Maskell, 1898, New Zeal. Inst. Trans. and Proc. (1897) 30: 242.

TYPE-SPECIES: Mallophora sinensis Maskell, 1897, by substitution of Mallococcus for Mallophora Maskell.

The author substituted this name for *Mallophora* Maskell, 1897, preoccupied in the Diptera. Morrison and Morrison, 1922: 66–69, redescribed this genus as a coccine form resembling the Asterolecaniinae in certain respects.

Mallophora Maskell, 1897, New Zeal. Inst. Trans. and Proc. (1896) 29: 314.

TYPE-SPECIES: Mallophora sinensis Maskell, 1896, by monotypy.

This name was preoccupied in the Diptera and was replaced by *Mallococcus* Maskell.

Mammicoccus Balachowsky, 1959, Rec. Acad. Colombiana 10: 337.

TYPE-SPECIES: Mammicoccus murilloi Balachowsky, 1959, by original designation and monotypy.

The author placed this genus in the Pseudococcini next to *Phenacoccus* Signoret.

Mancaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-293.

TYPE-SPECIES: Mancaspis lunata Ferris, 1941, by original designation.

The author placed this genus in the Diaspidinae, Diaspidini, but suggested association with no particular genus.

Marchalaspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Chionaspis vuilleti Marchal, 1909, by original designation and monotypy.

Lindinger, 1937: 188, placed this name in synonymy with *Chionaspis* Signoret. Hall, 1946a: 525, believed the genus was valid.

Marchaliella Bodenheimer, 1951, Ent. Ber. 13: 331.

TYPE-SPECIESS *Monophlebus hellenicus* Gennadius, 1883, by original designation and monotypy.

The author placed this genus in the Diaspidinae related to *Chionaspis* Signoret. Ferris, 1955d: 42, and Balachowsky, 1954e: 317-318, considered the name a synonym of *Chionaspis*.

Marchalina Vayssière, 1923, Ann. des Épiphyt. 9:427.

TYPE-SPECIES: Monophlebus hellenicus Gennadius, 1883, by original designation and monotypy.

The author placed this genus in the Monophlebinae. Morrison, 1928: 88, assigned it to the Marchalinini, Coelostomidiinae, Margarodidae.

Margarodes Guilding, 1829, Linn. Soc. London, Trans. 16: 118.

TYPE-SPECIES: Margarodes formicarum Guilding, 1829, by monotypy.

The author presented this genus in an interesting and relatively detailed paper without indication of relationship to any other insect. Morrison, 1928: 72, redescribed and discussed the genus, associating it with *Neomargarodes* Green in the Margarodini, Margarodinae, Margarodidae.

Marginaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 58.

TYPE-SPECIES: Marginaspis thevetiae Hall, 1946, by original designation and monotypy.

The author placed this genus in the Aspidiotini between *Lindingaspis* Mac-Gillivray and *Acutaspis* Ferris. McKenzie, 1950: 98-99, and Balachowsky, 1953c: 110, and 1958b: 164, 188-191, accepted the genus as distinct, though very close to *Lindingaspis*.

Margorades Hunsucker, 1956, Miss. Farm Res. 19:6.

A lapsus for Margarodes Guilding.

Marlattaspis MacGillivray, 1921, The Coccidae, p. 387.

TYPE-SPECIES: Aspidiotus implicatus Maskell, 1897, by original designation and monotypy.

The author placed this genus in the Aspidiotini. Ferris. 1938a: SII-232, listed the name as a synonym of *Hemiberlesia* Cockerell and the type-species as

identical with *H. lataniae* Signoret. Balachowsky, 1956: 104, confirmed this action.

Marshalina Hadzibejli, 1959, Akad. Nauk Gruz. SSR Soobshch. 23: 575.

A lapsus for Marchalina Vayssière.

Marsipococcus Cockerell and Bueker, 1930, Amer. Mus. Nat. Hist., Amer. Mus. Novitates 424:7.

TYPE-SPECIES: Lecanium marsupiale Green, 1904, by monotypy.

The authors presented this as a subgenus of *Coccus* Linnaeus, as characterized by Steinweden, 1929.

Mascarenococcus Mamet, 1940, Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 9: 68.

TYPE-SPECIES: Mascarenococcus pandani Mamet, 1940, by original designation and monotypy.

The author referred this genus to the Pseudococcinae.

Maskeliella Leonardi, 1898, in Berlese and Leonardi, Ann. di Agr. Rome (ser. 2):12; 1898, Riv. di Patol. Veg. (1897) 6:290.

The author listed this as, "Maskeliella Leon. (Polyaspis Maskl.)" with no indication of association. Ferris, 1937a: 4, stated that Maskelliella [misspelled], arbitrarily proposed by Leonardi to replace Poliaspis Maskell, was definitely invalid.

Maskellana MacGillivray, 1921, The Coccidae, p. 490.

TYPE-SPECIES: Mytilaspis (Fernaldella) beyeriae Green, by original designation and monotypy.

The author included this genus in the "Lepidosaphini." Ferris, 1937a: 4, considered it valid. Balachowsky, 1954e: 23, placed it in his "Lepidosaphedina."

Maskellanna MacGillivray, 1921, the Coccidae, pp. 276, 296.

A lapsus for Maskellana MacGillivray.

Maskellia Fuller, 1897, Agr. Gaz. N.S. Wales 8: 579; 1897, West. Austral. Bur. Agr. Jour. 4: 1345.

TYPE-SPECIES : Maskellia globosa Fuller, 1897, by monotypy.

The author established this genus for a diaspine gall-making coccid. Lindinger, 1943b: 206-207, proposed the substitution of *Austromaskellia* because he considered *Maskellia* Fuller, 1897, preoccupied by the publication in 1896 of the name "*Maskellia zonata* Green" as host of a chalcid parasite. See under *Austromaskellia* for details. We reject Lindinger's action and consider *Maskellia* Fuller, 1897, a valid diaspine genus.

Maskelliella Cockerell, 1899, Ill. Nat. Hist. Survey Bul. 5: 397.

An emendation or lapsus for *Maskeliella* Leonardi. Lindinger, 1937: 189, and Ferris, 1937a: 3-4, 6, also used this spelling.

Matsucoccus Cockerell, 1909, Canad. Ent. 41:56.

TYPE-SPECIES Xylococcus matsumurae Kuwana, 1905, by original designation and monotypy.

The author erected this genus for a single Japanese species found on pine, noting that it was related to *Callipappus* Guérin-Méneville. Herbert, 1921, treated the genus in detail and suggested that it was most closely related to *Kuwania* Cockerell, *Steingelia* Nassanov, and *Stomococcus* Ferris. Morrison, 1928: 48, discussed its relationships and placed it in the Matsucoccini, Xylococcinae, Margarodidae. Ferris, 1941: 7–8, noted that specimens found in Baltic amber belong to a genus closely related to *Matsucoccus*.

Mauritiaspis Mamet, 1939, Roy. Ent. Soc., London, Trans. 89: 583.

TYPE-SPECIES: Mauritiaspis malloti Mamet, 1939, by original designation.

The author placed this genus in the Diaspinae, related to *Parachionaspis* MacGillivray. Balachowsky, 1954e: 172, accepted it as valid and assigned it to the Diaspidina, group II, chionaspiform.

Mediococcus Kiritshenko, 1936, Rev. d'Ent. de l'URSS (1935) 26: 144.

TYPE-SPECIES: Mediococcus circumscriptus Kiritshenko, 1936, by monotypy.

Borchsenius, 1948: 953, associated this genus with *Centrococcus* Borchsenius, *Calyptococcus* Borchsenius, and *Coccura* Šulc in the Coccurini, Pseudococcinae.

Megacanthaspis Takagi, 1960, Insecta Matsumurana 23: 68-69, nomen nudum; 1961, Insecta Matsumurana 24:97.

TYPE-SPECIES: Megacanthaspis actinodaphnes Takagi, 1961, by original designation and monotypy.

The author placed this genus in the Diaspidini and noted certain resemblances to *Mercetaspis* Gómez-Menor.

Megalecanium Hempel, 1920, Rev. Mus. Paulista [Sao Paulo] 12: 352, 375.

TYPE-SPECIES: Megalecanium testudinis Hempel, 1920, by original designation and monotypy.

The author placed this genus in the Coccinae (str.), similar to *Mesolecanium* Cockerell, but larger.

Megalocryptes Takahashi, 1942, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 81: 20.

TYPE-SPECIES : Megalocryptes buteae Takahashi, 1942, by original designation.

The author placed this genus in the Coccinae (str.), resembling *Cryptes* Cockerell.

Megalodiaspis Paoli, 1916, Redia (1916) 11:256.

TYPE-SPECIES : Chionaspis (?) biclavis Comstock, 1883, by monotypy.

The author established this genus on a tentative basis, on the untenable assumption that *elegans* Leonardi (synonym of *zamiae* Morgan) was type-species of

Howardia. Cockerell, 1896a: 256, had designated *biclavis* Comstock, 1883, as type-species of *Howardia*. Therefore *Megalodiaspis* Paoli is a synonym of *Howardia* Berlese and Leonardi because of identity of properly designated type-species.

Megalolecanium Lindinger, 1937, Ent. Jahrb. 46: 189.

An emendation of Megalecanium Hempel.

Megalosaissetia Lindinger, 1937, Ent. Jahrb. 46:189.

An emendation of Megasaissetia Cockerell.

Megasaissetia Cockerell, 1901, Ent. Student 2:32.

TYPE-SPECIES: Lecanium (Saissetia) inflatum Cockerell and Parrott, 1899, by original designation and monotypy.

The author presented this as a subgenus of Saissetia Déplanche.

Megaspidiotus Brimblecombe, 1954, Queensland Jour. Agr. Sci. 11: 155.

TYPE-SPECIES : Diaspis (?) fimbriata Maskell, 1893, by original designation and monotypy.

The author placed this genus in the Aspidiotini with closest relationship to *Aspidiotus* Bouché. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 389, considered it distinct, belonging to a group of genera allied to *Aspidiotus* Bouché.

Melanaspis Cockerell, 1897, in Leonardi, Riv. di Patol. Veg. 5: 375; Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6: 9, 13.

TYPE-SPECIES : Aspidiotus obscurus Comstock, 1881, by original designation.

The author presented this as a subgenus of *Aspidiotus* Bouché. Recent coccid workers have accepted it as a valid aspidiotine genus. *See* Ferris, 1941d: SIII-328, SIII-347, for detailed discussion.

Melanespis Ali, 1962, Indian Jour. Sugarcane Res. & Devlpmt. 6:74.

A lapsus for Melanaspis Cockerell.

Melzera Lindinger, 1937, Ent. Jahrb. 46:189.

An emendation of Melzeria Green.

Melzeria Green, 1930, Stettin. Ent. Ztg. 91:215-216.

TYPE-SPECIES: Melzeria horni Green, 1930, by original designation and monotypy.

The author assigned this genus provisionally to the Dactylopiinae.

Membranaria Brain, 1920, Bul. Ent. Res. 11:41.

TYPE-SPECIES : Membranaria pretoriae Brain, 1920, by original designation and monotypy.

The author placed this as a lecaniid genus, somewhat like *Pulvinaria* Targioni-Tozzetti.

Mercetaspis Gómez-Menor, 1927, Eos 3: 292.

TYPE-SPECIES: *Mercetaspis sphaerocarpae* Gómez-Menor, 1927, by original designation and monotypy.

The author placed this genus close to *Adiscodiaspis* Marchal. Balachowsky, 1954e: 126, after a study of the types, assigned it to the Lepidosaphedina next to *Nilotaspis* Ferris.

Mesococcus Bekker-Migdisova, 1959, Akad. Nauk SSSR Paleontol. Inst. Materialy 3:115.

TYPE-SPECIES: Mesococcus asiatica Bekker-Migdisova, 1959, by original designation and monotypy.

The author erected this genus for a specimen of a pre-Cretaceous fossil insect from the Permian period of Central Asia, an oval insect with the appearance of a mealybug.

Mesolecanium Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9: 451.

TYPE-SPECIES: Lecanium nocturnum Cockerell and Parrott, 1899, by original designation.

The author placed this genus in the Lecaniinae and suggested a similarity to Calymnatus O. G. Costa.

Metacardia Ramakrishna Ayyar, 1926, Bombay Nat. Hist. Soc. Jour. 31: 451.

A lapsus for Metatachardia Chamberlin.

Metaceronema Takahashi, 1955, Insecta Matsumurana 19: 27.

TYPE-SPECIES: Ceronema japonica Maskell, 1898, by original designation and monotypy.

The author noted the similarity of this genus to *Ceronema* Maskell and *Mallococcus* Maskell. Borchsenius, 1957: 91, placed it in the Filippinae, Coccidae (str.).

Metadenopus Šulc, 1933, Acta Soc. Sci. Nat. Morav. 8 (12) (Signatura F76): 1-2, 15.

TYPE-SPECIES: Metadenopus festucae Šulc, 1933, by monotypy.

The author placed this genus in the Coccinae (str.), not close to any known genus. Borchsenius, 1949: 185, assigned it to the Pseudococcidae, Pseudococcinae.

Metandaspis Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 15:28.

TYPE-SPECIES: Mytilaspis recurvata Froggatt, 1914, by original designation.

The author placed this genus close to Andaspis MacGillivray in the Lepidosaphes Shimer group of the Diaspidini.

Metaspidiotus Takagi, 1957, Insecta Matsumurana 21: 35-36.

TYPE-SPECIES: Aspidiotus stauntoniae Takahashi, 1938, by original designation.

The author related this genus closely to Aspidiotus Bouché.

Metatachardia Chamberlin, 1923, Bul. Ent. Res. 14: 172.

TYPE-SPECIES: Tachardia conchiferata Green, 1922, by original designation and monotypy.

The author presented this as a subgenus of *Tachardia* R. Blanchard and later, 1925, raised it to generic rank. He noted certain similarities that linked it with *Tachardiella* Cockerell. Balachowsky, 1950: 9, assigned it to the Lacciferinina.

Micrococcus Leonardi, 1907, Portici R. Scuola Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 1:135.

TYPE-SPECIES: Micrococcus silvestrii Leonardi, 1907, by designation of Sanders, 1909: 42.

Lindinger, 1907, Ztschr. f. Wiss. Insektenbiol. 3: 159, objected to this name because of the existence of a bacterial genus with the same name. He was not supported in this objection by other authors. The genus was described in the Pseudococcinae. Ferris, 1921b: 60, associated it in a group of genera with *Eriococcus* Targioni-Tozzetti. Balachowsky, 1936c: 163, suggested a relation with *Antonina* Signoret but later, 1948b: 255, established the Micrococcini in the Lecaniinae for it. Ferris, 1957b: 64, and 1957c: 87, rejected this action and maintained that the genus was definitely eriococcid, with which Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11, concurred.

Microparlatoria Takahashi, 1956, Insecta Matsumurana 20: 26.

TYPE-SPECIES: Parlatoria itabicola Kuwana, 1931, by original designation and monotypy.

The author placed this genus close to *Parlatoria* Targioni-Tozzetti in the Diaspididae.

Mimeraspis Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 261.

TYPE-SPECIES: Mimeraspis cuspilobis Brimblecombe, 1957, by original designation.

The author assigned this genus to the Aspidiotini and noted resemblance to *Neomorgania* MacGillivray and *Pseudotargionia* Lindinger.

Mimosicerya Cockerell, 1902, Entomologist 35:233.

TYPE-SPECIES: Icerya (Crypticerya) hempeli Cockerell, 1899, by monotypy.

Morrison, 1928: 104-108, placed this genus in the Coelostomidiini, Coelostomidiinae, Margarodidae, and noted a very close relationship to *Cryptokermes* Hempel. AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 121

- Mimusaspis Mamet, 1942, Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 11: 37.
 - TYPE-SPECIES: Lepidosaphes mimusopis Mamet, 1939, by original designation and monotypy.

The author placed this genus in the Diaspinae, somewhat related to Andaspis MacGillivray.

Mirococcopsis Borchsenius, 1948, Akad. Nauk USSR Dok. (n.s.) 63: 582.

TYPE-SPECIES: *Mirococcopsis rubidus* Borchsenius, 1948, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to *Mirococcus* Borchsenius.

Mirococcus Borchsenius, 1947, Akad. Nauk Arm. SSR Dok. 7: 141– 143.

TYPE-SPECIES: Phenacoccus inermis Hall, 1925, by original designation and monotypy.

The author placed this genus in the Pseudococcidae intermediate between *Pseudococcus* Westwood and *Phenacoccus* Cockerell.

Miscanthaspis Takagi, 1960, Insecta Matsumurana 23: 68-69, nomen nudum; 1961, Insecta Matsumurana 24: 69.

TYPE-SPECIES : Aulacaspis kuznoi Kuwana, 1932, by original designation.

The author placed this genus in the *Phenacaspis* Cooley and Cockerell group of the Diaspidini.

Miscanthicoccus Takahashi, 1958, Univ. Osaka (Prefecture) Bul. (ser. B) (1957) 7:6-7.

TYPE-SPECIES: Trionymus miscanthi Takahashi, 1928, by original designation and monotypy.

The author placed this genus near Neotrionymus Borchsenius and Paratrionymus Borchsenius in the Pseudococcidae.

Misericoccus Ferris, 1953, Atlas of the Scale Insects of North America 6: 384.

TYPE-SPECIES: Ripersia arenaria Doane and Steinweden, 1927, by original designation and monotypy.

The author placed this genus close to *Humococcus* Ferris in the Pseudococcidae.

Misracoccus Rao, 1950, Roy. Ent. Soc., London, Proc., Ser. B: Taxonomy 19: 115.

TYPE-SPECIES: Lophococcus convexus Morrison, 1920, by original designation. This genus is placed in the Monophlebini, Monophlebinae, Margarodidae.

Mitraspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-296.

TYPE-SPECIES: Mitraspis heresiarcha Ferris, 1941, by original designation and monotypy.

The author placed this genus in the Diaspidini, Diaspidinae. Balachowsky, 1954e: 23, assigned it to the Lepidosaphedina.

Mitrococcus Borchsenius, 1959, Ent. Obozr. 38:170.

TYPE-SPECIES: *Mitrococcus celsus* Borchsenius, 1959, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) close to *Idiosaissetia* Brain and *Inglisia* Maskell.

Mitulaspidis MacGillivray, 1921, The Coccidae, p. 310.

TYPE-SPECIES: Chionaspis funtumiae Newstead, 1914, by original designation and monotypy.

This spelling appeared in the key where the generic characterization was presented. It has page priority over the spelling *Mitulaspis* on subsequent pages. The author assigned the genus to the Diaspidini. Balachowsky, 1954e: 23, placed it in the Lepidosaphedina using the spelling *Mitulaspis*.

Mitulaspis MacGillivray, 1921, The Coccidae, pp. 358, 491.

A lapsus for Mitulaspidis MacGillivray.

Mixaspis Takahashi, 1932, Soc. Trop. Agr. Jour. 4: 46-47.

TYPE-SPECIES: Leucaspis bambusicola Takahashi, 1930, by original designation and monotypy.

The author placed this genus as intermediate between *Leucaspis* Targioni-Tozzetti and *Parlatoria* Targioni-Tozzetti. Balachowsky, 1953g: 842, placed it in the Leucaspidina.

Mixorthezia Morrison, 1926, Jour. Agr. Res. 30:151.

TYPE-SPECIES: Mixorthezia cubana Morrison, 1925, by original designation and monotypy.

See Morrison, 1925, 1952, for relationships.

Mizococcus Takahashi, 1928, Philippine Jour. Sci. 36: 336.

TYPE-SPECIES: *Mizococcus sacchari* Takahashi, 1928, by original designation and monotypy.

Lindinger, 1932c: 203, placed this name in synonymy with *Ripersia* Signoret, and proposed a new specific name, *takahashii*, because of prior use of *sacchari* in *Ripersia*. He, 1943c: 250, replaced *Ripersia* with *Tychea* Koch. These actions are of doubtful validity. See under *Tychea*.

Mohelnaspis Šule, 1937, Acta Soc. Sci. Nat. Morav. 10(11) (Signatura F 100): 29-30.

TYPE-SPECIES: Mohelnaspis moravica Sulc, 1937, by original designation and monotypy.

The author described this genus as related in some degree to *Bcrlcsaspis* MacGillivray. Ferris, 1938b: 57-58, considered the genus valid. Balachowsky, 1954e: 152, accepted it and placed it in the Lepidosaphedina. He stated that the type-species was identical with *massilensis* Goux.

Mohelnia Šule, 1941, Acta Soc. Sci. Nat. Morav. 13 (6) (Signatura F 131): 1–2.

TYPE-SPECIES: Mohelnia festuceti Šulc, 1941, by monotypy.

The author described this genus as phylogenetically close to *Scythia* Kiritchenko, in the Coccidae (str.). Borchsenius, 1957: 40, 178, placed the name in synonymy with *Scythia*.

Mollicoccus Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8: 407.

TYPE-SPECIES: Mollicoccus guadaleanalanus Williams, 1960, by original designation and monotypy.

The author placed this genus in the *Phenacoccus* Cockerell series of the Pseudococcidae.

Moluscococcus Hall, 1941, Ent. Soc. South. Africa Jour. 4: 236-237.

TYPE-SPECIES: Moluscococcus fibrillae Hall, 1941, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, related to *Micrococcus* Leonardi. Williams, 1958b: 4, assigned it to the Dactylopiidae as defined by Ferris, 1955a.

Monaonidiella MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES : Aspidiotus ceratus Maskell, 1895, by original designation.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 189, did not accept it as distinct from *Aspidiotus* Bouché. Ferris, 1941a: 22, was uncertain as to its synonymy with *Aspidiella* Leonardi. Brimblecombe, 1958: 85 and 1959: 140, accepted it and used it for Australian species.

Mongrovaspis Bodenheimer, 1951, Ent. Ber. 13: 331.

TYPE-SPECIES: Leucaspis quadrispinosa Green, 1934, by original designation.

The author placed this genus in the Diaspidinae, closely related to *Leucaspis* Targioni-Tozzetti. Balachowsky, 1953g: 843, 904–905, assigned it to his Parlatorini, Leucaspidina.

Monophlaebus Berlese and Leonardi, 1898, Ann. di Agr. Rome (ser. 2): 14.

A lapsus for Monophlebus Guérin-Méneville.

208-496-66-9

Monophleba Latreille, 1829, in Cuvier, Le Règne Animal (ed. 2) 5: 233.

A lapsus for *Monophlebus* Guérin-Méneville. A male coccid was here characterized briefly without specific name.

Monophlebidus Morrison, 1927, Biol. Soc. Wash. Proc. 40: 104.

TYPE-SPECIES: Monophlebidus indicus Morrison, 1927, by original designation and monotypy.

The author assigned this margarodid genus to the Monophlebinae, Monophlebini, group 1.

Monophleboides Morrison, 1927, Biol. Soc. Wash. Proc. 40: 104.

TYPE-SPECIES: Monophlebus gymnocarpi Hall, 1926, by original designation and monotypy.

The author placed this margarodid genus in the Monophlebinae, Monophlebini, group 1, closely related to and possibly zoologically identical with *Palaeococcus* Cockerell. *See* Morrison, 1928: 129, for discussion of relationships.

Monophlebulus Cockerell, 1902, Entomologist 35:233, 318.

TYPE-SPECIES: Monophlebus fuscus Maskell, 1893, by original designation and monotypy.

Morrison, 1928: 174, associated this margarodid genus with *Nodulicoccus* Morrison in the Monophlebinae, Monophlebulini.

Monophlebus Guérin-Méneville, 1827, *in* Dictionnaire Classique d'Histoire Naturelle, p. 99; Berthold, *in* Latreille, 1827, Natürliche Familien des Thierreiche, p. 428; Burmeister, 1835, Handb. der Ent. v. 2, abt. 1:80.

TYPE-SPECIES: Monophlebus atripennis Burmeister, 1835, by subsequent designation by Cockerell, 1902q: 232, 1902r: 317–318.

Although this name was credited to Leach in early works on coccids (Burmeister, 1835: 80; Westwood, 1845: 21; Signoret, 1875a: 363), no recent coccid worker has reported its presence in any of Leach's work. Cockerell, 1902r: 317, reported that an exhaustive search by C. H. Fernald had failed to locate it there. *Monophlebus* first appeared in an article by Guérin-Méneville, 1827: 99, and later in the same year in a German translation of Latreille's Familles Naturelles du Règne Animal. Two years later Latreille, 1829: 233, applied the name, *Monophleba*, to this same zoological unit. The genus acquired named species when Burmeister, 1835: 80, placed in it "*M. atripennis* Kl. 3" [actually *Monophlebus atripennis* Burmeister n. sp., 1835] and "*M. fuscipennis* n. sp." The first type fixation that has been found was by Cockerell, 1902q: 232, 1902r: 317–318, where *atripennis* Burmeister, 1835, was selected as type and phases of the above situation reviewed.

Monophloebus Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3). 18–19; 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:4; 1869, 11:697.

An emendation of Monophlebus Guérin-Méneville.

Monoplhaebus Leonardi, 1901, Insetti Nocivi 4:386.

A lapsus for Monophlebus Guérin-Méneville.

Moraspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 525.

TYPE-SPECIES: Chionaspis euphorbiae Brain, 1919, by original designation and monotypy.

The author assigned this genus to the complex of genera of the *Phenacaspis* Cooley and Cockerell type of the Diaspidini. Balachowsky, 1954e: 172, placed it in the Diaspidina, group II, chionaspiform.

Morganella Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6:22.

TYPE-SPECIES: (Aspidiotus (Morganella) maskelli Cockerell, 1897)=Aspidiotus longispinus Morgan, 1889, by monotypy.

The author presented this as a subgenus of *Aspidiotus* Bouché. It has been accepted by coccid workers as a valid aspidiotine genus. Balachowsky, 1951: 598, placed it in group I, Aspidiotina, Aspidiotini.

Morrisonella Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17:16.

TYPE-SPECIES : Morrisonella poensis Hambleton, 1946, by original designation.

This name was preoccupied in Mollusca and was replaced by *Coccidella* Hambleton. It is assigned to the Pseudococcidae, close to *Ripersiella* Tinsley, *Rhizoecus* Künckel and *Neorhizoecus* Hambleton.

Morrisonia Bodenheimer, 1951, Ent. Ber. 13: 328.

TYPE-SPECIES: Asterolecanium tenax Bodenheimer, 1929, by original designation and monotypy.

This name is a synonym of *Trachycoccus* Borchsenius, 1950, because of community of type-species. *Morrisonia* was preoccupied in Lepidoptera, 1874, and in Crustacea, 1935.

Murataspis Balachowsky and Richardeau, 1942, Ent. Soc. de France Bul. 47:100.

TYPE-SPECIES: Hemiberlesia megaporus Balachowsky, by original designation.

The authors placed this genus in the Aspidiotinae. Balachowsky, 1951: 561, assigned it to the Aspidiotina close to *Saharaspis* Balachowsky.

Mutabilicoccus Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8: 409.

TYPE-SPECIES : Farinococcus simmondsi Laing, 1924, by original designation.

The author assigned this genus to the Pseudococcidae.

Mycetaspis Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6:8, 13.

TYPE-SPECIES: Aspidiotus personatus Comstock, 1883, by original designation and monotypy.

The author presented this as a subgenus of *Aspidiotus* Bouché. It was accepted as valid by Ferris, 1938, 1941d; Lindinger, 1943b; and Balachowsky, 1951. Bala-

chowsky, 1958b: 205-207, placed it in the Aspidiotina, Aspidiotini, close to *Melanaspis* Cockerell.

Mycetococcus Ferris, 1918, Canad. Ent. 50: 330.

TYPE-SPECIES : Ccrococcus chrhorni Cockerell, 18950 : 255, by original designation.

The author assigned this genus to the Asterolecaniini, Dactylopiinae.

Mycococcus Ferris, 1952, Microentomology 17:2.

TYPE-SPECIES : Mycococcus copernicae Ferris, 1952, by original designation.

The author placed this genus in the Asterolecaniidae.

Myrtophila Brimblecombe, 1957, Queensland Jour. Agr. Sci. 14: 264.

TYPE-SPECIES: Myrtophila curvata Brimblecombe, 1957, by original designation.

The author placed this genus in the Aspidiotini, related to *Pseudotargionia* Lindinger, *Neomorgania* MacGillivray, and *Mimeraspis* Brimblecombe.

Mytalaspis Cooke, 1881, Treatise on Insects Injurious to Fruit and Fruit Trees of California, p. 37.

A lapsus for Mytilaspis Targioni-Tozzetti.

Mytiella Hoke, 1921, Ent. Soc. Amer. Ann. 14:341.

A lapsus for Mytilella Leonardi.

Mytilapsis Cockerell, 1897, Jamaica Bot. Dept. Bul. (n.s.) 4:108.

A lapsus for Mytilaspis Targioni-Tozzetti.

Mytilaspis Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11: 44; 1869, 11: 737; Signoret, 1869, Soc. Ent. de France Ann. (1868) (ser. 4) 8:841; 1870, (ser. 4) 10:91.

TYPE-SPECIES: (Coccus conchiformis Gmelin, 1798)=Coccus ulmi Linnaeus, 1758, by Signoret indication.

The proper orientation of *Mytilaspis* and its type-species remains a problem. Through the years it has been credited equally to Targioni-Tozzetti and Signoret. In our search of entomological literature we have failed to find evidence to support the Signoret allegation of the publication of *Mytilaspis* by Targioni-Tozzetti and Signoret prior to the appearance of *Lepidosaphcs* Shimer in January 1868. We conclude that *Lepidosaphes* has priority over *Mytilaspis*. *Mytilaspis* appeared in a large number of coccid papers published prior to the Fernald Catalogue, 1903b, where it was placed as a synonyn of *Lepidosaphes*. Lindinger, 1936: 149, gave the first formal designation of a type-species of *Mytilaspis* naming *lincaris* Targioni-Tozzetti. Ferris, 1937a: 4, selected *Aspidiotus pomorum* Bouché. Both of these names are generally accepted as synonyms of *Coccus ulmi* Linnaeus, 1758. Mytilella Leonardi, 1903, Portici R. Scuola Super. di Agr. Ann. (1904) (ser. 2) 5:20.

TYPE-SPECIES : Mytilaspis carinata Cockerell, 1896, by monotypy.

This name was placed as a synonym of *Opuntiaspis* Cockerell by Lindinger, 1937: 190; Ferris, 1936a: 25, and Balachowsky, 1954e: 94.

Mytilepiss Kuwana, 1917, A Check List of the Japanese Coccidae, p. 18.

A lapsus for Mytilaspis Targioni-Tozzetti.

Mytilicoccus von Schlechtendal, 1858, Hamburger Gart. u. Blumenzeitung 14:408 (bottom of page).

A lapsus for Mytilococcus Amerling.

Mytillicoccus Amerling, 1858, Lotos 8:29.

A lapsus for *Mytilococcus* Amerling. This spelling also appeared at top of page 408, von Schlechtendal, 1858.

Mytilococcus Amerling, 1858, Lotos 8: 101, 103.

TYPE-SPECIES: (*Mytilococcus communis* Amerling, 1858)=Coccus ulmi Linnaeus, 1758 (according to Lindinger, 1936: 148), by subsequent designation of Lindinger.

Amerling presented the scientific name, "Mytilococcus communis mihi," with reference to illustrations of the scale covers but with no description of the coccid itself. Mytilococcus Amerling has priority over Lepidosaphes Shimer, 1868, and Mytilaspis Targioni-Tozzetti, 1868, and if this indication is sufficient to validate publication of genus and species, has validity as well. Lindinger, 1936: 148, 1937: 190, held this to be the case and substituted Mytilococcus for Lepidosaphes, as did Silvestri, 1939: 803–811. However, most recent coccid workers (Ferris, Takahashi, Balachowsky, Borchsenius) have continued to use Lepidosaphes for this zoological unit. See under Lepidosaphes.

Myxilecanium MacGillivray, 1921, The Coccidae, pp. 178, 492.

A lapsus for Myzolecanium Beccari.

Myxolecanium Targioni-Tozzetti, 1877, Soc. Ent. Ital. Bul. 9: 317.

A lapsus for Myzolecanium Beccari.

Myzolecanium Beccari, 1877, Melesia [Genova] 1 (2): 190–191; Targioni-Tozzetti, 1877, Soc. Ent. Ital. Bul. 9: 317 [as *Myxolecanium*].

TYPE-SPECIES : Myzolecanium kibarae Beccari, 1877, by monotypy.

Beccari's paper, which appeared earlier in the year than Targioni-Tozzetti's, contained a precise description and figures of the genus and species. Thus his names have nomenclatorial priority.

Naiacoccus Green, 1919, Indian Mus. Rec. 18:117.

TYPE-SPECIES: Naiacoccus scrpentinus Green, 1919, by original designation.

The author placed this genus in the Pseudococcinae near *Erium* Maskell. Ferris, 1950b: 23, associated it in a group including *Amonostherium* Morrison, *Trabutina* Marchal, and *Nipaecoccus* Šulc.

Naiococcus Lindinger, 1937, Ent. Jahrb. 46: 190.

An emendation of Naiacoccus Green.

Najacoccus Bodenheimer, 1929, *in* Bodenheimer and Theodor, Ergebnisse der Sinai-Expedition 1927, p. 73.

An emendation of Naiacoccus Green.

Najococcus Bodenheimer, 1927, Inst. Agr. and Nat. Hist., Palestine Agr. Rec. 2:181.

A lapsus for Najacoccus Bodenheimer or Naiacoccus Lindinger.

Natalaspis MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: "Chionaspis simplex Brain," 1920 (actually C. simplex Green var. of Brain, 1920), by original designation and monotypy.

The author placed this genus in the Diaspidini. Ferris, 1938b: 71, made the name a synonym of *Poliaspoides* MacGillivray in the Odonaspidini. He considered the type-species of the two genera very close, if not identical. *See* Mamet, 1946: 244, for notes on possible identity of the type-species.

Natalensia Brain, 1915, Roy. Soc. So. Africa, Cape Town, Trans. 5:79,90.

TYPE-SPECIES: Natalensia fulleri Brain, 1915, by original designation and monotypy.

The author placed this genus in the Pseudococcidae allied to *Cryptoripersia* Cockerell.

Natalensia Mamet, 1946, Mauritius Inst. Bul. 2:244.

A lapsus for Natalaspis MacGillivray.

Natalensis De Lotto, 1958, Brit. Mus. (Nat. Hist.) Ent. Bul. 7: 84.

A lapsus for Natalensia Brain.

Nautococcus Vayssière, 1939, Soc. Ent. de France Bul. 44: 124.

TYPE-SPECIES: Nautococcus schraderae Vayssière, 1939, by monotypy.

The author placed this genus in the Llaveiini, Monophlebinae, close to *Llaveia* Signoret, *Llaveila* Morrison, and *Protortonia* Townsend.

Neglectaspis Lindinger, 1937, Ent. Jahrb. 46:190.

TYPE-SPECIES: Aspidiotus unilobis Maskell, 1895, by original designation.

Ferris, 1937: 51, 53, 55, placed this name as a synonym of *Chentraspis* Leonardi because of community of type-species. Lindinger, 1943b: 217, 222, disagreed,

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 129

having designated *extensus* Maskell as type-species of *Chentraspis*, and maintained the validity of his genus. *See* under *Chentraspis*.

Nelaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 499, 526.

TYPE-SPECIES: Chionaspis exalbida Cockerell, 1902, by original designation.

The author assigned this genus to the Diaspidini. Balachowsky, 1954e: 374, placed it in synonymy under *Duplachionaspis* MacGillivray. Williams, 1955: 140, accepted this action.

Nemolecanium Borchsenius, 1955, Akad. Nauk SSSR Zool. Inst. Trudy 18: 289.

TYPE-SPECIES: Nemolecanium abietis Borchsenius, 1955, by original designation.

The author placed this genus in the Coccinae close to Parthenolecanium Šulc.

Neoacanthococcus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 60: 502.

TYPE-SPECIES: Neoacanthococcus tamaricicola Borchsenius, 1948, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, subfamily Eriococcinae, close to *Acanthococcus* Signoret. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11, accepted it in the Eriococcidae on the basis of the published description of the genus.

Neoasterodiaspis Borchsenius, 1960, Akad. Nauk SSSR Zool. Inst. (n.s. 77) Fauna SSSR 8:207–208.

TYPE-SPECIES: Asterolecanium pasaniae Kuwana and Cockerell, 1909, by original designation.

The author placed this genus in the Asterolecaniinae, Asterolecaniidae, close to *Asterodiaspis* Signoret.

Neobernardia Cockerell, 1892, Insect Life 4:333.

TYPE-SPECIES: Chermes oleae Bernard, 1782, by substitution of Neobernardia for Bernardia Ashmead, 1891.

This was proposed as a substitute name for *Bernardia* Ashmead because the latter was preoccupied in botany. *Neobernardia* is accepted as a synonym of *Saissetia* Déplanche, 1859.

Neochionaspis Borchsenius, 1947, Akad. Nauk SSSR Dok. (n.s.) 58: 344.

TYPE-SPECIES: Neochionaspis kirgisica Borchsenius, 1947, by original designation and monotypy.

The author placed this genus close to *Chionaspis* Signoret and associated the type-species with *Chionaspis asiatica* Archangelskaia. Balachowsky, 1954e: 171, accepted it and placed it in his Diaspidina, chionaspiform.

Neoclavaspis Brimblecombe, 1959, Queensland Jour. Agr. Sci. 16: 144.

TYPE-SPECIES: Neoclavaspis duplex Brimblecombe, 1959, by original designation and monotypy.

The author placed this genus in the Aspidiotini and noted some resemblance to *Clavaspis* MacGillivray and *Quadraspidiotus* MacGillivray.

Neoclavicoccus Cohic, 1959, Soc. Ent. de France Bul. 64:88.

TYPE-SPECIES: Ncoclavicoccus ferrisi Cohic, 1959, by present designation.

The author placed this genus in the Pseudococcidae near *Clavicoccus* Ferris and described two new species without designation of either as type-species. *Neoclavicoccus ferrisi* has page priority.

Neocoelostoma Hempel, 1932, Rev. de Ent. [Sao Paulo] 2: 310-311.

TYPE-SPECIES: Neococlostoma xcrophila Hempel, 1932, by original designation and monotypy.

The author placed this genus in the Coelostomidiinae, Margarodidae, close to *Coelostomidia* Cockerell.

Neofurcaspis Green, 1926, Bul. Ent. Res. 17:61.

TYPE-SPECIES: Neofurcaspis and amensis Green, 1926, by original designation and monotypy.

The author placed this genus close to *Furcaspis* Lindinger. Lindinger, 1937: 190, considered the name a synonym of *Furcaspis*. Ferris, 1938: 43, noted the necessity of a study of the *Furcaspis* series before conclusions on validity of the genus could be reached.

Neogreenia MacGillivray, 1921, The Coccidae, p. 474.

TYPE-SPECIES: Monophlebus zeylanicus Green, 1896, by substitution of Ncogreenia for Paragreenia MacGillivray.

The author proposed this name to replace *Paragreenia* MacGillivray, preoccupied. Morrison, 1928: 65, discussed the type-species, questioned its association with *Kuwania* Cockerell, but did not assign it to a position in his system.

Neolecaniochiton Lindinger, 1937, Ent. Jahrb. 46: 190.

An emendation of Ncolecanochiton Hempel.

Neolecanium Parrott, 1901, in Cockerell and Parrott, Canad. Ent. 33: 58.

TYPE-SPECIES: Lecanium imbricatum Cockerell, 1896, by original designation and monotypy.

This was proposed as a subgenus of *Lecanium* Burmeister. Steinweden, 1929: 227, considered it identical with *Toumcyclla* Cockerell.

Neolecanochiton Hempel, 1932, Rev. de Ent. [Sao Paulo] 2: 324.

TYPE-SPECIES: Neolecanochiton grevilleae Hempel, 1932, by original designation and monotypy.

The author placed this genus in the Lecaninae with resemblances to *Lecano*chiton Maskell and *Platinglisia* Cockerell.

Neoleonardia MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES: Aspidiotus extensus Maskell, 1895, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. Lindinger, 1937: 190, placed the name as a synonym of *Chentraspis* Leonardi. The genus was accepted as valid by Ferris, 1938: 43, and Brimblecombe, 1953: 161.

Neoleucaspis Green, 1926, Bul. Ent. Res. 17:63.

TYPE-SPECIES: Neoleucaspis parallela Green, 1926, by original designation and monotypy.

The author considered this genus allied to *Leucaspis* Targioni-Tozzetti. Lindinger, 1934: 26, and 1937: 190, placed the name as a synonym of *Apteronidia* Berlese. The genus was accepted as valid by Ferris, 1936a: 22, 25, and by Balachowsky, 1953g: 842, who assigned it to his Leucaspidina, Parlatorini.

Neomargania Balachowsky, 1951, Actualités Sci. et Indus., Ent. Appl. 1127:677.

A lapsus for Neomorgania MacGillivray.

Neomargarodes Green, 1914, Novitates Zool. 21: 263.

TYPE-SPECIES: Neomargarodes erythrocephala Green, 1914, by original designation and monotypy.

The author established this genus for a male coccid from the Sahara. Marchal, 1922: 1092, described all stages of a new species, *trabuti*, also from the Sahara, which he placed in this genus. Morrison, 1928: 79, redescribed the genus, associating it with *Margarodes* Guilding in the Margarodini.

Neomorgania MacGillivray, 1921, The Coccidae, pp. 394, 458.

TYPE-SPECIES: *Pseudaonidia junctiloba* Marlatt, 1908, by designation of Ferris, 1937c: 55.

The author established this genus for three species: *eucalypti* Maskell, 1888, *acaciae* Morgan, 1899, and *junctiloba* Marlatt, 1908, without designation of a typespecies. Brimblecombe, 1954: 149–153, after a study of authentic material, concluded that the three represented a single species. In his opinion, this made *eucalypti* Maskell the type-species of *Neomorgania*, and the genus monotypic. Balachowsky, 1948b: 269, assigned the genus to the Pseudoaonidina, Aspidiotini.

- Neoparlaspis Hempel, 1934, Rev. de Ent. [Sao Paulo] 4: 144; 1935, Arb. über Physiol. u. Angew. Ent. 2: 57.
 - TYPE-SPECIES: Neoparlaspis myrciariae Hempel, 1934, by original designation and monotypy.

The author assigned this genus to the Diaspidinae, closest to the Parlatoriini.

Neoparlatorea Lindinger, 1937, Ent. Jahrb. 46:190.

An emendation of Neoparlatoria Takahashi.

Neoparlatoria Takahashi, 1931, Soc. Trop. Agr. Jour. 3: 381-382.

TYPE-SPECIES: Neoparlatoria formosana Takahashi, 1931, by original designation and monotypy.

The author described this genus of the Diaspidini as related to *Parlatoria* Targioni-Tozzetti. Takagi, 1960: 72–73, considered it very close to *Cryptoparlatoria* Lindinger, but the type-species validly distinct. Ferris, 1937d: 104, accepted it as valid.

Neopinnaspis McKenzie, 1949, Calif. Dept. Agr. Bul. 38: 123-124.

TYPE-SPECIES: Neopinnaspis harperi McKenzie, 1949, by monotypy.

The author assigned this genus to the Diaspidini, Diaspidinae, with resemblances to *Pinnaspis* Cockerell. Ferris, 1955b: 22, listed the name as a synonym of *Africaspis* Hall, but Borchsenius, 1959b: 1821, accepted the genus as valid and noted a closeness to *Lepidosaphes* Shimer and *Andaspis* MacGillivray.

Neoplatylecanium Takahashi, 1929, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 40: 53-54.

TYPE-SPECIES: Neoplatylecanium cinnamomi Takahashi, 1929, by original designation.

The author noted a relationship to *Coccus* Linnaeus, *Platylecanium* Cockerell and Robinson, and their allies.

Neopulvinaria Hadzibejli, 1955, Ent. Obozr. 34:232.

TYPE-SPECIES: Neopulvinaria imertina Hadzibejli, 1955, by original designation and monotypy.

The author placed this genus close to *Rhizopulvinaria* Borchsenius in the Pulvinariini, Coccinae.

Neorhizoecus Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17: 40-41.

TYPE-SPECIES: Rhizoecus coffeae Laing, 1925, by original designation.

Ferris, 1953a: 284, 386, and other recent coccid workers have accepted this as a valid pseudococcid genus.

Neorhyzoecus Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17:2.

A lapsus for Neorhizoecus Hambleton.

Neoripersia Kanda, 1943, Kansai Ent. Soc. Trans. 12: 49-50.

TYPE-SPECIES: (*Ripersia ogasawarensis* Kanda, 1943 (not Kuwana 1909), by original designation and monotypy.

The author noted a close alliance of this pseudococcid genus with *Ripersia* Signoret. *Ripersia ogasawarensis* Kuwana, 1909, cited by Kanda as type-species was a misidentification. *See* Takahashi, 1958: 7, for details.

AN ANNOTATED LIST OF GENERIC NAMES OF THE COCCOIDEA 133

Neoselenaspidus Mamet, 1958, Mus. Roy. du Congo Belge [Tervuren] (n.s.) Sci. Zool. 4:404–405.

TYPE-SPECIES: Selenaspidus silvaticus Lindinger, 1908, by original designation.

The author assigned this genus to the Aspidiotini closely allied to *Selenaspidus* Cockerell.

Neosignoretia MacGillivray, 1921, The Coccidae, p. 389.

TYPE-SPECIES: Aspidiotus yuccae Cockerell, 1896, by original designation.

The author placed this genus in the Aspidiotini, Aspidiotinae. Ferris, 1936a: 22, 26, disagreed; he considered the genus non-Aspidiotini. Lindinger, 1937: 190, placed the name as a synonym of *Pseudodiaspis* Cockerell. Ferris, 1937: SI-125, assigned *Neosignoretia* to synonymy with *Situlaspis* MacGillivray, and Hall, 1946a: 536, 547, discussed and accepted this placement.

Neosimmondsia Laing, 1930, Bul. Ent. Res. 21:19.

TYPE-SPECIES: Neosimmondsia hirsuta Laing, 1930, by original designation and monotypy.

The author assigned this genus to the *Pseudococcus* Westwood group of genera, near *Farinococcus* Morrison. Williams, 1960: 389, 414, noted similarity to *Cryp*toripersia Cockerell and *Mizococcus* Takahashi, but placed it closest to *Pilococcus* Takahashi.

Neosteingelia Morrison, 1927, Biol. Soc. Wash. Proc. 40: 101.

TYPE-SPECIES: Neosteingelia texana Morrison, 1927, by original designation and monotypy.

The author placed this genus in the Margarodinae, Kuwaniini, related to *Kuwania* Cockerell.

Neotectococcus Hempel, 1937, Inst. Biol. [Sao Paulo] Arch. 8: 19.

TYPE-SPECIES: Neotectococcus lenticularis Hempel, 1937, by original designation and monotypy.

The author assigned this genus to the "Apiomorphinae?". Ferris, 1957c: 87, and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11, placed it in the Eriococcidae.

Neotrionymus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 63: 581–582.

TYPE-SPECIES: *Neotrionymus monstatus* Borchsenius, 1948, by original designation and monotypy.

The author described this genus in the Pseudococcidae, close to *Pseudococcus* Westwood, and, 1960e: 926, presented it in a key to genera related to *Pseudan*tonina Green.

Nesococcus Ehrhorn, 1916, Hawaii. Ent. Soc. Proc. 3: 235, 238.

TYPE-SPECIES: Nesococcus pipturi Ehrhorn, 1916, by monotypy.

Zimmerman, 1948: 274, 276, presented a redescription of this genus with placement in the Pseudococcidae near *Trionymus* Berg.

Newsteadia Green, 1902, Ent. Monthly Mag. 38:285.

TYPE-SPECIES: Coccus floccosus De Geer. 1778. by original designation and monotypy.

This name replaced *Douglasia* Green. *Sce Douglasia* for details. Morrison. 1925, placed *Newsteadia* in the Ortheziinae, which he elevated to family rank. Ortheziidae, in 1952.

Newsteadiella MacGillivray, 1921, The Coccidae, pp. 71, 75.

TYPE-SPECIES: Icerya formicarum Newstead, 1897, by monotypy.

Rao, 1951: 40, 54, on the basis of examination of type and supplementary specimens, concluded that the type-species is a normal *Icerya* rather widely distributed in India, and placed the name in synonymy with *Icerya* Signoret.

Nicholiella Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-298.

TYPE-SPECIES: NicholicIla bumeliac Ferris, 1941, by original designation and monotypy.

The author placed this genus in the Diaspidini near *Fissuraspis* Ferris and *Pelliculaspis* Ferris. Brown. 1960:163, 165, 168, noted that the chromosome number of S in the type-species was suggestive of the lecanoid genetic system.

Niclularia Lindinger, 1957, Beitr. z. Ent. 7: 549.

A lapsus for Nidularia Targioni-Tozzetti.

Nidularia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11: 34: 1869, 11: 727: Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:17.

TYPE-SPECIES: Coccus pulvinatus Planchon, 1864, by subsequent restriction of Signoret, 1875.

The author established this genus with a brief descriptive note and three associated species. Signoret, l.c., restricted the genus to *pulvinatus*, the second of these species, and it stood unquestioned as type-species of *Nidularia* for nearly 60 years. Lindinger, 1933a: 107–108, asserted that the first species named by Targioni-Tozzetti, the species currently called *Gossyparia spuria* (Modeer). must be accepted as type-species, and *Nidularia* must replace both *Gossyparia* Signoret and *Eriococcus* Targioni-Tozzetti of current usage. For the complex that had been known in literature as *Nidularia*, he proposed to substitute the name *Querceticoccus*. We believe that the Signoret, 1875, restriction of *Nidularia* constituted an effective type-species establishment and that Lindinger's subsequent changes were not legitimate. On the basis of Marchal's redescription of the type-species, 1908: 259, it appears that *Nidularia* can assign close to *Kermes* Boitard.

Nietnera Green, 1922, The Coccidae of Ceylon Part V, p. 454.

TYPE-SPECIES: *Nictuera pundaluoya* Green, 1922, by original designation and monotypy.

The author placed this genus in the Monophlebinae allied to *Walkcriana* Signoret. Morrison, 1928: 129, assigned it to group 1 of the Monophlebini and suggested a possible closeness to *Monophlebidus* Morrison and *Perissopneumon* Newstead.

Nigridiaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-374.

TYPE-SPECIES: Nigridiaspis armigera Ferris, 1941, by original designation and monotypy.

The author placed this genus in the Aspidiotini, Diaspidinae.

Nikkoaspis Kuwana, 1928, Min. Agr. and Forestry, Dept. Agr. [Japan] Sci. Bul. 1:37.

TYPE-SPECIES: Nikkoaspis shiranensis Kuwana, 1928, by original designation and monotypy.

Takahashi, 1934: 15, considered this genus distinguishable from *Tsukushiaspis* Kuwana [synonym of *Kuwanaspis* MacGillivray]. Lindinger, 1937: 190, placed the name as a synonym of *Kuwanaspis*. Balachowsky, 1958b: 315, accepted it as valid and assigned it to his Parlatorina. Takagi, 1961: 4, 1961a: 78, 100, regarded it as distinct from *Kuwanaspis* and presented it in his key to Japanese genera of the Diaspidini.

Nilotaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-300.

TYPE-SPECIES: Lepidosaphes (Coccomytilus) halli Green, 1923, by original designation and monotypy.

The author placed this genus in the Diaspidini, Diaspidinae.

Nimbaspis Balachowsky, 1952, Rev. de Path. Veg. et d'Ent. Agr. de France 31:125.

TYPE-SPECIES: Nimbaspis mollardi Balachowsky, 1952, by original designation.

The author placed this genus in Diaspidinae, Odonaspidini, Rugaspidiotina, near *Rugaspidiotus* MacGillivray.

Nipaecoccus Šulc, 1945, Acta Soc. Sci. Nat. Morav. 17 (3) (Signatura F 177):1.

TYPE-SPECIES: Dactylopius nipae Maskell, 1893, by original designation and monotypy.

The author assigned this genus to the Pseudococcidae. Borchsenius, 1948a: 953, placed it close to *Phenacoccus* Cockerell.

Nipponaclerda McConnell, 1954, Md. Agr. Expt. Sta. Bul. A-75: 107.

TYPE-SPECIES : Aclerda biwakoensis Kuwana, 1907, by original designation and monotypy.

The author assigned this genus to the Aclerdidae.

Nipponorthezia Kuwana, 1916, Annot. Zool. Jap. 9:150.

TYPE-SPECIES : Nipponorthezia ardisiae Kuwana, 1916, by monotypy.

The author assigned this genus to the Ortheziidae, closely allied to Ortheziola Šulc. See Morrison, 1952: 72, for discussion of relationships.

Niveaspis MacGillivray, 1921, The Coccidae, p. 276.

TYPE-SPECIES: Mytilaspis argentata Cockerell, 1898, by original designation and monotypy.

The author assigned this genus to the Diaspidinae, Lepidosaphini. Balachowsky, 1954e: 22-23, discussed it briefly and placed it in his Lepidosaphedina.

Nodulicoccus Morrison, 1923, U.S. Natl. Mus. Proc. 62, Art. 17 (No. 2463):19.

TYPE-SPECIES : Monophlebus crawfordi var. levis Maskell, 1893, by monotypy.

The author assigned this genus to the Monophlebinae, Monophlebulini, associated with *Monophlebulus* Cockerell.

Noteococcus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146:164.

TYPE-SPECIES: *Eriococcus hoheriae* Maskell, 1880, by original designation and monotypy.

The author placed this genus in the Eriococcidae closely related to *Phloeococcus* Hoy.

Nuculaspis Ferris, 1938, Microentomology 3:45, nomen nudum; 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-250.

TYPE-SPECIES: Aspidiotus californicus Coleman, 1903, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. The type-species is identical with *Aspidiotus pini* Comstock, 1881, and has appeared under that name in much early literature. However, *pini* Comstock was preoccupied by *Aspidiotus pini* Bouché, 1851.

Nudachaspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Chionaspis fodiens Green, 1898, by original designation and monotypy.

The author assigned this genus to the Diaspidinae, Diaspidini. Lindinger, 1937: 191, placed the name as a synonym of *Ancepaspis* Ferris. Ferris, 1937a: 4, considered the genus valid as far as separation from *Chionaspis* Signoret was concerned.

Obluctaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: Protodiaspis lobata Ferris, 1920, by original designation and monotypy.

The author placed this genus in the Diaspidini. Ferris, 1936a: 22, 26, and 1937: SI-99, and Lindinger, 1937: 191, assigned the name to synonymy with *Protodiaspis* Cockerell.

Obtusaspis MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Aspidiotus rhizophilus Newstead, 1920, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. Balachowsky, 1958b, 207-209, 230, 249, accepted the genus as valid and assigned it to the Aspidiotini, Aspidiotina.

Ochyrocoris Menge, 1856, Progr. Petrischule Danzig, p. 17.

TYPE-SPECIES: Ochyrocoris electrina Menge, 1856, by monotypy.

Cockerell, 1896b: 326, stated that this is a fossil in amber, and probably an *Orthezia* Bosc d'Antic.

Octaspidiotus MacGillivray, 1921, The Coccidae, p. 387.

TYPE-SPECIES: Aspidiotus subrubescens Maskell, 1892, by original designation.

The author placed this genus in the Diaspidinae, Aspidiotini. Ferris, 1937c: 52, 55, accepted it as probably valid and, 1938a: SII-228, suggested that it might consolidate with Dynaspidiotus Thiem and Gerneck. Lindinger, 1937: 191, said "= Chrysomphalus." McKenzie, 1939: 56, considered that it derived from a common phylogenetic stock with Chrysomphalus Ashmead.

Octococcus Hall, 1939, Ent. Soc. South. Africa Jour. 2:93.

TYPE-SPECIES: Octococcus pentziae Hall, 1939, by original designation.

The author placed this genus in the Pseudococcidae and noted resemblances to *Puto* Signoret. Williams, 1958b: 6-8, corrected the description and considered the genus valid.

Odonaspis Leonardi, 1897, Riv. di Patol. Veg. (Nov. 1896–Feb. 1897) 5:284.

TYPE-SPECIES: Aspidiotus secretus Cockerell, 1896, by monotypy.

The author presented this as a new genus in a systematic table of genera of the Aspidioti. Soon thereafter, in published comments on a letter received from Cockerell regarding division of the genus *Aspidiotus* into subgenera, he noted that Cockerell had proposed a subgenus, *Dycryptaspis*, with the same type-species as *Odonaspis* Leonardi. Later, Leonardi, 1898b: 115, decided that *Odonaspis* was preoccupied by *Odontaspis* Agassiz, 1835, in fishes, and substituted *Spatheaspis*. Lindinger, 1937: 184–185, agreed that *Odonaspis* was preoccupied because he considered that properly formed it should have been spelled *Odontaspis*, but held that its valid replacement was *Dycryptaspis* Cockerell. Other coccid workers (Ferris, Balachowsky, Borchsenius, Takagi) rejected Lindinger's conclusions and accepted *Odonaspis* as a valid genus assigned to the Odonaspidini.

Odontaspis Lindinger, 1937, Ent. Jahrb. 46:191.

The author considered *Odonaspis* Leonardi improperly formed and substituted this spelling which is a homonym of *Odontaspis* Agassiz, 1835.

Olliffia Fuller, 1897, West. Austral. Bur. Agr. Jour. 4: 1345 (separate, Notes on Coccidae, p. 8), nomen nudum; 1899, Ent. Soc. London, Trans. 1899: 442.

TYPE-SPECIES: Olliffia eucalypti Fuller, 1899, by monotypy.

The author indicated a similarity of this genus to *Eriococcus* Targioni-Tozzetti. Ferris, 1957b: 66, noted that critical examination was necessary to determine its placement in the Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11, accepted this genus in the Eriococcidae on the basis of examination of a specimen labeled "type."

Olliffiella Cockerell, 1896, Science (n.s.) 4:300.

TYPE-SPECIES: Olliffiella cristicola Cockerell, 1896, by monotypy.

Ferris, 1957c: 87-88, and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11, placed this genus in the Eriococcidae.

Onceropyga Ferris, 1955, Atlas of the Scale Insects of North America 7: 208.

TYPE-SPECIES: Eriococcus neglectus Cockerell, 1895, by original designation.

The author assigned this genus to the Eriococcidae, a placement accepted by Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 11. It is preoccupied by *Onceropyga* Turner, 1906, in the Lepidoptera.

Onicococcus Newstead, 1910, Bul. Ent. Res. 1: 186, nomen nudum.

TYPE-SPECIES: Onicococcus conchiformis Newstead ms., by monotypy.

Following his description of the insect *Inglisia conchiformis* sp. n., Newstead stated that he had given "the manuscript name *Onicococcus conchiformis* (gen. et sp. n.)" to material previously forwarded to the British Museum. Lindinger, 1937:191, said "=*Cardiococcus.*"

Onychocephalus Newstead, Green, 1909, The Coccidae of Ceylon. Part IV, p. 282.

This appears to be a manuscript name, either an alternate or emendation of *Onicococcus* Newstead ms. Green noted that the genus was doubtfully separable from *Inglisia* Maskell.

Oonidia Signoret, 1877, Soc. Ent. de France Ann. (1876) (ser. 5) 6: 669.

A lapsus for Aonidia Targioni-Tozzetti.

Operculaspis Laing, 1925, Bul. Ent. Res. 16:62.

TYPE-SPECIES: Operculaspis crinitus Laing, 1925, by original designation and monotypy.

The author assigned this genus to the Aspidiotini. Ferris, 1937a: 3, 5, placed it in the Diaspidini.

Ophiscelis Signoret, 1869, Soc. Ent. de France Ann. (1868) (ser. 4) 8:834.

A lapsus for Opisthoscolis Schrader.

Ophistocelis Signoret, 1868, Soc. Ent. de France Ann. (ser. 4) 8: 525; 1877 (1876) (ser. 5), 6: 597, footnote.

A lapsus for Opisthoscelis Schrader.

```
Ophistoscelis Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 9:100.
```

A lapsus for Opisthoscelis Schrader.

Opisthoscelis Schrader, 1863, Ent. Soc. N. So. Wales Trans. 1: 6.

TYPE-SPECIES: Opisthoscelis subrotunda Schrader, 1862, by subsequent designation by Fernald, 1903b: 46.

Ferris, 1957b: 63-64, presented a redescription of the genus but listed it with genera unplaceable in his classificatory scheme. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 12, assigned it to the Eriococcidae.

Opliscelis Signoret, 1869, Soc. Ent. de France Ann. (1868) (ser. 4) 8:855,872.

A lapsus for Opisthoscelis Schrader.

Opuntiaspis Cockerell, 1898, Ann. and Mag. Nat. Hist. (ser. 7) 1:438.

TYPE-SPECIES : Mytilaspis philococcus Cockerell, 1893, by monotypy.

The author established this as a subgenus of *Mytilaspis* Targioni-Tozzetti. Ferris, 1937: SI-79; Lindinger, 1937: 190-191, and Balachowsky, 1954e: 26, 94-95, have accepted it as a valid genus and placed *Mytilella* Leonardi in synonymy.

Oracella Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:22, 112.

TYPE-SPECIES: *Pseudococcus acutus* Lobdell, 1930, by original designation and monotypy.

The describer placed this genus in the Pseudococcidae without more precise relation to other genera.

Orthezia Bosc d'Antic, 1784, Jour. de Phys. 24 (1): 171–173.

TYPE-SPECIES: (Orthezia characias Bose d'Antie, 1784)=Aphis urticae Linnaeus, 1758, by monotypy.

This genus is placed in the Ortheziidae. See Morrison, 1925 and 1952, for detailed discussion of the genus.

Orthezinella Silvestri, 1924, R. Soc. Españ. Hist. Nat. Bol. 24: 170.

TYPE-SPECIES: Orthezinella hispanica Silvestri, 1924, by original designation.

Morrison, 1952: 72, assigned the type-species to *Nipponorthezia* Kuwana, making *Orthezinclla* a synonym of the latter; and placed *ncotropicalis* Silvestri, the other included species, in *Mixorthezia* Morrison.

208 - 496 - 66 - 10

Ortheziola Šulc, 1895, K. Böhmisch. Gesell. der Wiss. Sitzber. (1894) no. 44:1,5.

TYPE-SPECIES: Ortheziola vejdovskyi Šulc, 1895, by monotypy.

The author placed this genus as closely allied to *Orthezia* Bosc d'Antic. Ghesquière, 1946: 236, designated *Ortheziola signoreti* (Haller) as the correct name for the type-species. *See* Morrison, 1952: 75, for details.

Ortheziopa Laing, 1925, Bul. Ent. Res. 15: 383.

TYPE-SPECIES: Ortheziopa reynei Laing, 1925, by original designation and monotypy.

The author placed this genus as most closely allied to Ortheziola Šulc. Morrison, 1952: 2, considered it identical with Mixorthezia Morrison which was described earlier in 1925 than Ortheziopa.

Orthesiopoda Wheeler, 1935, N.Y. Ent. Soc. Jour. 43: 323.

A lapsus for *Ortheziopa* Laing. This name was presented in a quotation from letters of G. H. Bünzli.

Ortonia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:351.

TYPE-SPECIES: Ortonia uhleri Signoret, 1875, by subsequent designation of Cockerell, 1902q: 232.

Morrison, 1928: 220, in error, listed O. bouvari Signoret as type-species, having overlooked the Cockerell, 1902q: 232, designation of uhleri. Cockerell, 1899j: 259, having discovered the preoccupation of this name by Ortonia Wood, 1869, and Ortonia Nicholson, 1873, placed the name in synonymy with Llaveia Signoret because he considered the two included species, bouvari and uhleri, to be congeneric with axin, the type-species of Llaveia. Fernald, 1903b: 16, accepted this synonymy. However, Cockerell's concept of axin was based on a species now assigned to another genus (see Morrison, 1927: 108) and not on L. axin as recognized by Mexican (Bloede, 1884, Naturleza 6: [205]-210, and Dugés, 1884: Naturleza 6: 283, 293, 378) and other writers. Morrison, 1928: 189, considered bouvari congeneric and possibly identical with axin. The fragments of uhleri available for study showed that it was not a characteristic member of Llaveia Signoret and probably would require a new genus to receive it. If this proves to be true, Ortonia would again stand as a zoologically valid genus but a new name would be necessary for it.

Osiraspis Hall, 1923, Egypt Min. Agr. Tech. and Sci. Serv. Bul. 36: 24.

TYPE-SPECIES: Osiraspis balteata Hall, 1923, by original designation and monotypy.

This genus has been accepted by recent coccid workers. Balachowsky, 1953g: 749–752, assigned it as an aberrant Odonaspidini, Rugaspidiotina.

Oudablis Signoret, 1882, Soc. Ent. de France Ann. [Bul. Ent.] (1881) (ser. 6) 1: clvii.

TYPE-SPECIES: Coccus laurinus Boisduval, 1867 [emended to lauri by Signoret, 1875b: 338], by present designation.

Signoret substituted this name for his Boisduvalia, 1875, preoccupied by Boisduvalia Signoret, 1868, in Diptera. The genus was based on the adult male character of two pairs of terminal waxy tassels in contrast to the single pair found in the males of *Pseudococcus* Westwood [*Dactylopius* of Signoret]. This characteristic applied to both of the named included species, lauri and quadricaudata, neither of which species have been recognized by modern European coccidologists. On our present limited knowledge of the classification of adult male coccids, it will assign to the Phenacoccus Cockerell series of genera rather than to the Pseudococcus Westwood series, where both Boisduvalia and Oudablis are presently assigned as synonyms. While Lindinger, 1912b: 360, has disposed of the originally included species by placing them as synonyms of Pseudococcus adonidum (Linnaeus) and P. citri (Risso) respectively, the reported presence of 8-segmented antennae does not necessarily bar them from the phenacoccine series, but does raise the question of whether or not the males and females as described actually belong together. There may be some chance to settle the question if these particular specimens are still present in the Signoret Collection.

Ourococcus Fuller, 1897, West. Austral. Bur. Agr. Jour. 4: 1346 (Notes on Coccidae, p. 10); 1899, Ent. Soc. London, Trans. (1899) p. 452.

TYPE-SPECIES: Ourococcus eucalypti Fuller, 1897, by subsequent designation in the Fernald Catalogue, 1903b: 88.

Balachowsky, 1948b: 257, placed this genus in the Cylindrococcinae. Ferris, 1957b: 66, suggested the possibility that it might be included in the Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 12, assigned it to the Eriococcidae tentatively.

Ovaticoccus Kloet, 1944, Ent. Monthly Mag. 80:86.

TYPE-SPECIES: Coccus agavium Douglas, 1888, by substitution of Ovaticoccus for Gymnococcus Douglas.

The author proposed this name as a substitute for *Gymnococcus*, preoccupied in Protozoa by Zopf, 1884. *See* under *Gymnococcus*. Ferris, 1957e: 88, referred this genus to his Eriococcidae, an action accepted by Hoy, 1963, New Zeal. Dept. Sci. and Indus, Res. Bul. 150: 12.

Ovatococcus Lindinger, 1958, Beitr. z. Ent. 8:368.

A misspelling or emendation of Ovaticoccus Kloet.

Palaeococcus Cockerell, 1894, Canad. Ent. 26:36.

TYPE-SPECIES: Monophlebus fuscipennis Burmeister, 1835, by subsequent designation of Cockerell, 1902q: 233.

Cockerell proposed this name to replace *Leachia* Signoret, 1875, preoccupied in Mollusca. Morrison, 1928: 128–129, placed this genus in the Monophlebini, most closely related to *Monophleboides* Morrison.

Palacolecanium Lindinger, 1957, Beitr. z. Ent. 7: 548.

A lapsus for Palaeolecanium Šule.

Palaeolecanium Šulc, 1908, Ent. Monthly Mag. 44: 36; 1932, Acta Soc. Sci. Nat. Morav. 7 (5) (Signatura F 57): 47–48.

TYPE-SPECIES: Lecanium bituberculatum Targioni-Tozzetti, 1868, by original designation and monotypy.

The author established this genus on characters of the male but later, 1932: 47, lowered it to subgeneric status. Lindinger, 1937: 192, accepted the genus but placed the type-species as a synonym of *Coccus costatus* Schrank. Borchsenius, 1957: 345, 347, rejected this action and considered the genus valid with type-species as cited above.

A lapsus for *Palaeococcus* Cockerell. This spelling has been used by Morrison, 1921, Kuwana, 1922a, and others.

Palinaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-377.

TYPE-SPECIES: Targionia quohogiformis Merrill, 1923, by original designation.

The author assigned this genus to the Diaspidinae, Aspidiotini. Balachowsky, 1949c: 74, compared it with his *Rungaspis* and, 1959: 354, discussed its relationships.

Pallulaspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-82.

TYPE-SPECIES: *Pallulaspis cphcdrae* Ferris, 1937, by original designation and monotypy.

The author placed this genus in the Diaspidini and noted a similarity to *Vclataspis* Ferris. Balachowsky, 1954e: 25, 114, accepted it and assigned *Coccomytilus retamae* Hall as a second species. Takahashi, 1957b: 107, recorded it from Japan.

Palmaricoccus Stickney, 1934, U.S. Dept. Agr., Tech. Bul. 404: 49-51.

TYPE-SPECIES: Palmaricoccus attalcac Stickney, 1934. by original designation.

The author placed this genus in the Phoenicococcini. Ferris, 1952: 3, assigned the name as a synonym of *Colobopyga* Bréthes, 1912.

Palmaspis Bodenheimer, 1951, Ent. Ber. 13: 328.

TYPE-SPECIES: Astcrolccanium phoenicis Rao, 1922, by original designation.

The author established this genus for *Asterolocanium* Group II of Russell, 1941: 9. Borchsenius, 1960d: 172, accepted it as restricted to the type-species and noted its closeness to *Asterodiaspis* Signoret.

Paleococcus Ferris, 1919, A Contribution to the Knowledge of the Coccidae of Southwestern United States. Stanford Univ. Pubs., Univ. Ser., p. 7.

Palmicola Williams, 1960, Brit. Mus. (Nat. Hist.) Ent. Bul. 8: 415.

TYPE-SPECIES: Ripersia palmarum Ehrhorn, 1916, by original designation.

Established for certain Pseudococcidae specific to the Palmaceae, the author, 1963, Entomologist 96: 100–101, replaced it with *Palmicultor* because of preoccupation by *Palmicola* Mockford, 1955, in the Psocoptera.

Palmicultor Williams, 1963, Entomologist 96:100-101.

New name for Palmicola Williams.

Paloeolecanium Lindinger, 1958, Beitr. z. Ent. 8: 368.

A lapsus for Palaeolecanium Šule.

Paludicoccus Ferris, 1918, Canad. Ent. 50: 324, 327.

TYPE-SPECIES: Pseudolecanium disticlium Kuwana, 1902, by original designation and monotypy.

Ferris, 1953a: 392, placed this genus in the Pseudococcidae. We think it may belong in the Antoninae although the anal ring is not typical.

Paracardiococcus Takahashi, 1935, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 66:6.

TYPE-SPECIES: Paracardiococcus actinodaphnis Takahashi, 1935, by original designation and monotypy.

The describer noted differences from *Cardiococcus* Cockerell and *Cryptostigma* Ferris.

Parachionaspis MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: Chionaspis galliformens Green, 1899, by original designation and monotypy.

The author placed this genus in the Diaspidini. Ferris, 1937a: 5, considered it valid. Lindinger, 1943b: 223, accepted the genus but emended the specific name to *gallamformans*. We reject this change.

Paracoccus Ezzat and McConnell, 1956, Md. Agr. Expt. Sta. Bul. A-84:13, 17.

TYPE-SPECIES: *Pseudococcus burnerae* Brain, 1915, by original designation. The authors placed this genus in the Pseudococcidae, Planococcini.

Paracoelostoma Morrison, 1927, Biol. Soc. Wash. Proc. 40: 102.

TYPE-SPECIES: Paracoelostoma peruviana Morrison, 1927, by original designation and monotypy.

The describer placed this genus in the Coelostomidiini, Margarodidae, related to *Coelostomidia* Cockerell, *Ultracoelostoma* Cockerell, *Cryptokermes* Hempel, and *Mimosicerya* Cockerell.

- Paraconchaspis Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:421.
 - TYPE-SPECIES: Paraconchaspis major Mamet, 1959, by original designation and monotypy.

The describer referred this genus to the Conchaspididae.

Paractenochiton Takahashi, 1942, Formosa Govt. Res. Inst. Dept. Agr. Rpt. 81:28-29.

TYPE-SPECIES: Paractenochiton sutepensis Takahashi, 1942, by original designation and monotypy.

The author placed this genus in the Coccinae (str.).

Paradiaspis Lahille, 1919, Physis 4:595.

TYPE-SPECIES: Paradiaspis lizeriana Lahille, 1919, by monotypy.

Ferris, 1937d: 104, accepted this genus as valid and placed it in the Diaspidini.

Paradoxococcus McKenzie, 1962, Hilgardia 32:648-649.

TYPE-SPECIES: Paradoxococcus mcdanieli McKenzie, 1962, by original designation and monotypy.

The author referred this genus to the Pseudococcidae.

Paraepidiaspis Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci., pp. 167, 230, 232.

TYPE-SPECIES: Diaspis (Epidiaspis) staticola Gómez-Menor, 1938, by original designation and monotypy.

The author placed this genus in his Diaspidina, group II, diaspiform.

Parafairmairea Lindinger, 1907, Ent. Wochenblatt 24:20.

An emendation of Parafairmairia Cockerell.

Parafairmairia Cockerell, 1899, Canad. Ent. 31: 332.

TYPE-SPECIES: Fairmairia bipartita Signoret, 1876, by substitution of Parafairmairia for Fairmairia Signoret.

The author substituted this name for *Fairmairia* Signoret, preoccupied in Diptera, 1853. Steinweden, 1929: 229, associated this genus in a group with *Exaerctopus* Newstead, *Philcphedra* Cockerell, and *Luzulaspis* Cockerell. Goux, 1933: 123, considered it related to his *Chlamydolecanium*. Lindinger, 1932c: 204, placed *Parafairmairia gracilis* Green, 1916, as a synonym of the type-species, an action rejected by Borchsenius, 1957: 132, and Schmutterer, 1952: 558, who accepted *gracilis* as distinct and valid.

Parafiorinia MacGillivray, 1921, The Coccidae, p. 372.

TYPE-SPECIES: Fiorinia rubra Maskell, 1894, by original designation.

This genus was placed by its author in the Diaspidinae, Fioriniin!. Lindinger, 1937: 192, said: "= Anamefiorinia Leon."

Paragadaspis Kaussari and Balachowsky, 1954, Soc. Fouad I^{er} Ent. Bul. 38:161.

TYPE-SPECIES: *Paragadaspis sarkissiani* Kaussari and Balachowsky, 1954, by original designation and monotypy.

The authors placed this genus in the Diaspidini, Diaspidina with all the general characters of *Gadaspis* Hall.

Paragreenia MacGillivray, 1921, The Coccidae, pp. 78, 474.

TYPE-SPECIES: Monophlebus zeylanicus Green, 1896, by monotypy.

The author substituted *Neogreenia* for this generic name, preoccupied in Arachnida in 1907.

Parakuwania Borchsenius, 1960, Zool. Zhur. 39:144.

TYPE-SPECIES: Kuwania betulae Borchsenius, 1938, by original designation and monotypy.

The author assigned this genus close to *Kuwania* Cockerell of the Kuwaniini, Margarodinae.

Paralecanium Cockerell, 1899, *in* Cockerell and Parrott, Industrialist 25: 227.

TYPE-SPECIES : Lecanium frenchii Maskell, 1891, by original designation.

The author placed this genus as "allied to *Calymnatus*." Lindinger, 1937: 181, said: "=*Coccus* L." Steinweden, 1929: 206, and other workers recognized it as valid.

- Paralecanopsis Bodenheimer, 1951, Ent. Ber. 13: 329; 1953, Istanbul Facult. des Sci. Rev., Ser. B, 18: 109.
 - TYPE-SPECIES: Paralecanopsis turcica Bodenheimer, 1951, by original designation and monotypy.

The author placed this genus close to Lecanopsis Targioni-Tozzetti.

Paralepidosaphes Borchsenius, 1962, Ent. Obozr. 41: 863-864.

TYPE-SPECIES: Paralepidosaphes coreana Borchsenius, 1962, by original designation.

The author placed this genus close to Lepidosaphes Shimer.

Paraleucaspis Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953), (Sér. E. Ent.) 4:70-71.

TYPE-SPECIES: Pseudoleucaspis halli Mamet, 1940, by original designation.

The author noted resemblances to *Pseudoleucaspis* Mamet and *Emmereziaspis* Mamet. Balachowsky, 1958b; 335, placed the genus in his Leucaspidina.

Paramyrmococcus Takahashi, 1941, Tenthredo 3:204.

TYPE-SPECIES: Paramyrmococcus chiengraiensis Takahashi, 1941, by original designation and monotypy.

The author placed this genus in the Pseudococcidae closely related to *Allomyrmococcus* Takahashi.

Paranewsteadia MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Aspidiotus maculatus Newstead, 1896, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini.

Paraonidea MacGillivray, 1921, The Coccidae, p. 394.

A lapsus for Paraonidia MacGillivray.

Paraonidia MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Aspidiotus (Chrysomphalus) malleolus Green, 1905, by original designation and monotypy.

Balachowsky, 1948b: 269, placed this genus in his Pseudoaonidina. Ferris, 1938: 43, noted the necessity for study of the *Pseudaonidia* group of genera to confirm the validity of *Paraonidia*.

Paraonidiella MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES: Aspidiotus cladii Maskell, 1891, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. Laing, 1929: 26, and Lindinger, 1937: 192, considered the name a synonym of *Furcaspis* Lindinger. Ferris, 1938: 43, noted the necessity of restudy of the *Furcaspis* group of genera in order to reach a decision on the status of *Paraonidiella*.

Paraparlagena Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:452.

TYPE-SPECIES: Paraparlagena ifanadiana Mamet, 1959, by original designation and monotypy.

The author placed this genus in the Diaspidinae near Parlagena McKenzie.

Parapedronia Balachowsky, 1953, Soc. des Sci. Nat. du Maroc. Bul. (1951) 31 (semes. 2): 283.

TYPE-SPECIES: *Pedronia spinigera* Goux, 1937, by original designation and monotypy.

The author placed this genus in the Pseudococcidae near *Pedronia* Green. Danzig, 1960: 178, placed the name in synonymy with *Spinococcus* Borchsenius

Paraputo Laing, 1929, Ann. and Mag. Nat. Hist. (ser. 10) 4:473.

TYPE-SPECIES: Paraputo ritchiei Laing, 1929, by original designation and monotypy.

The author placed this genus in the pseudococcine series. Williams, 1958: 217–219, placed the name of the type-species as a synonym of *Paraputo* [*Ripersia*] *anomala* (Newstead).

Pararhizoecus Goux, 1941, [Marseille] Mus. d'Hist. Nat. Bul. [1941] (3): 197.

TYPE-SPECIES: *Rhizoecus* (*Pararhizoecus*) *petiti* Goux, 1941, by original designation and monotypy.

The author placed this genus close to *Rhizoecus* Künckel d'Herculais in the Pseudococcidae. We consider the name a synonym of *Ripersiella* Tinsley.

Parasaissetia Takahashi, 1955, Insecta Matsumurana 19:26.

TYPE-SPECIES: Saissetia nigra Nietner, 1861, by original designation.

The author noted that this genus is more closely related to *Lccanium* Burmeister than to *Pulvinaria* Targioni-Tozzetti. Lindinger, 1957: 551, rejected the genus as identical with *Saissetia* Déplanche.

Paraselenaspidus Mamet, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n. s.) Sci. Zool. 4: 418, 420.

TYPE-SPECIES : Scienaspidus madagascariensis Mamet, 1953, by original designation.

The author placed this genus in the Aspidiotini, closely allied with *Selenaspidus* Cockerell.

Paraspidiotus Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:131, 230-231.

TYPE-SPECIES: Aspidiotus viticola Leonardi, 1913, by original designation and monotypy.

Lindinger, 1937: 192, said "=*Aspidiotus*" and, 1957: 551, placed the type-species in synonymy with *Aspidiotus labiatarum* Marchal. Ferris, 1941e: 41, suggested that the type-species might belong in *Diaspidiotus* Berlese and Leonardi.

Paratachardina Balachowsky, 1950, Eos 26:8.

TYPE-SPECIES: Carteria decorella Maskell, 1892, by original designation and monotypy.

The author placed this genus in the Tachardini, Tachardinina.

Paratrionymus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n. s.) 63:582.

TYPE-SPECIES: Ripersia halocharis Kiritchenko, 1932, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to *Ncotrionymus* Borchsenius.

Parischnaspis MacGillivray, 1921, The Coccidae, 276.

TYPE-SPECIES: Ischnaspis spathulata Lindinger, 1911, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Lepidosaphini.

Parlagena McKenzie, 1945, Microentomology 10:81-82.

TYPE-SPECIES: (Parlagena inops MacKenzie, 1945)=Gymnaspis buxi Takahashi, 1936, by original designation and monotypy.

The author placed this genus in the parlatorine series allied to *Parlatoria* Targioni-Tozzetti. Balachowsky, 1950a: 17, reported the identity of the type-species with *buxi* Takahashi, 1936, and, 1953g: 833, assigned the genus to his Parlatorini, Parlatorina.

Parlaspis McKenzie, 1945, Microentomology 10:82.

TYPE-SPECIES: Parlatoria (Websteriella) papillosa Green, 1919, by original designation and monotypy.

The author placed this genus in the Diaspidini, noting a relation to *Parlatoria* Targioni-Tozzetti. Balachowsky, 1958b: 315, assigned it to his Parlatorina. [Misspelled the type-species *papillotae*.]

Parlatorea Lindinger, 1905, Insekten Börse 22:131.

An emendation of *Parlatoria* Targioni-Tozzetti. Brain, 1919: 212, 214, and Gómez-Menor, 1937: 43, accepted this spelling but most modern coccid workers (Ferris, Balachowsky, Borchsenius, Morrison, McKenzie) have rejected it.

Parlatoreopsis Lindinger, 1912, Die Schildläuse, pp. 14, 191.

TYPE-SPECIES: Chionaspis longispina Newstead, 1911, by monotypy.

Coccid workers have accepted this as a valid genus but there has been some uncertainty in regard to the included species. Balachowsky, 1953g: 828-829, discussed this situation and concluded that *longispina* Newstead and *chinensis* Marlatt are distinct although they were placed as synonyms by Lindinger, 1937, Ferris, 1942, and McKenzie, 1945. He also placed *perplexa* McKenzie in synonymy with *longispina* Newstead; both species were described from Egypt. Borchsenius, 1950b: 172, credited the generic name to MacGillivray, 1921: 309, citing the Lindinger, 1912b: 385, presentation as a nomen nudum. We do not agree with this interpretation of the Lindinger presentation.

Parlatoria Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11: 42; 1869, 11: 735; Signoret, 1869, Soc. Ent. de France Ann. (ser. 4) 9: 99, 450.

TYPE-SPECIES: Aspidiotus proteus Curtis, 1843, by subsequent designation of Leonardi, 1899a: 208.

Leonardi wrote: "But as Targioni, in 1868, established the genus *Parlatoria* first for his *P. orbicularis*, that is, the *Diaspis parlatoris* of his *Studi sulle* cocciniglie of the previous year and which he, himself, considered a synonym of *P. proteus* Curtis, and only secondarily joined with it *Coccus zizyphi* Lucas, thus I, to give a name to the two subgenera, as I intend to do, will call *Parlatoria* (s. str.) the subgenus of which the type is *P. proteus* and "Fernald, 1903b: 318, and Ferris, 1936a: 22, incorrectly listed *P. lucasii* (*zizyphus*) as type-species.

Parlatorie Šulc, 1936, Českoslov. Zool. Společ. Věst. (1935) 3:66.

A lapsus for Parlatoria Targioni-Tozzetti.

Paroudables Hadzibejli, 1959, Akad. Nauk Gruz. SSR Soobshch. 23: 575.

A lapsus for Paroudablis Cockerell.

Paroudablis Cockerell, 1900, Entomologist 33:87.

TYPE-SPECIES: Boisduvalia piceae Löw, 1883, by subsequent designation of **Fernald**, 1903b: 89.

This genus was separated from *Phenacoccus* Cockerell on the character of four caudal filaments in the adult male. Borchsenius, 1949:237, recognized the genus as valid but Ferris, 1950b: 120, placed it in synonymy with *Phenacoccus* Cockerell.

Parrotia Gómez-Menor, 1954, Eos 30:141.

The author proposed *Parrotia* as a subgenus of *Gymnococcus* Douglas for two described American species whose names he did not include. We believe the name has no standing because it does not fulfill the requirements of Article 13 (b) of the 1961 Code. Further, it is preoccupied by *Parrotia* Kieffer, 1924, in the Diptera, according to Neave, 1940, Nomen. Zool. III: 619.

Parrottia MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Aspidiotus moorei Green, 1896, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. Balachowsky, 1948b: 269, assigned it to his Pseudoaonidina. Ferris, 1938: 43, noted the necessity of a study of the *Pseudaonidia* Cockerell series to establish its status.

Partargionia MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Aspidiotus artocarpi Green, 1896, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Aspidiotini. Ferris, 1937d: 106, discussed the genus (listed in error as *Protargionia*) and, 1943a: 85, concluded that it was definitely not a *Targionia* Signoret. Takhashi, 1939d: 344, and Williams, 1957a: 33-34, placed the name as a synonym of *Semelaspidus* Mac-Gillivray.

Parthenolecanium Šulc, 1908, Ent. Monthly Mag. 44: 36; 1932, Acta Soc. Sci. Nat. Morav. 7(5) (Signatura F 57): 64.

TYPE-SPECIES: (Lecanium coryli Šulc, 1908, nec Linné, 1758)=Lecanium corni Bouché, 1844, by original designation.

The author proposed this as one of four genera into which he divided the genus *Lecanium* (sensu Signoret), separating it as parthenogenetic and without males, from the other three genera, which he differentiated on characters of the males. He set as type-species, *coryli* L., 1758, and included *persicae* Fabricius, 1776, suggesting that the two species were possibly identical. In 1932: 47, he lowered the status of these genera to that of subgenera and described the male scale and male characters of *Parthenolecanium*. Kawecki, 1951–1961, in his works on the genus *Lecanium*, accepted this concept and action. Other workers have not agreed. Lindinger, 1937: 192, placed this name in synonymy with

Palacolecanium Šulc. Borchsenius, 1957: 347, accepted Parthenolecanium as valid and cited as type-species, Lecanium corni Bouché, 1844, with Lecanium coryli Šulc, 1908, a synonym.

Paulianodes Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Sér. E. Ent.) 4:10, 29–30.

TYPE-SPECIES: Paulianodes madecassus Mamet, 1954, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, related to Kuwania Cockerell and allied genera.

Pedrococcus Mamet, 1942, Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 11: 79.

TYPE-SPECIES: Pedronia greeni Mamet, 1937, by original designation.

The author placed this genus in the Pseudococcidae near *Pedronia* Green. Balachowsky, 1953: 282, 284, considered it close to *Synacanthococcus* Morrison.

Pedronia Green, 1922, The Coccidae of Ceylon. Part V, p. 364.

TYPE-SPECIES : *Pedronia strobilanthis* Green, 1922, by original designation and monotypy.

The author placed this genus in the Pseudococcidae. Lindinger, 1933a: 108, considered the name a synonym of *Nidularia* Targioni-Tozzetti [*Eriococcus* auct.]. Recent workers have considered it a valid genus.

Pedroniopsis Green, 1926, Bul. Ent. Res. 17:59.

TYPE-SPECIES: *Pedroniopsis beesoni* Green, 1926, by original designation and monotypy.

The author placed this genus in the Eriococcinae, though superficially resembling *Pedronia* Green. Hoy, 1963, New Zeal. Dept. Sei and Indus. Res. Bul. 150: 12, accepted the genus in the Eriococcidae.

Pela Targioni-Tozzetti, 1866, R. Accad. dei Georg. Atti (n. s.) 13: 140.

TYPE-SPECIES: Pela cerifera Targioni-Tozzetti, 1866, by original indication and monotypy.

This was proposed as a substitute name for *Coccus pela* Westwood, 1853. It is an isogenotypic synonym of *Ericerus* Guérin-Méneville.

Peliococcopsis Borchsenius, 1948, Akad. Nauk SSSR Dok. (n. s.) 61: 954.

TYPE-SPECIES: *Phenacoccus caucasicus* Borchsenius, 1939, by original designation and monotypy.

The author placed this genus in the *Phenacoccus* Cockerell series of the Pseudococcidae near *Peliococcus* Borchsenius.

Peliococcus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n. s.) 61: 954.

TYPE-SPECIES : *Phenacoccus chersonensis* Kiritchenko, 1936, by original designation and monotypy.

The author placed this genus in the *Phenacoccus* series of the Pseudococcidae close to *Phenacoccus* Cockerell.

Pelliculaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-309.

TYPE-SPECIES: Pelliculaspis pellita Ferris, 1941, by original designation.

The author placed this genus in the Diaspidinae, Diaspidini. Lindinger, 1957: 551, transferred the two included species, *pellita* Ferris and *durapyga* Ferris, to *Anamefiorinia* Leonardi.

Pelomphala MacGillivray, 1921, The Coccidae, p. 292.

TYPE-SPECIES: Aspidiotus (Chrysomphalus) lilacinus Cockerell, 1898, by original designation.

The author placed this genus in the Aspidiotini. Ferris, 1937: 52, 54, and Silvestri, 1939: 849, considered the genus valid. However, Lindinger, 1937: 192, Ferris, 1941d: SIII-347, and Balachowsky, 1951: 578, placed the name as a synonym of *Melanaspis* Cockerell.

Penaspis Dale, 1960, West Samoa Dept. Agr., Forests, and Fisheries Inform. Cir. 4:12.

A lapsus for Pinnaspis Cockerell.

Pendularia J. P. da Fonseca, 1927, Chacaras e Quintaes 36: 268.

TYPE-SPECIES: *Pendularia pendens* J. P. da Fonseca, 1927, by original designation and monotypy.

The author placed this genus in the Lecaniinae, allied to *Pulvinaria* Targioni-Tozzetti, *Protopulvinaria* Cockerell, *Takahashia* Cockerell, and *Pulvinella* Hempel. Costa Lima, 1930a: 87, placed the name as a synonym of *Takahashia*.

Pergandiella Cockerell, 1899, Acad. Nat. Sci. Phila. Proc. [1899]: 266.

TYPE-SPECIES: Pergandiella americana Cockerell, 1899, by original designation.

This name is currently accepted as a synonym of Trionymus Berg.

Pergrothula Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:251.

A lapsus for Bergrothula Strand.

Pericerya Silvestri, 1939, Compendio di Ent. Appl. Parte Spec. 1(2): 648-649.

TYPE-SPECIES: Icerya purchasi Maskell, 1879, by monotypy.

The author placed this genus in the Monophlebini, differentiated from *Icerya* Signoret by having only two pairs of abdominal spiracles in the adult female. The name has received only slight acceptance in entomological literature.

Perilecanium J. P. da Fonseca, 1962, Inst. Biol. [São Paulo] Arch. 29: [13]-15.

TYPE-SPECIES: Lecanium transparens Hempel, 1937, by original designation. The author placed this genus in the Lecaniidae close to Lecanium Burmeister.

Perissopneumon Newstead, 1900, Ent. Monthly Mag. 36: 250.

TYPE-SPECIES: Perissopneumon ferox Newstead, 1900, by monotypy.

The author characterized this genus as strictly monophlebid. Morrison, 1928: 135, placed it in his group 2 of the Monophlebini.

Persiocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5:501.

A uninominal designation to replace a generic and specific name for the insect involved, [Lecanium] persicae Fabricius. It is without generic validity.

Persiotrocha Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 501.

A uninominal designation to replace a generic and specific name for the insect involved, [Lecanium] prunastri (Fonscolombe). It is without generic validity.

Peryceria Gómez-Menor, 1960, Eos 36: 204.

A lapsus for Pericerya Silvestri.

Peukinococcus Šulc, 1944, Acta Soc. Sci. Nat. Morav. (Signatura F 169) 16 (11):2.

TYPE-SPECIES : Boisduvalia piceae Löw, 1883, by monotypy.

This is an isogenotypic synonym of *Paroudablis* Cockerell. Ferris, 1950b: 120, and Lindinger, 1957: 551, considered it a synonym of *Phenacoccus* Cockerell.

Phaenococcus Lindinger, 1937, Ent. Jahrb. 46:192.

An emendation of *Phenacoccus* Cockerell not generally accepted.

Phaulaspis Leonardi, 1897, Riv. di Patol. Veg. (Nov. 1896-Feb. 1897) 5: 284.

TYPE-SPECIES : Aspidiotus hakeae Maskell, 1896, by monotypy.

The author placed this genus in his Aspidioti. Morrison and Morrison, 1922: 89; Lindinger, 1937: 183, 192; and Ferris, 1937c: 52-53, accepted it as valid.

Phaulomytilus Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:45(205)-46(206).

TYPE-SPECIES: Mytilaspis striata Maskell, 1895, by monotypy.

The author presented this genus as a subdivision of Mytilaspis Targioni-Tozzetti. Morrison and Morrison, 1922: 96, 99, redescribed the type-species

and considered the morphological modification sufficient to separate the genus widely from *Lepidosaphes* Shimer. Lindinger, 1937: 192, placed the name as a synonym of *Mytilococcus* Amerling [*Lepidosaphes*]. Ferris, 1938: 37, and Balachowsky, 1954e: 23, accepted the genus as valid, the latter assigning it to his Lepidosaphedina.

Phenacaspis Cooley and Cockerell, 1899, in Cockerell, Ill. Nat. Hist. Survey Bul. 5:398; Cooley, 1903, Canad. Ent. 35:48.

TYPE-SPECIES: *Chionaspis nyssae* Comstock, 1881, by subsequent designation of Cooley, 1903: 38.

The authors established this genus as a segregate from *Chionaspis* Signoret in the Diaspidini. Lindinger, 1933a: 160, made the name a synonym of *Trichomy-tilus* Leonardi, later shifting the included species to *Polyaspis* Maskell [emended]. Takahashi, 1953: 48, after a study of the dimorphism occurring in many of the species, rejected the validity of the genus and considered the name a synonym of *Chionaspis*. Recent coccid workers have accepted the genus as valid.

Phenacobryum Cockerell, 1902, Entomologist 35:114.

TYPE-SPECIES: *Planchonia bryoides* Maskell, 1894, by subsequent designation of Borchsenius, 1960d: 110.

The author established this as a new section of *Asterolecanium* Targioni-Tozzetti. The name was immediately considered to be a synonym of *Antecerococcus* Green, 1901: 560, which Green, 1908: 41, decided was identical with *Cerococcus* Comstock, 1882. Borchsenius, 1960d: 104, 110, restored *Phenacobryum* to valid generic status, distinct from *Antecerococcus* and *Cerococcus*, both, in his opinion, also valid genera, and placed it in the Cerococcini, Cerococcinae, *Asterolecaniidae*.

Phenacoccopsis Borchsenius, 1948, Akad. Nauk SSSR Dok. (n. s.) 61: 954.

TYPE-SPECIES: *Phenacoccus agropyri* Borchsenius, 1939, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to *Phenacoccus* Cockerell.

Phenacoccus Cockerell, 1893, Ent. News 4:318.

TYPE-SPECIES: *Pseudococcus aceris* Signoret, 1875, by subsequent designation by Fernald, 1903b: 89.

The author's proposal of this name to replace *Pseudococcus* of Signoret, 1875, met with acceptance by coccid workers. The type-species has been cited as identical with *Chermes aceris* Geoffroy, 1762, but the Geoffroy insect is now considered to be an aleyrodid.

Phenacoleachia Cockerell, 1899, Canad. Ent. 31:274.

TYPE-SPECIES: Leachia zealandica Maskell, 1891, by original designation and monotypy.

The author presented this genus in his Ortheziinae with the comment that it also had certain dactylopine features. Ferris, 1921b: 60, on the basis of study of the male, considered it a pseudococcine form of the general type of *Puto*

Signoret. Morrison and Morrison, 1922: 14, redescribed the type-species and discussed the relationships of the genus, assigning it to a specially created sub-family, the Phenacoleachinae. Borchsenius, 1958b: 767–768, placed it in the Phenacoleachidae which he associated with the Ortheziidae and Margarodidae as the three most primitive groups of coccids.

Phenococcus Schmutterer, 1952, Ztschr. f. Angew. Ent. 33: 396.

A lapsus for Phaenococcus Lindinger.

Philephedra Cockerell, 1898, Ann. and Mag. Nat. Hist. (ser. 7) 2:24; 1899, Canad. Ent. 31:331.

TYPE-SPECIES: Pulvinaria ephedrae Cockerell, 1898, by original designation and monotypy.

The author presented this as a subgenus of *Pulvinaria* Targioni-Tozzetti. Steinweden, 1929: 222, placed it in the *Exacretopus* Newstead group of the family Coccidae (str.) associated with *Parafairmairia* Cockerell and *Luzulaspis* Cockerell.

Philippia Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 13.

TYPE-SPECIES: Philippia follicularis Targioni-Tozzetti, 1867, by monotypy.

The author, 1868: 33, substituted *Filippia* for this generic name. *See Filippia* for details.

Philyrocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 502.

A uninomial designation to replace a generic and specific name for the insect ([*Lecanium*] *tiliae* L.=*coryli* L.) involved. It is without generic validity.

Phloeococcus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146: 167.

TYPE-SPECIES: Phlocococcus loriceus Hoy, 1962, by original designation.

The author placed this genus in the Eriococcidae, closely related to *Notcococcus* Hoy.

Phoenicoccus Ferris, 1957, Microentomology 22:65.

A lapsus for *Phoenicococcus* Cockerell.

Phoenicococcus Cockerell, 1899, Acad. Nat. Sci. Phila. Proc. 1899: 262.

TYPE-SPECIES: *Phoenicococcus marlatti* Cockerell, 1899, by original designation and monotypy.

The author associated this genus with pseudococcid genera. Stickney, 1934:2, erected the Phoenicococcinae, Phoenicococcini for it and a group of other unusual genera and placed them in the Diaspididae. Ferris, 1942: SIV-446 (66), and Balachowsky, 1948b: 260, agreed with this placement. See Stickney, 1934, for a detailed account of the anatomy and relationships of the type-species and genus.

Phoenococcus Fairchild, 1930, Exploring for Plants, pp. 198, 221.

A lapsus for Pseudococcus comstocki (Kuwana).

Phylippia Leonardi, 1920, Monografia delle Coccinglie Italiane. Portici, p. 340.

A lapsus for Philippia Targioni-Tozzetti.

Phyllipia Kiritchenko, 1928, Zakhist Roslin No. 3-4 (1927–1928): 114.

A lapsus for Philippia Targioni-Tozzetti.

Phyllococcus Ehrhorn, 1916, Hawaii. Ent. Soc. Proc. 3: 234, 236.

TYPE-SPECIES: Cissococcus ? oahuensis Ehrhorn, 1912, by monotypy.

The author placed this gall-making genus in his Dactylopiinae [present Pseudococcidae]. Ferris, *in* Zimmerman, 1948:159, presented a recharacterization of the genus and type-species.

Phyllostroma Šulc, 1942, Ent. Listy [Brno] 5:5-8.

TYPE-SPECIES: (Pulvinaria ericae Löw, 1883)=Lecanium myrtilli Kaltenbach, 1874, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) near *Pulvinaria* Targioni-Tozzetti. Borchsenius, 1957: 280, considered it close to *Rhizopulvinaria* Borchsenius. Schmutterer, 1952a: 554, placed the type-species in synonymy with *myrtilli* Kaltenbach, 1874, an action accepted by subsequent workers.

Physeriococcus Borchsenius, 1959, Ent. Obozr. 38:164.

TYPE-SPECIES: *Physeriococcus cellulosus* Borchsenius, 1959, by original designation and monotypy.

The author placed this genus close to *Nidularia* Targioni-Tozzetti in the Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150:12, confirmed its placement in this family.

Physochermes Targioni-Tozzetti, 1869, Soc. Ent. Ital. Bul. 1: 259.

A lapsus for *Physokermes* Targioni-Tozzetti. This spelling was also used by Bedwell, 1939, Suffolk Nat. Soc. Trans. 4:120, in combination with *abietis* Geoffroy.

Physococcus Hadzibejli, 1958, Ent. Obozr. 37:903.

TYPE-SPECIES: *Physococcus nanus* Hadzibejli, 1958, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to *Rhodania* Goux. We believe that this name is a synonym of *Ritscmia* Lichtenstein, 1879a: 455–457. At hand are three mica preparations sent by Lichtenstein to Professor Comstock with the note: "*Ritsemia pupifera* male and female, very curious little animals on elm. I send 3 9-jointed ant, 9 8-jointed, and larva 6-jointed." The characters that are observable agree very well with the generic characterization presented for *Physococcus*. It is evident that two species were confused in Lichtenstein's published description.

Physokermes Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11: 41; 1869, 11: 734; Signoret, 1874, Soc. Ent. de France Ann. (ser. 5) 4: 87.

TYPE-SPECIES: Coccus hemicryphus Dalman, 1825, by subsequent restriction of the genus to this single species by Signoret, 1874: 87.

The author presented this genus without descriptive notes but with four associated species in the Lecanites. Signoret, 1874: 87, restricted the genus to hemicryphus Dalman and described both genus and species. Lindinger, 1933a: 117, considering quercus Linnaeus the type-species because it was first-named, placed Physokermes in synonymy with Kermes [Talla Heyden of Lindinger] because of identity of type-species. This action has not been accepted by other workers. Schmutterer, 1956: 454, reviewed the situation and confirmed hemicryphus Dalman, long considered a synonym of piceae Schrank, 1801, as the type-species and as distinct from piceae. Borchsenius, 1957: 439, accepted Physokermes as valid but cited piceae Schrank as type-species and placed hemicryphus Dalman as a synonym of it.

Piannaspis Dunham, 1954 [Bahia], Bol. Inst. Biol. 1:72.

A lapsus for Pinnaspis Cockerell.

Pilococcus Takahashi, 1928, Formosa Nat. Hist. Soc. Trans. 18 (97): 257.

TYPE-SPECIES: *Pilococcus miscanthi* Takahashi, 1928, by original designation and monotypy.

The author placed this genus close to Ripersia Signoret in the Pseudococcidae.

Pinnapsis Lindinger, 1954, Beitr. z. Ent. 4:620.

A lapsus for Pinnaspis Cockerell.

Pinnaspis Cockerell, 1892, Inst. Jamaica Jour. 1:136.

TYPE-SPECIES: (Mytilaspis pandani Comstock, 1881)=Aspidiotus buxi Bouché, 1851, by subsequent designation of Fernald, 1903b: 242.

The author proposed this as a subgenus of *Mytilaspis* Targioni-Tozzetti with two definitely included species, *pandani* Comstock and *buxi* Signoret. Its validity has never been challenged but there has been some uncertainty as to the relation of certain genera to it. Lindinger, 1912b: 58, 79, first indicated the synonymy of *Hemichionaspis* Cockerell with *Pinnaspis*. Jaapia Lindinger and Lepidaspidis MacGillivray are also considered to be synonyms. See Ferris and Rao, 1947, for details.

Pityococcus McKenzie, 1942, Microentomology 7: 3-4.

TYPE-SPECIES: Pityococcus ferrisi McKenzie, 1942, by original designation.

The author established the Pityococcini in the Coelostomidiinae for this margarodid genus.

Planchonia Signoret, 1870, Soc. Ent. de France Ann. (ser. 4) 10:282.

TYPE-SPECIES : Coccus fimbriatus Fonscolombe, 1834, by monotypy.

Signoret established this genus because he considered that *fimbriatus* Fonscolombe should be removed from *Eriococcus*, in which Targioni-Tozzetti had

included it. Cockerell, 1893, Inst. Jamaica Jour. 1: 373. stated that *Planchonia* was a synonym of *Asterolecanium* Targioni-Tozzetti and this was accepted by his contemporary workers with the exception of Maskell, 1894: 94–95, and 1895a: 61, who insisted on the use of *Planchonia* because of his conviction that the name *Asterolecanium* was inaptly descriptive of the genus. Russell, 1941, accepted the synonymy of *Planchonia* with *Asterolecanium*. Bodenheimer, 1951: 328, recognized the genus as valid and included in it the seven "*Group IV*" species of the Russell monograph. Borchsenius, 1960d: 144, in his revision of the Asterolecaniidae, accepted the validity of *Planchonia* with the same seven included species.

Planococcoides Ezzat and McConnell, 1956, Md. Agr. Expt. Sta. Bul. A-84:13, 53.

TYPE-SPECIES: *Pseudococcus njalensis* Laing, 1956, by original designation. The authors placed this genus in the Pseudococcidae, Planococcini.

- Planococcus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:22, 164.
 - TYPE-SPECIES: *Pseudococcus citri* (Risso) of Ferris, 1950, by original designation.

Ezzat and McConnell, 1956: 3, erected the Planocoecini to contain this and several related genera of the Pseudococcidae.

Plannococcus Entwhistle, 1958, Ghana Farmer 2:64.

A lapsus for Planococcus Ferris.

Platinglisia Cockerell, 1899, Entomologist 32:12.

TYPE-SPECIES: *Platinglisia noacki* Cockerell, 1899, by original designation and monotypy.

The author noted this genus as being closely allied to *Inglisia* Maskell in the Lecaniinae.

Platycoccus Stickney, 1934, U.S. Dept. Agr. Tech. Bul. 404: 107-108.

TYPE-SPECIES: *Platycoccus tylocephalus* Stickney, 1934, by original designation and monotypy.

The author placed this genus in his Phoenicococcinae, Phoenicococcini. Beardsley, 1963, Pacific Insects 5: 63-64, described the genus as an endemic [Hawaiian] offshoot of *Colobopyga* Bréthes.

Platycoccus Takahashi, 1959, Kontyu 27:76.

TYPE-SPECIES: Lecanium acuminatum Signoret, 1873, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) related to *Coccus* Linnaeus and *Protopulvinaria* Cockerell. It is preoccupied by *Platycoccus* Stickney 1934, in the Phoenicococcinae.

Platycoelostoma Morrison, 1923, in Morrison and Morrison, U.S. Natl. Mus. Proc. 62, Art. 17 (No. 2463): 34.

TYPE-SPECIES: Coelostoma compressum Maskell, 1892, by original designation and monotypy.

The author placed this genus in the group of Margarodinae including *Steingelia* Nassanov, *Matsucoccus* Cockerell, *Stomacoccus* Ferris, and *Kuwania* Cockerell, Morrison, 1927: 103, erected a new tribe for it, *Platycoelostomini*, in the Coelostomidiinae.

Platylecanium Cockerell and Robinson, 1915, Amer. Mus. Nat. Hist. Bul. 34: 427.

TYPE-SPECIES: Neolecanium cribrigerum Cockerell and Robinson, 1915, by original designation.

The authors presented this genus in the Lecaniinae.

Platypyga Green, 1918, Ann. Appl. Biol. 4: 232, nomen nudum.

TYPE-SPECIES: Platypyga fagi [Green?], 1918, by monotypy, nomen nudum.

The name "Platypyga fagi" was presented in a list of coccid species affecting Fagus (Corylaceae) without other information. Hence it is a nomen nudum. Vayssière, 1926: [351]. also presented the name in a host plant list. According to Neave, 1940, Nomen. Zool. III: 800, the name was preoccupied by Illiger's use in the Mammalia in 1811.

Platysaissetia Cockerell, 1901, Ent. Student 2:32.

TYPE-SPECIES: Lecanium (Saissetia) castilloae Cockerell, 1898, by original designation and monotypy.

The author presented this as a subgenus of Saissctia Déplanche.

Pluvinaria Shinji, 1935, Zool. Soc. Japan, Tokyo, Dobutsugaku Zasshi 47 (566): 771, 775.

A lapsus for Pulvinaria Targioni-Tozzetti.

Polea Green, 1922, The Coccidae of Ceylon. Part V, p. 462.

TYPE-SPECIES: Pollinia ceylonica Green, 1909, by original designation and monotypy.

The author placed this genus in the Asterolecaniinae with characters resembling *Asterolecanium* Targioni-Tozzetti.

Poliaspidoides Goux, 1937, Soc. Ent. de France Bul. 42: 35.

A lapsus for Poliaspoides MacGillivray.

Poliaspis Maskell, 1880, New Zeal. Inst. Trans. and Proc. (1879) 12: 293.

TYPE-SPECIES: Poliaspis mcdia Maskell, 1880, by monotypy.

The author described this diaspidine genus as very similar to *Leucaspis* Targioni-Tozzetti. It is accepted by coccid workers as a valid genus. Balachowsky, 1954e: 171, 427, placed it in his Diaspidina, group II, chionaspiform.

Poliaspoides MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: Chionaspis simplex Green, 1899, by original designation and monotypy.

The author placed this genus in the Diaspidini. Lindinger, 1937: 193, said "=Dycryptaspis Ckll." [Odonaspis]. Ferris, 1937a: 6, 33, considered the genus valid but transferred it to the Odonaspidini. Balachowsky, 1953g: 750, 760, placed the name as a synonym of Rugaspidiotus MacGillivray.

- Pollinia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:41; 1869, 11:734; 1869, Soc. Ent. Ital. Bul. 1:263.
 - TYPE-SPECIES: (Pollinia costae Targioni-Tozzetti, 1868)=Coccus pollini A. Costa, 1857, by monotypy.

Targioni-Tozzetti proposed this genus for the A. Costa species but with change of the specific name from *pollini* to *costae*. Since Rules do not permit such a change, the type must stand as cited above. A. Costa. 1877, noted the establishment of the new genus for his *Coccus pollini* and accepted the need for it, but rejected both the generic and specific names proposed. He substituted *Cisticoccus*, presenting the combination as *Cisticoccus pollini*, thus making his generic name an isogenotypic synonym of *Pollinia* Targioni-Tozzetti. *Pollinia* Targioni-Tozzetti has been accepted as a valid genus in the Asterolecaniidae. Borchsenius, 1960d : 128, placed it in the Cerococcinae, Polliniini.

Pollyocellaria Imhof, 1900, Biol. Centbl. 20: 527, nomen nudum.

The author based this genus on the adult male of two coccids without mention of a species name. He suggested a possible relation to "Orther[z] is cataphracta Sh[a]w."

Polyaspis Leonardi, 1898, *in* Berlese and Leonardi, Ann. di Agr. Rome (ser. 2): 12.

Leonardi presented this apparent misspelling of *Poliaspis* as; "*Maskeliella* Leon. (*Polyaspis* Maskl.)" Lindinger, 1935: 131, and 1937: 193, took this up as the proper spelling but later, 1943b: 224, accepted *Poliaspis* as correct. Other workers have not accepted *Polyaspis*.

Polyocellaria Sharp, 1901, Zool. Rec. (1900) 37:40, 332.

A lapsus for *Pollyocellaria* Imhof. The name was placed under Aphididae by Sharp. Kirkaldy, 1906, Canad. Ent. 38: 10, repeated this, but indicated that the placement was doubtful. Sanders, 1906: 2, used this spelling but placed the name in the Ortheziinae. Kiritchenko, 1940: 120, listed the name erroneously in combination with *radicumgraminis* as a synonym of *Lecanopsis* Targioni-Tozzetti.

Polystomophora Borchsenius, 1948, Akad. Nauk SSSR Dok. (n. s.) 61:955.

TYPE-SPECIES: *Phenacoccus ostiaplurimus* Kiritchenko, 1940, by original designation and monotypy.

The author placed this genus in the Pseudococcinae close to *Mirococcus* Borchsenius.

Porceraspis Ferris, 1938, Microentomology 3:75.

A lapsus for Proceraspis MacGillivray.

Porococcus Cockerell, 1898, Ann. and Mag. Nat. Hist. (ser. 7) 1:426.

TYPE-SPECIES: Porococcus tinctorius Cockerell, 1898, by original designation.

The author suggested a relationship with *Solenophora* Maskell. Ferris, 1920a: 61, considered this a pseudococcine form in the group associated with *Pseudococcus* Westwood and structurally similar to *Erioides* Green.

Porogymnaspis Green, 1916, Bul. Ent. Res. 7:55.

TYPE-SPECIES: *Porogymnaspis rufa* Green, 1916, by subsequent designation by Ferris, 1936a: 23.

The author associated this genus with *Gymnaspis* Newstead, *Parlatoria* Targioni-Tozzetti, and *Leucaspis* Targioni-Tozzetti, most nearly related to *Leucaspis*. Lindinger, 1934: 26, placed the name as a synonym of *Apteronidia* Berlese. Ferris, 1936a: 23, accepted the genus as valid, and Balachowsky, 1958b: 342, placed it in his Gymnaspidina, grouping with *Gymnaspis* Newstead, *Decoraspis* Ferris, *Bigymnaspis* Balachowsky and *Sakaramyaspis* Mamet.

Porphirophora Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 18.

A lapsus for Porphyrophora Brandt.

Porphyrophora Brandt, 1833, *in* Brandt and Ratzeburg, Medizinische Zoologie oder getreue Darstellung und Beschreibung der Thiere, die in der Arzeneimittellehre in Betracht kommen, in systematischer Folge 2: 355.

TYPE-SPECIES: (*Porphyrophora frischii* Brandt, 1883)=*Coccus polonicus* Linnaeus, 1758, apparently by subsequent designation of Kirkaldy, 1906a: 254 (the first we have found).

This genus was established after *Margarodes* Guilding, 1829, and was used for many years for the reception of the European species of that genus. Later, the name was considered a synonym of *Margarodes* by Lindinger, 1912b: 307; 1937: 193, and Morrison, 1928: 220. Silvestri, 1938: 35, on the basis of examination of various species, decided that *Porphyrophora* should be restored to valid status. Hall, 1940: 494; Borchsenius, 1949: 336; Jakubski, 1950: 398; Dzhafarov, 1956, Akad. Nauk Azerbaid. SSR Izv. 11: S8; Hadzibejli, 1957: 211, have accepted this view.

Powellia Maskell, 1879, New Zeal. Inst. Trans. and Proc. (1878) 11: 223.

TYPE-SPECIES: Powcllia vitrcoradiata Maskell, 1879, by monotypy.

Originally described as a coccid, it is now placed as a psyllid.

Praecocaspis Ferris, 1942, Atlas of the Scale Insects of North America (ser. 4) [v. 4]: SIV-410.

TYPE-SPECIES: Praecocaspis diversa Ferris, 1942, by original designation and monotypy.

The author placed this genus in the Diaspidinae, Diaspidini. No subsequent mention of the type-species has been found.

Priococcus Fulmek, 1943, Ent. Beihefte aus Berlin-Dahlem 10: 32, 60.

A lapsus for Eriococcus Targioni-Tozzetti.

Proceraspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Chionaspis cinnamomi Green, 1905, by original designation and monotypy.

The author placed this genus in the Diaspidini. Lindinger, 1937: 193, accepted it as valid. Ferris, 1937a: 6, considered it valid as separated from *Chionaspis* Signoret. Balachowsky, 1954e: 172, assigned it to his Diaspidina, group II, chionaspiform.

Prodigiaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-312.

TYPE-SPECIES: *Prodigiaspis septunx* Ferris, 1941, by original designation and monotypy.

The author placed this genus in the Diaspidini but noted resemblances to *Poliaspoides* MacGillivray. Balachowsky, 1954e: 23, assigned it to the Lepidosaphedina.

Promargarodes Silvestri, 1938, Notes d'Ent. Chionoise 5:21.

TYPE-SPECIES: Promargarodes sinensis Silvestri, 1938, by original designation and monotypy.

The author placed this genus in the Margarodinae, closest to *Neomargarodes* Green.

Prontaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: Chionaspis citri Comstock, 1883, by original designation.

This name is currently placed as a synonym of Unaspis MacGillivray.

Prosopophora Douglas, 1892, Ent. Monthly Mag. 28:207.

TYPE-SPECIES: Prosopophora dendrobii Douglas, 1892, by monotypy.

The author noted an inability to assign this genus to relationship or position in any group of the Coccidae (str.). Cockerell, 1896i: 50, considered it not separable from *Lecaniodiaspis* Targioni-Tozzetti. Green, 1901i: 293, accepted this synonymy and subsequent workers have concurred until Borchsenius, 1960d: 223, restored the genus to valid status. He described five new species, and suggested transfer of four previously described species to it.

Protancepaspis Borchsenius and Bustshik, 1959, Ent. Obozr. 38: 160.

TYPE-SPECIES: *Protancepaspis bidentata* Borchsenius and Bustshik, 1959, by original designation and monotypy.

The authors placed this genus in the Phoenicococcidae, close to Ancepaspis Ferris.

Protargionia Leonardi, 1911, Portici R. Scuola Super. di Agr., Lab. Zool. Gen. e Agr. Bol. 5:280.

TYPE-SPECIES: Protargionia larreac Leonardi, 1911, by monotypy.

The author suggested that this genus agreed in general characters with *Targionia* Signoret, but subsequent workers placed it in the Diaspidini. Lindinger, 1932f: 204. and 1937: 193, assigned it to synonymy with *Pseudoparlatoria* Cockerell. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 366, regarded the genus as distinct but with striking similarity to *Diaspis* Costa and plainly a member of the Diaspidini.

Protartonia Weber, 1935, Biol. der Tiere Deut. 38 (31): 328.

A lapsus for Protortonia Townsend.

Proteriococcus Borchsenius, 1960, Ent. Obozr. 39:916.

TYPE-SPECIES: Proteriococcus acutispinus Borchsenius, 1960, by original designation.

The author assigned this genus to the Eriococcidae, close to *Acanthococcus* Signoret. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 12, accepted it in the Eriococcidae.

Proticerya Cockerell, 1895, Psyche (sup.) 7:15.

TYPE-SPECIES: *Icerya rileyi* Cockerell, 1895, by original designation and monotypy.

The author presented this as a subgenus of *Icerya* Signoret. Morrison, 1928: 220, placed it in synonymy with *Icerya* Signoret.

Protodiaspis Cockerell, 1898, Ann. and Mag. Nat. Hist. (ser. 7) 1: 428.

TYPE-SPECIES: *Protodiaspis parvulus* Cockerell, 1898, by original designation and monotypy.

The author placed this genus in the Diaspinae and suggested that it connected the Diaspinae with the Coccinae (str.). Ferris, 1919a: 46, accepted the genus as valid in the Diaspidini. Balachowsky, 1953g: 842, considered that its affinities with the Leucaspidina were indisputable. *Scc* Brown and McKenzie, 1962, for discussion of the morphological diversity of the genus and its interpretation.

Protopulvinaria Cockerell, 1894, Trinidad Field Nat. Club Jour. 1: 309-310.

TYPE-SPECIES: Pulvinaria (Protopulvinaria) pyriformis Cockerell, 1894, by original designation and monotypy.

The author presented this as a subgenus of *Pulvinaria* Targioni-Tozzetti, noting also its closeness to *Lecanium manyiferae* and allies. The Fernald, 1903b:128.

assignment of *Pulvinaria convexa* Hempel as type-species, which was repeated by Gómez-Menor, 1958b: 73, and Borchsenius, 1957: 289, is incorrect. The Lindinger, 1937: 193, emendation of the spelling of the name of the type-species to *piriformis* has not been accepted.

Protortonia Townsend, 1898, in Townsend and Cockerell, N.Y. Ent. Soc. Jour. 6: 169.

TYPE-SPECIES: Ortonia primitiva Townsend, 1898, by original designation.

This was established as a subgenus of *Ortonia* Signoret, raised to generic rank by Cockerell, 1899a: 390, and then suppressed by Fernald, 1903b: 16, as congeneric with *Llaveia* Signoret, which had supplanted *Ortonia*. Morrison, 1928: 189, on the basis of a study of the type-species, restored *Protortonia* to valid generic status in the Llaveiini. Hughes-Schrader, 1940: 331, on a cytological basis, placed it as the most highly specialized of the three genera of this tribe.

Pseudalichtensia Hempel, 1928, Inst. Biol. [Sao Paulo] Arch. 1:237.

TYPE-SPECIES: Pseudalichtensia brasiliae Hempel, 1928, by original designation and monotypy.

The author placed this genus in the Lecaniinae and noted superficial similarities, but structural differences, with *Platinglisia* Cockerell.

Pseudantonina Green, 1922, The Coccidae of Ceylon. Part V, p. 363.

TYPE-SPECIES: Pseudantonina bambusae Green, 1922, by original designation and monotypy.

The author placed this genus in his Dactylopiinae [current Pseudococcidae] intermediate between Antonina Signoret and Ripersia Signoret. See Borchsenius, 1960e : 923, for revision of the genus with new diagnosis.

Pseudaonidia Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6: 14.

TYPE-SPECIES: Aspidiotus duplex Cockerell, 1896, by original designation.

The author established this as a subgenus of *Aspidiotus* Bouché, raising it to full generic status, 19011: 226. Lindinger, 1910: 156, placed it in the Parlatoreae group with *Furcaspis* Lindinger. Ferris, 1937c: 52, 55, considered it valid in the Aspidiotini. Balachowsky, 1948b: 269, assigned it to the Pseudoaonidina.

Pseudaonidiella MacGillivray, 1921, The Coccidae, p. 394.

TYPE-SPECIES: Aspidiotus duplex Cockerell var. paeoniae Cockerell, 1899, by original designation and monotypy.

Lindinger, 1937: 194, and Ferris, 1937c: 52, 55, placed this name in synonymy with *Pseudaonidia* Cockerell. Other workers share this view.

Pseudaspidoproctus Morrison, 1927, Biol. Soc. Wash. Proc. 40: 104.

TYPE-SPECIES: Aspidoproctus hypheniacus Hall, 1925, by original designation and monotypy.

The author placed this genus. established for several African species, in his group 1 of the Monophlebini.

Pseudaulacaspis MacGillivray, 1921, The Coccidae, p. 305.

TYPE-SPECIES: Aulacaspis pentagona Targioni-Tozzetti, 1886, by original designation.

The genus has been generally accepted as valid in the Diaspidini. Ghauri, 1962: 213, placed it in the Chionaspidina on characters of the adult male.

Pseudinglisia Newstead, 1893, Ent. Monthly Mag. 29:153.

TYPE-SPECIES: Pseudinglisia rodrigueziae Newstead, 1893, by monotypy.

The author expressed doubt as to the position this genus should occupy, in the Lecaniinae or the Coccinae (str.). Cockerell, 1896b: 323, placed the name in synonymy with *Conchaspis* Cockerell. Mamet, 1954b: 208, confirmed this synonymy and accepted the type-species as identical with *Conchaspis angracci* Cockerell.

Pseudischnaspis Hempel, 1900, Rev. Mus. Paulista [São Paulo] 4: 506.

TYPE-SPECIES: (*Pseudischnaspis linearis* Hempel, 1900)=*Aspidiotus bowreyi* Cockerell, 1893, by original designation and monotypy.

The author noted a superficial resemblance to *Ischnaspis* Douglas and a similarity to *Chrysomphalus* Ashmead in pygidial structure. The genus has been accepted as valid in the Aspidiotini.

Pseudoaunidia Minamikawa, 1959, Okitsu. Natl. Tokai-Kinki Agr. Expt. Sta., Tea Div., Study of Tea No. 20:41.

A lapsus for Pseudaonidia Cockerell.

Pseudocapulinia Hempel, 1932, Rev. de Ent. [São Paulo] 2: 319.

TYPE-SPECIES: *Pseudocapulinia lanosa* Hempel, 1932, by original designation and monotypy.

The describer placed this genus in the Cylindrococcinae, close to *Capulinia* Signoret.

Pseudochermes Nitsche, 1895, in Judeich und Nitsche-Lehrbuch der mitteleuropäischen Forstinsektenkunde II: 1249.

TYPE-SPECIES: Chermes? fraxini Kaltenbach, 1860, by original designation and monotypy.

Lindinger, 1937: 179, 185, 194, considered this genus valid and placed Apterococcus Newstead, 1898, and Fonscolombia Cockerell, 1899j: 264 (non Fonscolombia Lichtenstein, 1877), in synonymy. Borchsenius, 1949: 365, followed this interpretation in his redescription of the genus. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 13, accepted Pseudochermes in the Eriococcidae. We cannot accept Schmutterer's action, 1952: 418, in placing Pseudochermes Nitsche, 1895, with fraxini Kaltenbach cited as type-species, in synonymy with Fonscolombia Lichtenstein, 1877. See under Fonscolombia.

Pseudoccus Westwood, 1840, An Introduction to the Modern Classification of Insects 2:445.

A lapsus for Pseudococcus Westwood.

Pseudococcs Takahashi, 1958, Univ. Osaka (Prefecture) Bul. (ser. B) (1957) 7:3.

A lapsus for Pseudococcus Westwood.

Pseudo-Coccus Westwood, 1840, An Introduction to the Modern Classification of Insects 2: 448.

This spelling also appeared in Westwood, 1845, Arcana Entomologica 1: 21, as *Pseudo-coccus*.

Pseudococcus Westwood, 1840, An Introduction to the Modern Classification of Insects 2: 448, appendix 118.

TYPE-SPECIES: Coccus adonidum Linnaeus, 1767 (longispinus Targioni-Tozzetti, 1868), by subsequent designation of Fernald, 1903b: 96.

The position of *Pseudococcus* as a valid generic name in the Coccoidea is exceedingly insecure. Westwood (p. 448) definitely associated "the cochineal insect of Mexico, Coccus cacti Linn.," with his generic name "Pseudo-Coccus," mentioning no other species, but in the generic synopsis in the appendix (p. 118), listed "Pseudococcus Westw. (C. adonidum, Cacti, etc.)." Since Dactylopius had been used in 1835 by Costa for the cochineal insect. Pseudococcus was a synonym of that name. In 1875 Signoret published an entirely different concept of Pseudococcus, using it for mealybug species which Cockerell, 1893ee: 317, placed in Phenacoccus, and assigning to Dactylopius, not the cochineal insect, but a group of mealybugs of the type of *adonidum* Linnaeus. This practice was followed in coccid literature for 25 years. The Fernald Catalogue, 1903b; 96, changed the picture by presenting *Pseudococcus* Westwood, with type-species longispinus Targioni-Tozzetti (adonidum Linnaeus) for the mealybug species that Signoret had placed in Dactylopius, and Phenacoccus Cockerell for the species Signoret had placed in Pseudococcus. Kirkaldy, 1904a: 227, 258, pointed out that *Pseudococcus*, as a synonym of *Dactylopius* and referring to only the cochineal insect of Mexico, should be replaced by Trechocorys Curtis, 1843. However, coccid workers have ignored Kirkaldy's decision, and have followed the usage of the Fernald Catalogue. Laing, 1944: 93, and Ferris, 1950b: 170-171, while recognizing and discussing this anomalous situation, continued to use the name Pseudococcus. Strict adherence to the rules of nomenclature would require its rejection, but the fact that *Pseudococcus*, with adonidum as typespecies, has been used for 45 years for a group of mealybugs, with a large amount of literature built up around it, suggests the desirability of an arbitrary decision to make its continued use valid.

Pseudococus Dunham, 1954 [Bahia] Bol. Inst. Biol. 1: 68, 72.

A lapsus for *Pseudococcus* Westwood. This spelling also appeared in Juscafresa 1961, El Cultivador Moderno 44: 96.

Pseudodaulacaspis Laffoon, 1961, Ent. Soc. America Bul. 6: 191.

A lapsus for Pseudaulacaspis MacGillivray. Corrected in l.c. 7:93.

Pseudodiaspis Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6:21.

TYPE-SPECIES: Aspidiotus (Pseudodiaspis) larreae Cockerell, 1897, by monotypy.

The author presented this as a subgenus of *Aspidiotus* Bouché. Ferris, 1919a: 52, accepted it as a valid genus but suggested assignment to the diaspine series rather than to the aspidiotine. Balachowsky, 1954e: 167, placed it in the Diaspidina, group I, diaspiform.

Pseudodiospis Lindinger, 1957, Beitr. z. Ent. 7:547.

A lapsus for Pseudodiaspis Cockerell.

Pseudodischnaspis Flachs, 1931, Krankheiten und Parasiten der Zierpflanzen, p. 298.

A lapsus for *Pscudischnaspis* Hempel. This spelling also appeared in Balachowsky, 1951: 583, and 1958b: 202.

Pseudodocus Dunham, 1954 [Bahia] Bol. Inst. Biol. 1: 67.

A lapsus for Pseudococcus Westwood.

Pseudokermes Cockerell, 1895, Canad. Ent. 27:203.

TYPE-SPECIES : Lecanium (Pseudokermes) nitens Cockerell, 1895, by monotypy.

The author presented this as a subgenus of *Lecanium* Burmeister noting similarities to *Physokermes* Targioni-Tozzetti, *Inglisia* Maskell, and *Fairmairia* Signoret.

Pseudolacaspis Dunham, 1954 [Bahia] Bol. Inst. Biol. 1:67.

A lapsus for Pseudaulacaspis MacGillivray.

Pseudolecanium Cockerell, 1896, Psyche (sup.) 7:19.

TYPE-SPECIES: Sphaerococcus (Pscudolccanium) tokionis Cockerell, 1896, by monotypy.

This genus was established as a subgenus of *Sphaerococcus* Maskell. Fernald Catalogue, 1903b: 210, listed the name as a synonym of *Aclcrda* Signoret, and McConnell, 1954: 23, confirmed this placement.

Pseudoleucaspis Mamet, 1939, Roy. Ent. Soc., London, Trans. 89: 586.

TYPE-SPECIES: Pseudoleucaspis monticola Mamet, 1939, by original designation and monotypy.

The author noted a relation to *Leucaspis* Targioni-Tozzetti by nature of the female puparium, and differences from members of the Diaspinae in the pygidium of the nymphal exuvium and that of the adult female.

Pseudomelanaspis Borchsenius, 1952, Ent. Obozr. 32:262.

TYPE-SPECIES: Pseudomelanaspis minima Borchsenius, 1952, by original designation and monotypy.

The author placed this aspidiotine genus close to Melanaspis Cockerell.

Pseudoparlatorea Lindinger, 1905, Insekten Börse 22: 131.

An emendation of *Pseudoparlatoria* that has met with slight acceptance except by Lindinger himself.

Pseudoparlatoria Cockerell, 1892, Inst. Jamaica Jour. 1: 136.

TYPE-SPECIES: *Pseudoparlatoria ostreata* Cockerell, 1892, by subsequent designation of Fernald, 1903b: 300.

The author presented this as "n.g. or subg. of *Aspidiotus*." He later noted the resemblance of the female scales to those of *Aspidiotus* Bouché and of the male scales to female scales of *Parlatoria* Targioni-Tozzetti. Subsequent workers have accepted the genus as valid in the Diaspidini. Balachowsky, 1954e: 255, assigned it to the Diaspidina and noted a closeness to *Malleolaspis* Ferris.

Pseudophilippia Cockerell, 1897, Psyche 8:89.

TYPE-SPECIES: Pseudophilippia quaintancii Cockerell, 1897, by monotypy.

The author placed this as a lecanine genus allied to *Filippia* Targioni-Tozzetti. We consider that the genus associates with *Toumeyella* Cockerell in a special group of the Coccidae (str.).

Pseudopsylla Froggatt, 1921, N. S. Wales Dept. Agr. Sci. Bul. 19:6.

TYPE-SPECIES: Pseudopsylla hirsuta Froggatt, 1921, by monotypy.

The only further mention of this genus of gall-making coccids that we have found is in the Lindinger, 1937: 194, list of coccid genera.

Pseudopulvinaria Atkinson, 1889, Asiatic Soc. Bengal Jour. 58 (pt. 2, no. 1):4.

TYPE-SPECIES: Pseudopulvinaria sikkimensis Atkinson, 1889, by monotypy.

The author placed this genus in Maskell's Hemicoccina, with some structural characters of the Coccina and some of the Lecanina. Ferris, 1957c: 88, considered that a case could be made for its assignment to the Eriococcidae and also to the Coccidae (str.). Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Rul. 150: 13, agreed.

Pseudorhizoecus Green, 1933, Stylops 2:55.

TYPE-SPECIES : Pseudorhizoecus proximus Green, 1933, by original designation.

The author placed this genus of root coccids in the Pseudococcinae, noting that superficially it appeared similar to *Rhizoecus* Künckel d'Herculais, but that the structural characters were very distinct.

Pseudorhodania Borchsenius, 1962, Akad. Nauk SSSR Zool. Inst. Trudy 30: 242–244.

TYPE-SPECIES: *Pseudorhodania marginata* Borchsenius, 1962, by original designation and monotypy.

The author placed this genus in the Phenacoccini, Pseudococcidae, close to *Rhodania* Goux.

Pseudoripersia Cockerell, 1899, Ill. Nat. Hist. Survey Bul. 5: 392.

TYPE-SPECIES: Eriococcus turgipes Maskell, 1893, by monotypy.

The author established this as a subgenus of *Ripersia* Signoret and subsequently raised it to generic rank. Morrison and Morrison, 1922: 51, redefined the genus and redescribed the type-species. It is assigned to the Pseudococcidae.

Pseudorrhizoecus Lindinger, 1937, Ent. Jahrb. 46:194.

A lapsus for Pseudorhizoecus Green.

Pseudoselenaspidus J. P. da Fonseca, 1962, Inst. Biol. [Sao Paulo] Arch. 29: 26.

TYPE-SPECIES: *Pseudoselenaspidus inermis* J. P. da Fonseca, 1962, by original designation and monotypy.

The author differentiated this aspidiotine genus from *Selenaspidus* Cockerell.

Pseudotargionia Lindinger, 1912, Die Schildläuse, pp. 14, 50, 386.

TYPE-SPECIES: Aonidia glandulosa Newstead, 1911, by monotypy.

The author established this aspidiotine genus without characterization, placing it in his Parlatoreae group of the Diaspinae and listing it with the valid species at the end of the book. He, 1932f: 199, called attention to its incorrect citation as a subgenus in Supplement 5 of the Fernald Catalogue. Ferris, 1937c: 52, 55, regarded the genus as valid, an opinion confirmed by Balachowsky, 1948b: 269, who assigned it to the Pseudoaonidina and, 1951: 676, defined the genus and differentiated it from the closely allied *Pseudaonidia* Cockerell.

Pseudotectococcus Hempel, 1934, [Sao Paulo] Rev. de Ent. 4: 139.

TYPE-SPECIES: Pseudotectococcus annonae Hempel, 1934, by original designation and monotypy.

The author placed this genus in the Eriococcinae close to *Tectococcus* Hempel. Ferris, 1957c: 88, accepted it as definitely eriococcid and Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 13, agreed with its placement in the Eriococcidae.

Psilococcus Borchsenius, 1952, Akad. Nauk SSSR Zool. Inst. Trudy 12:269.

TYPE-SPECIES: *Psilococcus ruber* Borchsenius, 1952, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) near *Lecanopsis* Targioni-Tozzetti.

Psoraleococcus Borchsenius, 1959, Ent. Obozr. 38:841.

TYPE-SPECIES: *Psoraleococcus verrucosus* Borchsenius, 1959, by original designation.

The author placed this genus in his Lecaniodiaspididae close to Anomalococcus Green.

Pteleocecis Amyot, 1847, Soc. Ent. de France Ann. (ser. 2) 5: 502.

This is a uninomial designation intended to replace a generic and specific name for the species involved, *Lecanium coryli* (Linnaeus), as we interpret it. It has no validity as a generic name.

Pterolecanium Šulc, 1932, Acta Soc. Sci. Nat. Morav. 7(5) (Signatura F 57): 48, 53.

TYPE-SPECIES: Lecanium pulchrum [King MS] Reh, 1903, nomen nudum; Marchal, 1908, by monotypy.

The author presented this as a subgenus of *Lecanium* Burmeister but it was not accepted by other workers. Bodenheimer, 1929: 97, placed it in synonymy with *Eulecanium* Cockerell, and Borchsenius, 1957: 374, with *Parthenolecanium* Šulc. The name of the type-species is considered a synonym of *rufulum* Cockerell.

Pudaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 530-531.

TYPE-SPECIES: Diaspis newsteadi Leonardi, 1914, by original designation.

The author referred this genus to the Diaspidini and noted its differentiation from *Diaspis* Costa. Balachowsky, 1954e: 167, placed it in the Diaspidina, group I, diaspiform.

- Pulvinaria Targioni-Tozzetti, 1866, R. Accad. dei Georg. Atti (n.s.) 13:146;1867, Soc. Ital di Sci. Nat. Mem. 3(3):13.
 - TYPE-SPECIES: Coccus vitis Linnaeus, 1758, by original designation and monotypy.

The author presented this genus with a brief comment on the floccose material produced by its type-species; again, 1867: 13, he cited the genus and its type-species in a footnote; and in his catalog, 1868: 34, 1869: 727, associated it with his *Nidularia* in sect. B, Pulvinati, of his tribe "Lecanites." Throughout subsequent coccid literature, a large number of species have been referred to *Pulvinaria*. Steinweden, 1929: 226, and 1946: 3, accepted *Coccus vitis* Linnaeus as type-species and precisely redefined the genus. Borchsenius, 1952a: 296-297, and 1953: 287-288, separated 8 new genera from *Pulvinaria* and, 1957: 202-203, placed it in the Pulvinariini, Coccinae (str.).

Pulvinariella Borchsenius, 1953, Ent. Obozr. 33: 287.

TYPE-SPECIES: Coccus mesembryanthemi Vallot, 1830, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) close to *Rhizopulvinaria* Borchsenius.

Pulvinarisca Borchsenius, 1953, Ent. Obozr. 33: 288.

TYPE-SPECIES: Pulvinaria scrpentina Balachowsky, 1929, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) near Phyllostroma Šulc.

Pulvinatus Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:16.

From the context in which this name occurs, we suppose that it is a lapsus for *Nidularia* Targioni-Tozzetti of authors. No species was associated with it so it has no standing.

Pulvinella Hempel, 1899, Canad. Ent. 31: 132.

TYPE-SPECIES: Pulvinaria pulchella Hempel, 1899, by original designation and monotypy.

The describer presented this as a subgenus of *Pulvinaria* Targioni-Tozzetti allied to *Pcndularia* da Fonseca, in the Lecaniinae.

Pusillaspis Lindinger, 1906, Jahrb. der Hamburg. Wiss. Anst. (1905) 23 Beih. 3: 27.

TYPE-SPECIES: Leucaspis pusilla Löw, 1883, by subsequent designation of MacGillivray, 1921: 262.

This name was proposed for an uncharacterized subdivision of a "Sektion" of the genus *Leucaspis* Targioni-Tozzetti. It was established as a definite subgenus with *pusilla* Löw designated as type by MacGillivray. Ferris, 1936a: 23–24 and Balachowsky, 1953g: 860, considered the type-species to be a *Leucaspis*.

Puto Signoret, 1876, Soc. Ent. de France Ann. (1875) (ser. 5) 5: 394.

TYPE-SPECIES: Putonia antennata Signoret, 1875, by substitution of Puto for Putonia Signoret.

The author proposed this name as a replacement for his Putonia, 1875.

Putonia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:341.

TYPE-SPECIES: Putonia antennata Signoret, 1875, by monotypy.

This name was preoccupied by *Putonia* Stål, 1872, in the Heteroptera, and was replaced by *Puto* Signoret, 1876.

Pygalataspis Ferris, 1921, Bul. Ent. Res. 12:218.

TYPE-SPECIES: *Pygalataspis miscanthi* Ferris, 1921, by original designation and monotypy.

The author placed this genus in the *Diaspis* O. G. Costa series of the Diaspididae, but noted certain characters that closely resembled characters of *Odonaspis* Leonardi.

Pygidiaspis MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES: Aspidiotus (Targionia) ccdri Green, 1915, by original designation and monotypy.

Lindinger, 1937: 194, placed this name of an aspidiotine genus as a synonym of *Targionia* Signoret. Ferris, 1937c: 55, considered it a valid genus with some connection with *Loranthaspis* Cockerell and Bueker, and 1943a: 85, stated that it was definitely not a *Targionia*.

Pygmaeococcus McKenzie, 1960, Hilgardia 29:741.

TYPE-SPECIES: *Pygmaeococcus morrisoni* McKenzie, 1960, by original designation and monotypy.

The describer placed this genus in the Pseudococcidae, most closely related to *Rhizoecus* Künckel d'Herculais.

Pyrogymnaspis Ramakrishna Ayyar, 1919, Pusa Agr. Res. Inst. Bul. 89:99.

A lapsus for Porogymnaspis Green.

Pyrophora Lindinger, 1935, Ent. Jahrb. 44: 141.

A lapsus for Porphyrophora Brandt.

Quadraspidiotus MacGillivray, 1921, The Coccidae, p. 388.

TYPE-SPECIES: Aspidiotus ostreaeformis Curtis, 1843, by original designation.

This genus has received general acceptance in the Aspidiotini. Ferris, 1938a: SII-255, and 1943a: 95, discussed and defined the genus. Balachowsky, 1950b: 397, placed it in the Aspidiotina. De Lotto, 1963, Ent. Soc. South. Africa Jour. 26: 144-145, also discussed this genus and *Diaspidiotus* Berlese and Leonardi. *See* discussion under *Diaspidiotus*.

Querceticoccus Lindinger, 1933, Ent. Anz. 13: 117.

TYPE-SPECIES: Coccus pulvinatus Planchon, 1864, by original designation and monotypy.

The author proposed this generic name as a substitute for *Nidularia* of authors and current usage, after replacing *Eriococcus* Targioni-Tozzetti with *Nidularia* Targioni-Tozzetti on the basis of acceptance of first included species as typespecies of a genus. *See* under *Nidularia*.

Quercetococcus Lindinger, 1943, Ztschr. der Wien. Ent. Gesell. 28: 264.

An emendation of Querceticoccus Lindinger.

Querinococcus Carus, 1912, Bibliog. Zool. 22:88.

A lapsus for Guerinococcus Berlese.

- Quernaspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-118.
 - TYPE-SPECIES: Chionaspis quercus Comstock, 1881, by original designation and monotypy.

The author placed this genus in the Diaspidini. Balachowsky, 1954e: 172, placed it in the Diaspidina, group II, chionaspiform.

208 - 496 - 66 - 12

Radiaspis Ferris, 1938, Atlas of the Scale Insects of North America (ser. 2) [v. 2]: SII-152.

TYPE-SPECIES: Leucaspis indica Marlatt, 1908, by original designation and monotypy.

The author referred this genus to the Diaspidini with doubt. Later, 1942: SIV-422, recognizing the prior use of the name by Richter, 1917, for a trilobite, he substituted the name *Radionaspis*.

Radicoccus Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17:47.

TYPE-SPECIES: Rhizoecus globosus James, 1935, by original designation.

The author placed this genus near *Ripersiella* Tinsley, in the group of rootinfesting genera of the Pseudococcidae.

Radiococcus Hambleton, 1946, Rev. de Ent. [Rio de Janeiro] 17:10.

A lapsus for *Radicoccus* Hambleton. Lindinger, 1957: 551, accepted this spelling, but considered the name a synonym of *Rhizoecus* Künckel d'Herculais.

Radionaspis Ferris, 1942, Atlas of the Scale Insects of North America (ser. 4) [v. 4]: SIV-422.

TYPE-SPECIES: Leucaspis indica Marlatt, 1908, by substitution of Radionaspis for Radiaspis Ferris.

Balachowsky, 1953g: 842, assigned this genus to the Leucaspidina. Ferris, 1955c: 31, noted the agreement, in great reduction of characters, of this genus with *Anotaspis* Ferris and *Thysanaspis* Ferris.

Ramachandraspis Rao, 1953, Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 22:66.

TYPE-SPECIES: Ramachandraspis fenestrata Rao, 1953, by original designation and monotypy.

The describer assigned this genus to the Diaspidini. Ramakrishna Ayyar, 1924, 1926, and 1930, presented the type-species in lists of Indian Coccidae as *Fiorinia* fenestrata Green (MS).

Rastrococcus Ferris, 1954, Microentomology 19:55.

TYPE-SPECIES: Phenacoccus iceryoides Green, 1908, by original designation.

The author established this genus in the *Phenacoccus* Cockerell series of the Pseudococcidae. Lindinger, 1958:372, placed the type-species as "*Ceroputo iceryoides* (Gr. 1908) comb. n.," but this action has not been accepted by other workers.

Remotaspidiotus MacGillivray, 1921, The Coccidae, p. 391.

TYPE-SPECIES: Aspidiotus (Targionia) chenopodii Marlatt, 1908, by original designation.

The author placed this genus in the Diaspidini. Lindinger, 1937:195, made the name a synonym of *Targionia* Signoret but this action was rejected by Ferris, 1937c: 33-34, and Balachowsky, 1951: 650, who considered it a synonym of *Rhizaspidiotus* MacGillivray. Brimblecombe, 1958: 74, restored the genus to valid

status for a group of Australian species, noting a relation to *Aspidiella* Leonardi. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13:391–392, considered this group of species worthy of generic rank.

Remotaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: Chionaspis dentilobis Newstead, 1910, by original designation and monotypy.

The author established this genus in the Diaspidini. Ferris, 1936a: 26, considered the separation from *Chionaspis* Signoret valid. Hall, 1946a: 549, placed it in synonymy with *Inchoaspis* MacGillivray because of identity of type-species. *See* under *Inchoaspis*.

Reynvaania Reyne, 1954, Tijdschr. v. Ent. 97: 234-235.

TYPE-SPECIES: Reynvaania gallicola Reyne, 1954, by original designation and monotypy.

The describer assigned this genus to Balachowsky's Eriococcidae. He noted more resemblance to *Fulbrightia* Ferris than to *Olliffiella* Cockerell, the other two eriococcid genera that cause galls on oaks. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 13, accepted it in the Eriococcidae on the basis of the published description.

Rhizaecus Cockerell, 1899, Acad. Nat. Sci. Phila. Proc. 1899: 265.

A lapsus for Rhizoecus Künckel d'Herculais.

Rhizaspidiotus MacGillivray, 1921, The Coccidae, p. 290.

TYPE-SPECIES: (Aspidiotus (Targionia) helianthi Parrott, 1899)=Aspidiotus dearnessi Cockerell, 1898, by original designation and monotypy.

The author established this genus in the Aspidiotini. Coccid workers, with the exception of Lindinger, who considered the name a synonym of *Pseudodiaspis* Cockerell, have accepted it as a valid genus but with a question as to its proper taxonomic position. Ferris, 1937a: 34, assigned the genus to the Odonaspidini with a question; reversed himself, 1938a: SII-265, and reassigned it to the Aspidiotini. Balachowsky, 1948b: 268, placed it in Targionina, Aspidiotini, a position accepted by later workers.

"Rhizobinia Targioni 1867" Leonardi, 1920, Monografia delle Cocciniglie Italiane, p. 325.

A lapsus for Rhizobium Targioni-Tozzetti.

Rhizobium Targioni-Tozzetti, 1867, Soc. Ital. di Sci. Nat. Mem. 3 (3): 23.

The author proposed this name with no specific name for the insect involved although he did present an illustration of a portion of derm of an adult female of the insect. He later, 1868: 36, 1869: 729, emended the name to *Rhyzobium*, at the same time placing it as a synonym of *Lecanopsis* "nob. gen. nov." The status of synonymy to *Lecanopsis* Targioni-Tozzetti has been continued by all subsequent writers on the group.

Rhizobius Burmeister, 1835, Handb. der Ent. 2 (abt. 1):87.

TYPE-SPECIES: Rhizobius pilosellae Burmeister, 1835, by monotypy.

This genus was included in the list of aphid genera under the heading, "Aphis *aut*. Coccus *Leon* Duf.", followed by a description of the single included species and comment on its similarity to *Coccus zeae maidis* Dufour. There has been uncertainty as to the identity of the type-species. Lindinger considered it a coccid. However, workers in the Aphididae place the genus and species in that family.

Rhizobius Buckton, 1883, Monograph of the British Aphides 4: 181.

TYPE-SPECIES : Rhizobius jujubae Buckton, 1883, by monotypy.

This name was preoccupied by *Rhizobius* Burmeister, 1835 (Aphididae), and *Rhizobius* Agassiz, 1846 (emendation of *Rhyzobius* Stephens, 1829, Coleoptera). *Rhizobius jujubae* Buckton is a *Drosicha* Walker or something closely related. *See* Morrison, 1952: 76, for details.

Rhizococcus Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5:16, 36.

TYPE-SPECIES: Rhizococcus gnidii Signoret, 1875, by monotypy.

The author presented this genus as very close to *Eriococcus* Targioni-Tozzetti and *Acanthococcus* Signoret in microscopic characters, but differentiated by habitat. Coccid workers have held varying views as to its status. Lindinger, 1933a: 107, considered the name of a synonym of *Nidularia* [of Lindinger, =Eriococcus auct.]. Ferris, 1955a: 94, and 1957c: 85, believing that the genus had been based on an immature insect, also considered the name a synonym of *Eriococcus* auct. Borchsenius, 1948: 501, and 1949: 351, maintained the validity of the genus and transferred to it a number of species formerly assigned to *Eriococcus* Targioni-Tozzetti. Danzig, 1962a: 839, accepted this interpretation and presented a revision with recharacterization of the genus, redescriptions of several species, and a key for differentiation of the species. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 8, regarded *Rhizococcus* as a synonym of *Eriococcus* Targioni-Tozzetti.

Rhizoecus Künckel d'Herculais, 1878, Soc. Ent. de France Ann. (ser.

5) 8:163.

TYPE-SPECIES: Rhizoecus falcifer Künckel d'Herculais, 1878, by monotypy.

The author established this genus for a root-infesting mealybug. Hambleton, 1946, reviewed it and related genera and added four new genera to the four already described in the group.

Rhizopulvinaria Borchsenius, 1952, Acad. Nauk SSSR Zool. Inst. Trudy 12: 297, 301–303.

TYPE-SPECIES: *Rhizopulvinaria virgulata* Borchsenius, 1952, by original designation.

The author placed this genus in the Pulvinariini, Coccinae.

Rhodania Goux, 1935, Soc. Ent. de France Bul. (1934) 39:291.

TYPE-SPECIES: Rhodania porifera Goux, 1935, by original designation and monotypy.

The author placed this genus in the Pseudococcini, Pseudococcidae, noting differentiation from the *Pseudococcus* Westwood group of species by absence of ostioles and from the *Ripersia* Signoret group by the character of the pores.

Rhodesaclerda McConnell, 1954, Md. Agr. Expt. Sta. Bul. A-75 (Tech.): 110.

TYPE-SPECIES: *Rhodesaclerda combreticola* McConnell, 1954, by original designation and monotypy.

The author placed this genus in the Aclerdidae with a question.

Rhodococcus Borchsenius, 1953, Ent. Obozr. 33:283.

TYPE-SPECIES: Rhodococcus rosaclutea Borchsenius, 1953, by original designation.

The author placed this genus in the Coccidae (str.), close to *Eulocanium* Cockerell.

Rhopaloaspis Del Guercio, 1903, Soc. Ent. Ital. Bul. (trimes. 3, 1902) 34: 188.

TYPE-SPECIES: Leucaspis riccae Targioni-Tozzetti, 1881, by monotypy.

The author described this genus as very close to *Leucaspis* Targioni-Tozzetti but separated by absence of circumgenital glands. Subsequent workers have not accepted this separation but have placed the name as a synonym of *Leucaspis*.

Rhyzaecus Signoret, 1882, Soc. Ent. de France Ann. [Bul. Ent.] (ser. 6) 2: xxxv.

A lapsus for Rhizoecus Künckel d'Herculais.

Rhyzobium Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:36; 1869, 11:729.

An emendation of *Rhizobium* Targioni-Tozzetti, 1867: 23, published as a synonym of *Lecanopsis* Targioni-Tozzetti, 1868: 36, 1869: 729.

Ribesia Coubeaux, 1892, Soc. de Belgique Ann. 36:82.

Lindinger, 1937: 195, listed this as a generic name which he assigned to synonymy with *Pulvinaria* Targioni-Tozzetti. After an examination of the Coubeaux list, we conclude that it merely had the appearance of a generic name due to the manner of printing and that it was intended to be a listing of the combination *Pulvinaria ribesiae* Signoret.

Ripersia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5: 335.

TYPE-SPECIES: Ripersia corynephori Signoret, 1875, by monotypy.

Due to the inadequacy of the original description which presented only the feature of 6-segmented antenna in the adult female, and the fact that the type-

species has not been found since its original collection, a valid redescription of the genus was not possible for many years. However, a large number of species of mealybugs on Gramineae, or on roots of other plants, or in ants' nests were placed in the genus. Kiritchenko, 1936a: 130, sought to define the relation of the genus to *Trionymus* Berg and *Pseudococcus* Westwood, and determine distinctive characters permitting their separation. Proceeding from this point, Goux, 1940: 55–62, completed the arbitrary redefinition of the genus, basing it on characters of species grouped around *tomlinii* Newstead, and erected three new subgenera. Reyne, 1951a, after receiving remnants of the Signoret type material from the Vienna Museum, presented an extended description and discussion of the type-species based on a study of the preparations made from this material. Unfortunately, the slide used by Signoret for his observations has disappeared and the possibility exists that two species might have been involved, since Reyne's preparation showed an 8-segmented antenna.

Ripersiella Tinsley, 1899, Canad. Ent. 31: 278.

TYPE-SPECIES: *Ripersia rumicis* Maskell, 1892, by subsequent designation of Cockerell, 1901j.

Cockerell, 1899m: 278, in a key, credited the name of the genus to Tinsley, and later, 1901j: 165, further discussed the genus and designated the type-species. A group of morphologically allied root-infesting species of mealybugs, closely related to *Rhizoecus* Künckel d'Herculais, have been included under this name. Hambleton, 1946: 59-61, reviewed the genus and its relationships, transferred to it five species from *Rhizoecus* and described eight new species. Ferris, 1953a: 426, and Williams, 1962: 41, have not accepted the transfer of these species and have reassigned them to *Rhizoecus*.

Ritsemia Lichtenstein, 1879, Stettin. Ent. Ztg. 40: 387; 1879, [Paris] Acad. des Sci. Compt. Rend. 88: 870; 1879, Ann. and Mag. Nat. Hist. (ser. 5) 3: 455.

TYPE-SPECIES: Ritsemia pupifera Lichtenstein, 1879, by monotypy.

This genus and species have remained unplaced by present-day coccidologists. On the basis of an opinion by Cockerell (in lit.), the species was assigned to the genus *Ripersia* Signoret in the Fernald Catalogue, 1903b: 119. We have examined three mica preparations labeled *Ritsemia pupifera*, sent to Professor Comstock by Lichtenstein in May 1882, and conclude therefrom that this is a valid genus.

Rizobius Passerini, 1863, Aphididae Italicae, p. 202.

A lapsus for Rhizobius Burmeister.

Rolaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 499, 531.

TYPE-SPECIES: Phenacaspis whitehilli Hall, 1946, by original designation.

The author referred this genus to the Diaspidini and noted differences from *Phenacaspis* Cooley and Cockerell, *Tecaspis* Hall and *Voraspis* Hall. Balachowsky, 1954e: 357, assigned it to the Diaspidina, group II, chionaspiform. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 366, confirmed its validity.

Rosanococcus Kanda, 1934, Insect World 38: 311-312.

TYPE-SPECIES: *Phenacoccus suwakoensis* Kuwana and Toyoda, 1915, by original designation and monotypy.

Takahashi, 1958: 3, placed this name as a synonym of *Coccura* Šulc and suggested the identity of the type-species with *Coccura ussuriensis* (Borchsenius).

Rugaspidiotinus Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202:749.

TYPE-SPECIES: Rugaspidiotus circumdatus Ferris, 1938, by original designation.

The author placed this genus in the Odonaspidini, Rugaspidiotina, close to Rugaspidiotus MacGillivray.

Rugaspidiotus MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Diaspis arizonica Cockerell, 1900, by original designation.

Recent workers have accepted this genus as valid. Balachowsky, 1953g: 750, 760, placed it in the Odonaspidini, Rugaspidiotina and listed *Adiscodiaspis* Marchal, 1909, among its synonyms. If these two genera are accepted as identical. *Adiscodiaspis* has priority and *Rugaspidiotus* would stand as the synonym.

Rugaspidis MacGillivray, 1921, The Coccidae, p. 449.

A lapsus for Rugaspidiotus MacGillivray.

Rugaspis Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202:760.

A lapsus for Rugaspidiotus MacGillivray.

Rugaspitiotus Balachowsky, 1953, Actualités Sci. et Indus., Ent. Appl. 1202:761.

A lapsus for Rugaspidiotus MacGillivray.

Rungaspis Balachowsky, 1949, Soc. Ent. de France Bul. 54: 74.

TYPE-SPECIES: Rungaspis trabuti Balachowsky, 1949, by original designation and monotypy.

The author placed this genus in the Aspidiotini, Aspidiotina, related to *Palinaspis* Ferris.

Rupertsia Lichtenstein, 1877, Schweiz. Ent. Gesell. Mitt. 5: 299.

A lapsus for Ripersia Signoret.

Russellaspis Bodenheimer, 1951, Ent. Ber. 13: 328.

TYPE-SPECIES: Asterodiaspis pustulans Cockerell, 1892, by original designation.

The author established this genus for *Asterolecanium* Group XI of Russell, 1941: 9. Borchsenius, 1960d: 154, accepted the genus in the Asterolecaniinae.

Rutherfordia MacGillivray, 1921, The Coccidae, p. 306.

TYPE-SPECIES: Chionaspis malloti Rutherford, 1914, by original designation and monotypy.

Saccharicoccus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:21,216.

TYPE-SPECIES: Dactylopius sacchari Cockerell, 1893, by original designation and monotypy.

The author established this genus for a distinctive grass-infesting pseudococcid having many characters in common with *Trionymus* Berg. Williams, 1962: 50, described a second species in the genus.

Saharaspis Balachowsky, 1951, Actualités Sci. et Indus., Ent. Appl. 1127: 567-568.

TYPE-SPECIES: Hemiberlesia ceardi Balachowsky, 1928, by original designation and monotypy.

The author placed this genus in the Aspidiotini, Aspidiotina, related to *Murataspis* Balachowsky.

Saisettia Suomalainen, 1962, Ann. Rev. Ent. 7:351, 353.

A lapsus for Saissetia Déplanche.

Saissetia Déplanche, 1859, Soc. Linn. de Normandie, Bul. 4: 203-207.

TYPE-SPECIES: (Saissetia coffeae Déplanche, 1859)=Lecanium coffeae Walker, 1852, by monotypy.

The descriptive material associated with the publication of this name covered a mealybug and possibly the coccid currently recognized in this country as *Saissetia hemisphaerica* (Targioni-Tozzetti). The association of the name *Saissetia* with a group of lecanine coccids having aereolated dorsal derm at maturity, along with other common characteristics, is so thoroughly established in entomological literature, especially in the economic field, that we believe it would be a great mistake to even consider reorientation of the application of the name because of confusion that exists in the original description.

The correct name to be applied to the type-species has also been uncertain. There is no great assurance that Déplanche examined specimens of the insect that is widely known today as *S. hemisphaerica* Targioni-Tozzetti, 1867, since there are apparently no recent records of the occurrence of this insect in Tahiti. However, coccid workers have more or less arbitrarily accepted the fact that *coffeae* Déplanche=*coffeae* Walker, is the same insect as *hemisphaerica*. Cockerell, 1894j: 71–72, suggested this identity and Laing, 1927: 39, reverted to the use of *coffeae* Walker in place of *hemisphaerica*. Williams, 1957: 314, examined Walker's original material, confirmed its identity with the species known as *hemisphaerica* and concluded that *Saissetia coffeae* (Walker) should now be used in place of *Saissetia hemisphaerica* (Targioni-Tozzetti).

Sakalavaspis Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Ser. E. Ent.) 4:21,74.

TYPE-SPECIES: Sakalavaspis perineti Mamet, 1954, by original designation.

The author assigned this genus to "Diaspididae with 'two-barred' ducts. Non-pupillarial."

Sakaramyaspis Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Ser. E. Ent.) 4:21, 78.

TYPE-SPECIES: Sakaramyaspis beguei Mamet, 1953, by original designation and monotypy.

The author assigned this genus to the "Diaspididae with 'two-barred' ducts. Pupillarial." He noted its relationship to *Porogymnaspis* Green and closeness to *Gymnaspis* Newstead. Balachowsky, 1958b: 342, placed it in the Gymnaspidina.

Salaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 535.

TYPE-SPECIES: Chionaspis tenuidisculus Newstead, 1920, by original designation and monotypy.

The author assigned this genus to the Diaspidini, probably close to *Ledaspis* Hall. Balachowsky, 1954e: 172, placed it in the Diaspidina, group II, chionaspiform. Lindinger, 1957: 552, assigned the type-species to *Poliaspis* Maskell.

Salicicola Lindinger, 1905, Zool. Anz. 29: 253.

TYPE-SPECIES: Leucaspis kermanensis Lindinger, 1905, by monotypy.

The author established this as a "Sektion" of *Leucaspis* Targioni-Tozzetti. MacGillivray, 1921: 262, raised it to subgeneric rank. Ferris, 1936a: 23, accepted it as a valid genus. Balachowsky, 1953g: 901, placed it in the Leucaspidina.

Saliococcus Kanda, 1934, Insect World 38: 308-310.

TYPE-SPECIES: Dactylopius takae Kuwana, 1907, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, resembling *Phenacoccus* Cockerell, but, 1935a : 70, recognized its identity with *Heliococcus* Šule. In 1959 : 179, he again presented *Saliococcus* in combination with *tokyoensis* sp. nov.

Sarulaspis Bodenheimer, 1953, Istanbul Univ. Facult. des Sci. Rev. Ser. B, 18:6.

A lapsus for Carulaspis MacGillivray.

Sasakia Kuwana, 1902, Calif. Acad. Sci. Proc. (ser. 3, Zool.) 3:47.

TYPE-SPECIES: Sasakia quercus Kuwana, 1902, by monotypy.

The author described this genus in the Margarodinae, Xylococcini. Cockerell. 1902q: 258, changed the name to *Kuwania* because of preoccupation of *Sasakia* in the Lepidoptera in 1896.

Sasakiaspis Kuwana, 1926, [Japan] Dept. Finance, Imp. Plant Quar. Serv. Tech. Bul. 4:7.

TYPE-SPECIES: Diaspis pentagona Targioni-Tozzetti, 1885, by original designation.

This name is currently accepted as a synonym of *Pseudaulacaspis* MacGillivray, 1921, with the same type-species.

Sassetia Dunham, 1954, [Bahia] Bol. Inst. Biol. 1:68.

A lapsus for Saissetia Déplanche.

Schizaspidiotus MacGillivray, 1921, The Coccidae, p. 456.

A lapsus for Schizaspis Cockerell and Robinson.

Schizaspis Cockerell and Robinson, 1915, Amer. Mus. Nat. Hist. Bul. 34: 423.

TYPE-SPECIES: Schizaspis lobata Cockerell and Robinson, 1915, by monotypy.

The authors placed this genus in the Diaspinae but subsequent workers have referred it to the Aspidiotinae. Ferris, 1937c: 52, 56, accepted the genus as valid and figured the type-species.

Schizentaspidus Mamet, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n. s.) Sci. Zool. 4: 421-422.

TYPE-SPECIES: Schizentapidus loranthi Mamet, 1958, by original designation.

The author placed this genus in the Aspidiotini, closely allied to *Entaspidiotus* MacGillivray.

Schizochlamidia Cockerell, 1899, Canad. Ent. 31: 333, nomen nudum; 1899, Biol. Centr. Amer. 2, pt. 2: 15.

TYPE-SPECIES: Schizochlamidia mexicana Cockerell and Parrott, 1899, by original designation and monotypy.

The author first presented this name with key characters but no included species. In the second citation he described the genus and type-species, and differentiated this lecanine genus from *Inglisia* Maskell, *Platinglisia* Cockerell, and *Fairmairia* Signoret.

Schizochlamydia Borchsenius, 1957, Akad. Nauk SSSR Zool. Inst. (n.s. 66) 9:47.

A lapsus for Schizochlamidia Cockerell.

Schizochlamys Cockerell, 1900, Biol. Centr. Amer. 2 (pt. 2): 15.

The author substituted this name for his *Schizochlamidia* because "that name belongs to a genus of Algae." Lindinger, 1937: 195, listed *Schizochlamidia* Cockerell as a synonym of this name. However, *Schizochlamidia*, published in Nov. 1899, definitely predates the December publication of *Schizochlamys* and therefore has priority.

Schizotargionia Balachowsky, 1951, Actualités Sci. et Indus., Ent. Appl. 1127: 632, 644-645.

TYPE-SPECIES: Aspidiotus (Aonidiella) arthrophyti Archangelskaia, 1931, by original designation and monotypy.

The author placed this genus in his Targionina, near *Targionia* Signoret. He noted the close correspondence to *Targaspidiotus* MacGillivray, the type-species of which he included in his new genus. If *yuccarum* Cockerell is established to be congeneric with *arthrophyti* Archangelskaia, *Schizotargionia* will stand as a synonym of *Targaspidiotus*. See under *Targaspidiotus* for further details.

Scleromytilus Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 71.

TYPE-SPECIES: Scleromytilus hargreavesi Hall, 1946, by original designation and monotypy.

The author placed this genus in the Diaspidini, noting that the affinities of the genus were not clear, but some resemblances to *Phaulomytilus* Leonardi, *Aonidomytilus* Leonardi, and *Mitulaspis* MacGillivray were evident.

Sclerosococcus McKenzie, 1958, Pan-Pacific Ent. 34: 169-170.

TYPE-SPECIES: Sclerosococcus ferrisi McKenzie, 1958, by original designation and monotypy.

The author assigned this genus to the Asterolecaniidae.

Sclopetaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: Chionaspis laniger Newstead, 1920, by original designation.

This genus of the Diaspidini was accepted as valid by Ferris, 1937d: 104, and Balachowsky, 1954e: 171, who placed it in the Diaspidina, group II, chionaspiform.

Scobinaspis MacGillivray, 1921, The Coccidae, p. 274.

TYPE-SPECIES: *Mytilaspis serrifrons* Leonardi, 1898, by original designation and monotypy.

The author placed this genus in the Lepidosaphini. Ferris, 1937: SI-131, considered *Scobinaspis dentata* Hoke, which he made type-species of *Velataspis* Ferris, not especially related to *serrifrons* Leonardi. However, Balachowsky, 1954e: 91, placed *serrifrons* Leonardi in *Velataspis*, but without displacing the name *Velataspis*, a necessity in order to make the transfer valid, since *Scobinaspis* precedes *Velataspis* by 16 years.

Scrupulaspis MacGillivray, 1921, The Coccidae, p. 274.

TYPE-SPECIES : Mytilaspis intermedia Maskell, 1891, by original designation.

The author placed this genus in the Lepidosaphini. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 370, accepted the genus and placed it closest to *Lepidosaphes* Shimer.

Scutare Brittin, 1915, New Zeal. Inst. Trans. and Proc. 47: 158.

TYPE-SPECIES: Scutare fimbriata Brittin, 1915, by monotypy.

The author placed this genus tentatively in the Conchaspinae. This placement was accepted by MacGillivray, 1921: 215, and Balachowsky, 1948b: 259, but rejected by Silvestri, 1939: 860. Green, 1916d: 51, transferred the typespecies to *Rhizococcus* Signoret as did Mamet, 1954b: 193. Hoy, 1962: 173, gave *Scutare* valid status in the Eriococcidae.

Scytalaspis Ferris, 1955, Microentomology 20:24.

TYPE-SPECIES: Scytalaspis quadriclavata Ferris, 1955, by original designation and monotypy. [Presented as Clavataspis quadriclavata, new species an obvious error.]

The author referred this genus to the *Lepidosaphes* Shimer series of the Diaspidinae, resembling the genus *Andaspis* MacGillivray in many respects. Scythia Kiritchenko, 1938, Konowia 16:229.

TYPE-SPECIES: Scythia craniumequinum Kiritchenko, 1938, by monotypy.

The author placed this genus in the Lecaniinae, near *Eriopeltis* Signoret. Borchsenius, 1957: 178, assigned it to the Filippiinae.

Seabrina Neves, 1943, Lisboa Univ. Arq. do Mus. Bocago 14:1.

TYPE-SPECIES: Seabrina cistorum Neves, 1943, by original designation and monotypy.

The author placed this genus in the Kermidae but noted a certain similarity to *Puto* Signoret and *Echinococcus* Balachowsky. Gómez-Menor, 1957: 79–85, redescribed the genus and type-species and assigned them to the Pseudococcidae.

Seissetia Abrahao and Mamprim, 1958, O'Biológico 24:268.

A lapsus for Saissetia Déplanche.

Selenaspidiotus Thiem and Gerneck, 1934, Arb. über Physiol. u. Angew. Ent. 1:230.

This name was presented in a phylogenetic "tree" with no species association. We believe that it must stand as a nomen nudum. Lindinger, 1937: 195, listed it as a synonym of *Selenaspidus* Cockerell.

Selenaspidius Kloet and Hincks, 1945, A Check List of British Insects, p. 75.

A lapsus for Selenaspidus Cockerell.

Selenaspidus Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6: 14.

TYPE-SPECIES: A[spidiotus] articulatus Morgan, 1889, by original designation and monotypy.

The author presented this as a subgenus of *Aspidiotus* Bouché. It is currently considered a valid genus in the Selenaspidina, Aspidiotini.

Selenaspis Leonardi, 1897, Riv. di Patol. Veg. 5: 375; 1898, (1897) 6: 50(210)-51(211).

This is a lapsus or an unnecessary emendation of *Sclenaspidus* Cockerell, and has not been accepted by other coccidologists.

Selenediella Mamet, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n.s.) Sci. Zool. 4:424.

TYPE-SPECIES: *Hemiberlesia mekenzici* Takahashi, 1951, by original designation and monotypy.

The author placed this genus in the Aspidiotini, closely related to *Selenaspidus* Cockerell and with certain resemblances to *AonidicIla* Berlese and Leonardi.

Selenomphalus Mamet, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n.s.) Sci. Zool. 4: 426.

TYPE-SPECIES: Aspidiotus euryae Takahashi, 1931, by original designation and monotypy.

The author placed this genus in the Aspidiotini, closely allied to *Neoselenaspidus* Mamet, and in certain characters related to *Chrysomphalus* Ashmead and allied genera.

Semelaspidus MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: (Aspidiotus (Chrysomphalus) cistuloides Green, 1905)=Aspidiotus artocarpi Green, 1896. by original designation.

The author placed this genus in the Aspidiotini. Williams, 1957a: 34-36, reviewed the genus and considered it valid in the Pseudaonidina, closest to *Duplaspidiotus* MacGillivray.

Separaspis MacGillivray, 1921, The Coccidae, p. 390.

TYPE-SPECIES: Furcaspis proteae Brain, 1918, by original designation and monotypy.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 195, considered the name a synonym of *Furcaspis* Lindinger. The genus was accepted as possibly valid though close to *Furcaspis* by Ferris, 1938: 43. Balachowsky, 1958b: 249-255, placed it in the Furcaspidina.

Serrataspis Ferris, 1955, Microentomology 20:31.

TYPE-SPECIES: Serrataspis maculata Ferris, 1955, by original designation and monotypy.

The author placed this genus as belonging to the *Diaspis* Costa series in the Diaspididae.

Serrolecanium Shinji, 1935, Oyo-Dobutsugaku Zasshi [Jap. Soc. Appl. Zool.] 7: 106.

TYPE-SPECIES: Serrolecanium bambusae Shinji, 1935, by monotypy.

The author erected the Serrolecaniinae for this genus, but after a study of new material, 1935b: 770. placed it in the Lecaniinae. Kanda, 1936, Insect World 40:5, and Siraiwa, 1939:68, noted the synonymy of *bambusae* with *Antonina tobae* Kuwana. Ferris, 1950a: 71, placed the genus in the Pseudococcidae near *Antonina* Signoret.

Signoretia Targioni-Tozzetti, 1868, (separate) Soc. Ital. di Sci. Nat. Atti 11:34; 1869, 11:727.

TYPE-SPECIES: (Signoretia clypeata Stål, 1869) = Aspidiotus (?) luzulae Dufour, 1864.

This name was preoccupied by *Signoretia* Stål, 1859, in the Hemiptera and was replaced by *Luzulaspis* Cockerell, 1902.

Signoretia Kraatz, 1888, Deut. Ent. Ztschr. 32:176.

TYPE-SPECIES: Westwoodia perrisii Signoret, 1875, by substitution of Signoretia for Westwoodia Signoret.

The author proposed this name to replace preoccupied Westwoodia Signoret. Later in the same volume, 1888a: 360, recognizing that Signoretia was invalid because of use in the Hemiptera in 1859 by Stål, he presented the name Bergrothia as a substitute. Reitter, 1898: 54, having noted the use of Bergrothia in the Coleoptera in 1884, suggested Bergrothiella to replace Bergrothia Kraatz, 1888. This substitution has not been accepted. Berg, 1899: 78, apparently in ignorance of Reitter's action, presented: "Trionymus nov. nom. pro Signoretia Kraatz 1888." Trionymus Berg is currently accepted as the valid name for this zoological unit.

Signorettia Targioni-Tozzetti, 1869, Soc. Ital. di Sci. Nat. Atti 11: 699.

A lapsus for Signoretia Targioni-Tozzetti.

Silvestraspis Bellio, 1929, Portici, R. Ist. Super. Agr., Lab. Zool. Gen. e Agr. Bol. 22:159.

TYPE-SPECIES: Silvestraspis sinensis Bellio, 1929, by original designation and monotypy.

The author placed this genus in the Diaspinae near *Leucaspis* Targioni-Tozzetti. Lindinger, 1931a: 89, listed the name as a synonym of *Cryptoparlatorea* Lindinger, and 1934: 26, 1937: 196, of *Apteronidia* Berlese. Other workers have accepted the genus as valid. Balachowsky, 1958b: 315, assigned it to his Parlatorina. Takahashi, 1942b: 46-47, recorded the type-species as a synonym of "S. uberifera (Ldgr.)."

Sinaidiaspis Bodenheimer, 1951, Ent. Ber. 13: 329.

TYPE-SPECIES: *Diaspis capperidis* Bodenheimer, 1929, by original designation and monotypy.

The author placed this genus in the Diaspidinae and noted differences from *Pseudodiaspis* Cockerell, *Neosignoretia* MacGillivray, and *Howardia* Leonardi.

Sinistraspis MacGillivray, 1921, The Coccidae, p. 309.

TYPE-SPECIES: Chionaspis unilateralis Newstead, 1913, by original designation and monotypy.

The author placed this genus in the Diaspidini. Coccid workers, with the exception of Lindinger, have accepted it as valid. Balachowsky, 1954e:171, placed it in the Diaspidina, group II, chionaspiform.

Sishanaspis Ferris, 1952, Microentomology 17:6.

TYPE-SPECIES: Sishanaspis quercicola Ferris, 1952, by original designation and monotypy.

The author placed this genus in the *Parlatoria* Targioni-Tozzetti series of the Diaspidini. Balachowsky, 1958b: 315, assigned it to his Parlatorina.

Sishania Ferris, 1950, Microentomology 15:12-13.

TYPE-SPECIES: Sishania nigropilata Ferris, 1950, by original designation and monotypy.

The author placed this genus in the Margarodidae, Monophlebinae, Drosichini, most closely related to *Drosicha* Walker and *Drosichiella* Morrison.

Sisyrococcus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146: 181.

TYPE-SPECIES: Rhizococcus intermedius Maskell, 1891, by original designation.

The author placed this genus in the Eriococcidae.

Situlaspis MacGillivray, 1921, The Coccidae, p. 311.

TYPE-SPECIES: *Pseudodiaspis condaliae* Ferris, 1919, by original designation and monotypy.

The author placed this genus in the Diaspidini. Lindinger, 1937: 196, rejected its separation from *Pseudodiaspis* Cockerell. It was accepted as valid by Ferris, 1937: SI-68, 120, and Balachowsky, 1954e: 167, who placed it in the Diaspidina, group I, diaspiform.

Solenaspidus Hollrung, 1914, Jahresber. über Pflanz. (for 1912) 15: 338, 441.

A lapsus for Selenaspidus Cockerell.

Solenococcus Cockerell, 1899, Ill. Nat. Hist. Survey Bul. 5: 392.

TYPE-SPECIES: Solenophora fagi Maskell, 1890, by subsequent designation of Fernald, 1903b: 58.

The author proposed this name as a substitute for *Solenophora* Maskell, 1890, on grounds of preoccupation by two prior publications of the name *Solenophorus*. Cockerell (*in lit.*, 1922) reversed himself on this substitution and expressed the opinion that *Solenophora* is "validly constituted on the two-letter rule." At the moment the matter is not of first importance since both names are currently placed in synonymy under *Cerococcus* Comstock (*see* Ferris, 1955a: 31), but a critical study of all the elements now included in *Cerococcus* might develop a basis for splitting the genus as currently accepted, and the reestablishment of *Solenophora-Solenococcus* as a valid segregate.

Solenophora Maskell, 1890, New Zeal. Inst. Trans. and Proc. (1889) 22:139.

TYPE-SPECIES: Solenophora fagi Maskell, 1899, by identity of Solenophora with Solenococcus Cockerell, 1899.

This name is currently regarded as preoccupied and replaced by *Solenococcus* Cockerell, 1899, and as belonging in synonymy under *Cerococcus* Comstock.

Spatheaspis Leonardi, 1897, Riv. di Patol. Veg. 6: 109, 115.

TYPE-SPECIES: Aspidiotus secretus Cockerell, 1896, by monotypy.

The author presented this name as a substitute for *Odonaspis* Leonardi, which he believed to be preoccupied by *Odonaspis* in Pisces. He was in error in this since the name proposed by Agassiz in 1835 was *Odontaspis*. *Spatheaspis* is currently accepted as a synonym of *Odonaspis*.

Spermococcus Giard, 1894, Soc. Ent. de France Ann. [Bul. Ent.] (1893) 62: excix.

TYPE-SPECIES: Spermococcus fallax Giard, 1894, by monotypy.

The author noted that in general appearance this genus was a "Lecanite."

The name is currently accepted as a synonym of *Lecanopsis* Targioni-Tozzetti. Lindinger, 1935: 135, placed *fallax* as a synonym of *radicumgraminis* Fonscolombe, but Borchsenius, 1957: 11, retained it, calling the type-species *Lecanopsis fallax* (Giard).

Sphaeraspis Giard, 1894, Soc. de Biol. [Paris] Compt. Rend. (ser. 10, v. 1) 46:712.

TYPE-SPECIES: Margarodes vitium Giard, 1894, by monotypy.

The author presented this as a subgenus of *Margarodes* Guilding. The name is currently placed in synonymy with *Margarodes*.

Sphaerococcopsis Cockerell, 1899, Acad. Nat. Sci. Phila. Proc., p. 262.

TYPE-SPECIES: Sphaerococcopsis inflatipes Maskell, 1893, by original designation and monotypy.

Morrison and Morrison, 1922: 32, redescribed this genus and considered it possibly eriococcine. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 14, included it in the Eriococcidae.

Sphaerococcus Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24: 39.

TYPE-SPECIES: Sphaerococcus casuarinae Maskell, 1892, by monotypy.

Ferris, 1919d: 249, redescribed the genus, placing it in the pseudococcine group of genera, very close to *Antonina* Signoret.

Sphaerocopsis Balachowsky, 1948, Actualités Sci. et Indus., Ent. Appl. 1054: 257.

A lapsus for Sphaerococcopsis Cockerell.

Sphaerolecanium Sulc, 1908, Ent. Monthly Mag. 44: 36.

TYPE-SPECIES: Coccus prunastri Fonscolombe, 1834, by original designation and monotypy.

The author established this genus on characters of the male, presenting it as one of four genera into which he divided *Lecanium* (sensu Signoret). In 1932: 47, he reduced its status to that of a subgenus. Schmutterer, 1952: 552, Borchsenius, 1957: 322, Gómez-Menor, 1958: 26, and others have accepted *Sphaerolecanium* as a valid genus.

Sphaerolecanium Leonardi, 1908, (non Šulc, 1908), Portici R. Scuola Super. di Agr. Lab. Zool. Gen. e Agr. Bol. 3: 180–181.

TYPE-SPECIES: Chermes emerici Planchon, 1864, by monotypy.

Silvestri, in Leonardi, 1920: 312, said that the name of this genus must be considered a synonym of *Eulecanium* Cockerell and that of the type-species, a synonym of *Eulecanium coryli* or variety.

Spheralecanium Chorbadzhiev, 1939, Izv. B'lgarsk. Ent. Druzh. for 1938 [Sofia] 10:89.

A lapsus for Sphaerolecanium Leonardi.

Spilococcus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:22, 219.

TYPE-SPECIES: Dactylopius gutierreziae Cockerell, 1896, by original designation.

The author established this genus as a segregate from *Pseudococcus* Westwood. Subsequent coccid workers have accepted it as valid.

Spinaspidiotus MacGillivray, 1921, The Coccidae, pp. 390, 428.

TYPE-SPECIES: Aspidiotus fissidens Lindinger, 1909, by original designation.

The author placed this genus in the Aspidiotini. Recent coccid workers have accepted it as valid as regards the type-species, but have rejected the additional inclusions. Balachowsky, 1958b: 218, placed it in the Aspidiotini, Aspidiotina, close to *Schizaspis* Cockerell and Robinson and with some affinity to *Hemiberlesia* Cockerell.

Spinococcus Borchsenius; Kiritchenko, 1931, Inst. Zashch. Rast. Plant Protect. [Leningrad] (1930) 7: 314, nomen nudum; Kiritchenko, 1936, Rev. d'Ent. de l'URSS (1935) 26: 156; Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 61: 953; Borchsenius, 1949, Akad. Nauk SSSR Zool. Inst. (n.s. 38) 7: 203-204.

TYPE-SPECIES: Acanthococcus marrubii Kiritchenko, 1936, by designation of Borchsenius, 1949: 203-204.

Kiritchenko, 1931: 314, presented Spinococcus marrubii Kiritchenko with collection and biological notes but no descriptive information. In 1936a: 156–158, the same species appeared as Acanthococcus marrubii n. sp., with full description and figures. Borchsenius, 1948a: 953, noted the genus as: "Spinococcus Kir., 1930 (=Acanthococcus Kir. 1936)" in his revision of the genus Phenacoccus Cockerell, and, 1949: 203–204, validated Spinococcus by designating Acanthococcus marrubii Kiritchenko as type-species. Balachowsky, 1953: 282, placed Spinococcus in synonymy with Synancanthococcus Morrison, but Danzig, 1960: 178, rejected this action and considered the two genera distinct. Recent workers have accepted the validity of Spinococcus.

208-496-66-13

Stachycoccus Borchsenius, 1962, Akad. Nauk SSSR, Zool. Inst. Trudy 30: 240.

TYPE-SPECIES: Stachycoccus caulicola Borchsenius, 1962, by original designation and monotypy.

The author placed this genus in the Phenacoccini, Pseudococcidae, close to *Heterococcus* Ferris and *Rhodania* Goux.

Steatococcus Ferris, 1921, Stanford Univ. Pubs., Univ. Ser., Biol. Sci. 1:69.

TYPE-SPECIES: Palaeococcus morrilli Cockerell, 1914, by original designation.

The author associated in this genus, three species of monophleboid coccids previously assigned to *Palaeococcus* Cockerell and two described as new. Morrison, 1928: 214, placed the genus in the Iceryini and noted that the included species were readily segregated, morphologically and geographically, into three groups, possibly of subgeneric rank.

Stegococcus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146: 186.

TYPE-SPECIES: Stegococcus oleariae Hoy, 1962, by original designation and monotypy.

The author placed this genus in the Eriococcidae closely associated with *Eriococcus* Targioni-Tozzetti.

Steingelia Nassanov, 1908, Mus. Zool. de l'Acad. Imp. Sci. St. Petersbourg Ann. 13: 345.

TYPE-SPECIES: Steingclia gorodetskia Nassanov, 1908, by original designation and monotypy.

The author placed this genus closest to *Xylococcus* Löw. Morrison, 1928: 53-54, associated it with *Stomacoccus* Ferris in the Steingeliinae, Margarodidae.

Stemmatomerinx Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]: 21, 245.

TYPE-SPECIES: Stemmatomerinx decorata Ferris, 1950, by original designation and monotypy.

The author placed this genus in the *Phenacoccus* Cockerell series of the Pseudococcidae, somewhat like *Synacanthococcus* Lindinger.

Stenolecanium Takahashi, 1959, Kontyu 27:74.

TYPE-SPECIES: Stenolecanium esakii Takahashi, 1959, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) related to Luzulaspis Cockerell and Parafairmairia Cockerell.

Stictococcus Cockerell, 1903, Canad. Ent. 35:64.

TYPE-SPECIES: Stictococcus sjostedti Cockerell, 1903, by monotypy.

The author established this as an aberrant genus of the Lecaniinae. Coccid workers have not questioned the validity of the genus but its proper systematic

position has not been established with certainty. Sanders, 1906: 7. included it in the same subfamily as the author but under the name Coccinae. Newstead, 1908a: 150–151, placed it tentatively in the Margarodinae, near *Xylococcus* Löw. Lindinger, 1913; 63, 91, erected the Stictococcinae for it. Silvestri, 1915a: 388, accepted the last action, considering that the genus was in no way related to the Margarodidae, and was distinct though with affinity to the Lecaniinae. Balachowsky, 1942: 42, raised it to family rank as the Stictococcidae. Ferris, 1957b: 65–66, was uncertain as to where to place this family.

Stictolecanium Cockerell, 1902, Ann. and Mag. Nat. Hist. (ser. 7) 9: 452.

TYPE-SPECIES: Lecanium ornatum Hempel, 1900, by original designation and monotypy.

The author placed this genus in the Lecaniinae, allied to *Mesolecanium* Cockerell.

Stigmacoccus Hempel, 1900, Rev. Mus. Paulista [Sao Paulo] 4: 379, 399.

TYPE-SPECIES: Stigmacoccus asper Hempel, 1900, by original designation and monotypy.

Morrison, 1927: 100, established the Stigmacoccini in the Xylococcinae for this margarodid genus. He considered that Cockerell, 1902q: 233, had incorrectly associated it with *Perissopneumon* Newstead.

Stigmatococcus Lindinger, 1937, Ent. Jahrb. 46: 196.

An emendation of Stigmacoccus Hempel.

Stomacoccus Ferris, 1917, Canad. Ent. 49: 375.

TYPE-SPECIES: Stomacoccus platani Ferris, 1917, by original designation and monotypy.

The author referred this genus to the Xylococcini, Margarodinae. Morrison, 1928: 54, placed it in the Steingeliini, Steingeliinae, Margarodidae.

Stomatococcus Lindinger, 1937, Ent. Jahrb. 46:196.

An emendation of Stomacoccus Ferris.

Stotzia Marchal, 1906, Soc. Ent. de France Bul. 9:143.

TYPE-SPECIES : Stotzia striata Marchal, 1906, by monotypy.

The author placed this genus in the "Lecanides, near *Lichtensia* and *Philippia*." The synonymy of *striata* with *Filippia ephedrae* (Newstead) listed by Lindinger, 1912b: 140, was rejected by Balachowsky, 1929a: 309. Borchsenius, 1957: 183, accepted the genus as valid in the Filippinae, Coccidae (str.).

Stramenaspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-126.

TYPE-SPECIES: Leucaspis kelloggi Coleman, 1903, by original designation and monotypy.

The author placed this genus in the Diaspidini and noted a faint suggestion of relationship with *Lineaspis* MacGillivray. Balachowsky, 1954e: 16, 265, placed it near *Kuwanaspis* MacGillivray in the Diaspidina, group II, chionaspiform.

Stringaspidiotus MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Aspidiotus (Pseudaonidia) curculiginis Green, 1904, by original designation.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 196, and Ferris, 1938a: SII-230, considered the name a synonym of *Furcaspis* Lindinger.

Suareziella Mamet, 1954, Inst. Sci. de Madagascar, Mém. (1953) (Ser. E. Ent.) 4:14,47–48.

TYPE-SPECIES: Suareziella montana Mamet, 1954, by original designation and monotypy.

The author placed this genus in the Coccidae (str.) and compared it with *Pulvinaria* Targioni-Tozzetti, *Protopulvinaria* Cockerell, *Coccus* Linnaeus, and *Lecanium* Burmeister.

Suturaspis Lindinger, 1906, Jahrb. der Hamburg. Wiss. Anst. (1905) 23 Beih. 3: 26.

TYPE-SPECIES: Leucaspis pistaciae Lindinger, 1906, by subsequent designation of MacGillivray, 1921:268.

The author presented this as one of two divisions of "Sektion" *Euleucaspis* of the genus *Leucaspis* Targioni-Tozzetti but, 1937: 196, listed the name as a synonym of *Leucodiaspis* Signoret. Ferris, 1936a: 26, considered it "probably worthy of separation from *Leucaspis.*" Balachowsky, 1953g: 882, placed *Suturaspis* as a synonym of *Salicicola* Lindinger.

Symeria Green, 1929, Bul. Ent. Res. 19: 380.

TYPE-SPECIES: (Lepidosaphes epiphytidis (Maskell) of Green, 1929) = Symeria zealandica Morrison and Morrison, n. sp., by original designation and monotypy.

The author established this genus for a species identified by him as *Lepidosaphes epiphytidis* (Maskell) but the description and figure presented do not agree with type specimens of Maskell's *epiphytidis*. We believe that the genus *Symeria* must have for its type-species the species on which the author based his generic description, to which we herewith assign the name *zealandica*. The author described this diaspidine genus as resembling *Lepidosaphes* Shimer in structure of the male and female puparia but differing in microscopic characters.

Synacanthococcus Morrison, 1920, Philippine Jour. Sci. 17: 166.

TYPE-SPECIES: Synacanthococcus bispinosus Morrison, 1920, by original designation and monotypy.

The author placed this pseudococcine form as most closely related to *Tylococcus* Newstead.

Synanthococcus Lindinger, 1937, Ent. Jahrb. 46: 196.

A lapsus for Synacanthococcus Morrison.

Syngenaspis Šulc, 1895, [Prague] K. Böhmisch. Gesell. der Wiss. Sitzberg. (1895) pt. 2, no. 49:2.

TYPE-SPECIES: Syngenaspis parlatoriae Šulc, 1895, by original designation and monotypy.

The author presented this genus as closely allied to *Parlatoria* Targioni-Tozzetti. Subsequent workers have recognized and emphasized this close relationship. McKenzie, 1945: 85-86, accepted the genus, restricted to the type-species, as valid. Balachowsky, 1953g: 820-821, concurred in this opinion and placed it in his Parlatorini, Parlatorina.

Syphaerococcus Lindinger, 1958, Beitr. z. Ent. 8:371.

A lapsus for Sphaerococcus Maskell.

Syrmococcus Ferris, 1953, Atlas of the Scale Insects of North America 6:472.

TYPE-SPECIES: Pseudantonina spirapuncta Lobdell, 1930, by original designation.

The author placed this genus in the Pseudococcidae, in many respects close to *Discococcus* Ferris but not allied to *Pseudantonina* Green.

Tachardia Blanchard, 1886, in Signoret, Soc. Ent. de France Ann. [Bul. Ent.] (ser. 6) 6: lxii.

TYPE-SPECIES: Coccus lacca Kerr, 1782, by substitution of Tachardia for Carteria Signoret.

This name was offered as a substitute for *Carteria* Signoret, 1874, preoccupied by use in the Protozoa in 1866. The lac insect appeared in literature as *Tachardia lacca* for more than 40 years subsequently. The priority of the use of *Laccifer* Oken over *Tachardia* for this insect, noted first by Kirkaldy, 1906, received little notice until Cockerell, 1924, repeated and emphasized the fact. Chamberlin, 1925, formally accepted the substitution of *Laccifer* for *Tachardia*, together with the change of family name to Lacciferidae, and most coccid workers since that date have done the same.

Tachardiella Cockerell, 1901, Entomologist 34: 249.

TYPE-SPECIES: Tachardia cornuta Cockerell, 1894, by original designation.

The author presented this as a subgenus of *Tachardia* Blanchard. Chamberlin, 1923: 174, raised it to generic status and divided it into two subgenera. Balachowsky, 1950: 9, placed it in the Lacciferini, Lacciferinina.

Tachardina Cockerell, 1901, Entomologist 34:249.

TYPE-SPECIES: Tachardia albida Cockerell, 1901, by original designation and monotypy.

The author presented this as a subgenus of *Tachardia* Blanchard. Chamberlin, 1923: 199, accepted it as of generic rank and separated it into two subgenera. Balachowsky, 1950: 9, placed it in the Tachardini, Tachardinina.

208-496-66-14

Takahashia Cockerell, 1896, Psyche (sup.) 7:20.

TYPE-SPECIES: Pulvinaria (Takahashia) japonica Cockerell, 1896, by original designation and monotypy.

The author presented this as a subgenus of *Pulvinaria* Targioni-Tozzetti. Steinweden, 1929: 240-241, accepted it as a valid genus for the type-species, but considered *jaliscensis* T. & W. Cockerell, 1902t, not congeneric. Lindinger, 1937: 196, and Borchsenius, 1957: 288, accepted the genus.

Takahashiaspis Takagi, 1961, Insecta Matsumurana 24: 92, 94.

TYPE-SPECIES: Takahashiaspis macroporana Takagi, 1961. by original designation and monotypy.

The proposer noted that this genus of Diaspidini is very distinct although related to *Neochionaspis* Borchsenius, *Contigaspis* MacGillivray, *Gadaspis* Hall, and *Paragadaspis* Kaussari and Balachowsky.

Takahashicoccus Kanda, 1959, Kontyu 27: 239.

TYPE-SPECIES: *Heliococcus takahashii* Kanda, 1935, by original designation and monotypy.

The author placed this genus in the Pseudococcidae, closely allied to *Heliococcus* Šulc.

Talla von Heyden, 1860, Correspondenzbl. f. Sammler von Insekten 1:90.

TYPE-SPECIES: Lecanium quercus Reaumur, 1860)=Coccus quercus Linnaeus, 1758 [Kermes quercus (L.) of current usage], by monotypy.

Lindinger, 1933a: 143, placed this as a valid genus, with *Kermes* Boitard a synonym of the name, but this opinion has not been accepted by most coccid workers. The critical point in the problem is the character of the Latreille, 1798: 113, use of the name *Kermes*. Our opinion is that he presented it as a group common name, which did not invalidate its later usage by Boitard, 1828, in a technical sense. We place *Talla* von Heyden, 1860, in synonymy with *Kermes* Boitard, 1828.

Tallaspidiotus Balachowsky, 1958, Mus. Roy. du Congo Belge [Tervuren] Ann. (n. s.) Sci. Zool. 4: 249.

A lapsus for Tollaspidiotus MacGillivray.

Targaspidiotus MacGillivray, 1921, The Coccidae, p. 392.

TYPE-SPECIES: Aspidiotus yuccarum Cockerell, 1898, by original designation.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 197, and Ferris, 1937c: 52, 56, considered the name a synonym of *Targionia* Signoret. Borchsenius, 1952: 263, rejected this synonymy and accepted the validity of the genus but suggested the possible need to separate, as a new unit, the palearctic species, a group morphologically close to each other and with similar host and environmental relations. Balachowsky, 1951: 644, noted the Ferris rejection of *Targaspidiotus* but recognized the merit of a division of *Targionia* and proposed the genus *Schizotargionia* corresponding in general concept to the MacGillivray genus. However, he cited arthrophyti Archangelskaia as type-species of his genus

and included in it *yuccarum* Cockerell and *halophila* Balachowsky. If a restudy should confirm *yuccarum* as congeneric with *arthrophyti*, then *Schizotargionia* would stand as a synonym of *Targaspidiotus*. If, on the other hand, *yuccarum* Cockerell were excluded, *Schizotargionia* might well care for the group of palearctic species as suggested by Borchsenius, and *Targaspidiotus*, with typespecies *yuccarum* Cockerell, would include the Nearctic species.

Targionia Signoret, 1869, Soc. Ent. de France Ann. (1869) (ser. 4) 8:862;1869, (ser. 4) 9:99;1870, (ser. 4) 10:105.

TYPE-SPECIES: Targionia nigra Signoret, 1869, by original indication and monotypy.

This genus did not meet with immediate acceptance. Constock. 1883: 453, rejected it as inseparable from *Aspidiotus* Bouché, and Cockerell, 1893d: 8, treated it as a subgenus of the latter. However, Leonardi, 1900: 343, considered it valid, as have most subsequent workers, although the zoological concept of the unit has not been clear. All sorts of unrelated species were referred to it over the years by various authors. Ferris, 1943a, presented a detailed review of the genus and restricted the included species to six definitely assigned, and two more placed tentatively. Balachowsky, 1948b: 268, placed the genus in his Targionina.

Targionidea MacGillivray, 1921, The Coccidae, p. 393.

TYPE-SPECIES: Targionia (?) campylanthi Lindinger, 1911, by original designation.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 197, called the name a synonym of *Targionia* Signoret, but Ferris, 1943a: 85, stated that it was definitely not *Targionia*.

Tecaspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 499, 536.

TYPE-SPECIES: Chionaspis (Phenacaspis) visci var. umtali Hall, 1929, by original designation.

The author placed this genus in the Diaspidini closest to *Rolaspis* Hall. Balachowsky, 1954e: 369, assigned it to his Diaspidina, group II, chionaspiform, but considered it doubtfully distinct from *Rolaspis*.

Tectococcus Hempel, 1900, Rev. Mus. Paulista [Sao Paulo] 4: 406.

TYPE-SPECIES: Tectococcus ovatus Hempel, 1900, by original designation and monotypy.

Ferris, 1957c: 88, redescribed the type-species and assigned the genus to the Eriococcidae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 14, confirmed this assignment.

Tectopulvinaria Hempel, 1899, in Cockerell, Canad. Ent. 31: 331, nomen nudum; 1900, Rev. Mus. Paulista [Sao Paulo] 4: 417, 482.

TYPE-SPECIES: Tectopulvinaria albata Hempel, 1900, by original designation and monotypy.

The author placed this genus in a key to the genera of the Lecaniinae. It is allied to *Pulvinaria* Targioni-Tozzetti.

Tekaspis Lindinger, 1957, Beitr. z. Ent. 7:552.

An emendation of Tecaspis Hall.

Temnaspidiotus MacGillivray, 1921, The Coccidae, p. 387.

TYPE-SPECIES: Aspidiotus excisus Green, 1896, by original designation and monotypy.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 197, assigned the name to synonymy with Aspidiotus Bouché. Ferris, 1938: 43, agreed with this view but, 1952a: 8, reviewed the question and decided that Temnaspidiotus should be separated from Aspidiotus. Balachowsky, 1956: 132, accepted Temnaspidiotus as distinct in the Aspidiotina, Aspidiotini.

Tenuiaspis MacGillivray, 1921, The Coccidae, p. 308.

TYPE-SPECIES: Chionaspis minuta Green, 1896, by original designation and monotypy.

The author described this genus in the Diaspidini. Ferris, 1937a: 6, accepted it as a valid segregate from *Chionaspis* Signoret. Balachowsky, 1954e: 171-172, placed it in his Diaspidina, group II, chionaspiform.

Termitococcus Silvestri, 1901, Mus. di Zool. et Anat. Comp. Bol. [Torino Univ.] 16 (395):4.

TYPE-SPECIES: Termitococcus asper Silvestri, 1901, by subsequent designation of Fernald, 1903b: 122.

The author placed this genus originally in the Coccidae (str.) but, 1936: 32, 34, redescribed the genus and assigned it to the Margarodini.

Tessarabolus Vayssière, 1923, Ann. des Épiphyt. 9: 427.

A lapsus for Tessarobelus Montrouzier.

Tessarobelus Montrouzier, 1864, in Perroud and Montrouzier, Soc. Linn. de Lyon, Ann. (n. s.) 11:246.

TYPE-SPECIES: Tessarobelus guerinii Montrouzier, 1864, by monotypy.

This genus presumably assigns to the Margarodidae. Vayssière, 1923a: 427, placed the name as a synonym of *Monophlebus* Burmeister.

Tetrura Lichtenstein, 1882, Wien. Ent. Ztg. 1: 124; 1882, Ent. Monthly Mag. 18: 275; 1882, Soc. Ent. de France Ann. (Bul. Ent.) (ser. 6) 2: lxxv; 1882, Soc. Ent. Ital. Bul. 14: 330.

TYPE-SPECIES: Tetrura rubi Lichtenstein, 1882 (non Coccus rubi Schrank, 1801), by monotypy.

The status of this genus and its type-species is confusing. The author published *Tetrura*, almost simultaneously in the serials cited. The name, apparently, had been used in 1844 in Aves. The only species originally included was misidentified as *Coccus rubi* Schrank, 1801. Cockerell, 1900b: 86, proposed that this species be called *rubi* Lichtenstein, 1882. Lindinger, 1937: 197, placed *T. rubi* Lichtenstein (non Schrank) as a synonym of *Coccus comari* Kunow, 1880, but accepted *Tetrura* as a valid genus. Borchsenius, 1949: 301, rejected this

synonymy. Schmutterer, 1952: 400, considered this coccid under the name *Phenacoccus comari* (Kunow) with recognition of Lindinger's placement. An old preparation in the U.S. National Collection of Coccoidea, from Montpelier, by Richter, is probably authentic. It shows the adult female of the type-species to be a mealybug of the *Phenacoccus* series, and the body shape and such characters as can be seen check very well with the Schmutterer figures. The antennae are missing but two cicatrices are plainly visible. As of now, it seems best to consider that Schmutterer's 1952 description applies to *Tetrura rubi* Lichtenstein. This places the species in the *aceris* section (with multiple circuli) of *Phenacoccus*, and makes *Tetrura* Lichtenstein, preoccupied, a synonym of *Phenacoccus* Cockerell.

Thekes [Crawford MS] Maskell, 1892, New Zeal. Inst. Trans. and Proc. (1891) 24:28.

TYPE-SPECIES: Acanthococcus multispinus Maskell, 1879, by original designation.

Maskell, in comments following his description of "Eriococcus eucalypti," noted that the species had appeared in Crawford's collection as "Thekes eucalypti." He placed it in the section of Eriococcus Targioni-Tozzetti of which E. multispinus was the type. Cockerell, 1897p: 589, and 1899m: 276, listed Thekes as a subgeneric name in Eriococcus, citing eucalypti as type. Morrison and Morrison, 1922: 26, considered Thekes doubtfully distinct from Eriococcus, and Ferris, 1955a: 94, and 1957c: 85, placed the name definitely as a synonym of Eriococcus. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 62, confirmed this.

Thymaspis Šulc, 1934, Acta Soc. Sci. Nat. Morav., 9(3) (Signatura F 79): 2, 18.

TYPE-SPECIES : Thymaspis fusca Šulc, 1934, by monotypy.

Ferris, 1937d: 105, placed this name as a synonym of *Rhizaspidiotus* Mac-Gillivray and *fusca* as a synonym of *Aspidiotus artemisiae* Hall. Balachowsky, 1951: 650, accepted this placement. Bodenheimer, 1952: 343, considered the genus aspidiotine in type but not identical with *Rhizaspidiotus*.

Thysanaspis Ferris, 1955, Microentomology 20:30.

TYPE-SPECIES: Thysanaspis acalyptus Ferris, 1955, by monotypy.

The author, uncertain as to the position of this genus within the Diaspididae, grouped it with *Anotaspis* Ferris and *Radionaspis* Ferris as exhibiting great reduction of the characters available for generic separation. Balachowsky, 1958b: 335, placed it in the Leucaspidina. Takagi, 1961a: 94–95, 101, commented on the uncertainty of its affinities but believed them to lie with the Diaspidini.

Thysanococcus Stickney, 1934, U.S. Dept. Agr. Tech. Bul. 404: 116.

TYPE-SPECIES: Thysanococcus chinensis Stickney, 1934, by original designation.

The author placed this genus in his Phoenicococcini, which he considered, tentatively, as a part of the diaspine assemblage.

Thysanofiorinia Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci., pp. 168, 312-314.

TYPE-SPECIES: Fiorinia nephelii Maskell, 1898, by original designation and monotypy.

The author placed this genus in the Diaspidini, Diaspidina, close to *Fiorinia* Targioni-Tozzetti.

Tollaspidiotus MacGillivray, 1921, The Coccidae, p. 389.

TYPE-SPECIES: Aspidiotus (? Chrysomphalus) mauritianus Newstead, 1917, by original designation.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 197, considered the name a synonym of *Furcaspis* Lindinger and the type-species the same as *Furcaspis oceanica* Lindinger. McKenzie, 1939: 54; Ferris, 1941e: 45; and Mamet, 1949: 65, accepted the genus as valid.

Tolypecoccus Hoy, 1962, New Zeal. Dept. Sci. and Indus. Res. Bul. 146: 188.

TYPE-SPECIES: Tolypecoccus latebrosus Hoy, 1962, by original designation and monotypy.

The author placed this genus in the Eriococcidae, not close to any particular genus.

Toumeyella Cockerell, 1895, Psyche (1894–1896) (sup.) 7:2.

TYPE-SPECIES: Lecanium mirabilis Cockerell, 1895, by original designation and monotypy.

The author presented this as a subgenus of *Lecanium* Burmeister. Steinweden, 1929: 227, associated it with *Neolecanium* Parrott and *Pseudophilippia* Cockerell, saying that he believed the three constituted a single genus.

Tozzetia Signoret, 1870, Soc. Ent. de France Ann. (ser. 4) 10:282.

From the context of the statement in which this name occurs, it must be considered a lapsus for *Targionia* Signoret.

Trabutina Marchal, 1904, Paris Mus. d'Hist. Nat. Bul. 10: 449.

TYPE-SPECIES: Trabutina elastica Marchal, 1904, by original designation and monotypy.

Ferris, 1950b: 23, assigned this genus to a group of genera of the Pseudococcidae, including *Naiacoccus* Green, *Amonostherium* Morrison, and *Nipaecoccus* Šulc.

Trabutinella Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 63: 584.

TYPE-SPECIES: Trabutinella tenax Borchsenius, 1948, by original designation and monotypy.

The author placed this genus in the Pseudococcidae close to Trabutina Marchal.

- Trachycoccus Borchsenius, 1950, Akad. Nauk SSSR Dok. 71: 781-782.
 - TYPE-SPECIES: Asterolecanium tenax Bodenheimer, 1929, by original designation and monotypy.

The author placed this genus in the Asterolecaniidae near Asterolecanium Targioni-Tozzetti.

Trachycoccus Ferris, 1955, Atlas of the Scale Insects of North America 7:215.

TYPE-SPECIES: Trachycoccus hyperici Ferris, 1955, by original designation and monotypy.

The author referred this genus to the Dactylopiidae. The name is a homonym of *Trachycoccus* Borchsenius, 1950. Williams, 1961a: 93, proposed *Hypericicoccus* as a new name for the genus.

Trechocorys Curtis [Ruricola], 1843, Gard. Chron. No. 26: 444.

TYPE-SPECIES: Coccus adonidum Linnaeus, 1767, by original designation and monotypy.

The author proposed this name for the group of coccids commonly known as mealybugs. Some authors believe that, according to the Rules of Nomenclature, it should replace *Pseudococcus* Westwood as the valid name for this group. See under *Pseudococcus* for details.

Triaspidis MacGillivray, 1921, The Coccidae, p. 273.

TYPE-SPECIES: *Mytilaspis bicornis* Green and Lidgett, 1900, by original designation.

The author included 15 species in this lepidosaphine genus, many of which are not congeneric with the type-species. The genus has been accepted as restricted to the type-species. Balachowsky, 1954e: 23, placed it in his Lepidosaphedina.

Triaspis Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci., p. 23.

A lapsus for Triaspidis MacGillivray.

Trichococcns Kanda, 1941, Insect World 44:4(68).

A printer's error for Trichococcus Kanda.

- Trichococcus Kanda, 1941, Insect World 44:4-8 (68-72)? (in Japanese).
 - TYPE-SPECIES: Xylococcus napiformis Kuwana, 1914, by original designation, and monotypy (apparently).

The author placed this genus close to Xylococcus Löw.

Trichococcus Borchsenius, 1948, Akad. Nauk SSSR Dok. (n.s.) 60: 503.

TYPE-SPECIES: Trichococcus filifer Borchsenius, 1948, by original designation and monotypy.

The author placed this genus in the Eriococcinae, Pseudococcidae, near Acanthococcus Signoret. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul.

150: 15, placed the genus in the Eriococcidae on the basis of the published description. *Trichococcus* Borchsenius is a homonyn of *Trichococcus* Kanda.

Trichomytilus Leonardi, 1898, Riv. di Patol. Veg. (1897) 6:45-46.

TYPE-SPECIES : Mytilaspis formosa Maskell, 1893, by monotypy.

Morrison and Morrison, 1922: 106, considered that this genus should be included in the *Chionaspis* Signoret series rather than the *Lepidosaphes* Shimer group. Ferris, 1941a: 12, accepted the genus as valid.

Tridisculus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:13.

A lapsus for Tridiscus Ferris.

Tridiscus Ferris, 1950, Atlas of the Scale Insects of North America (ser. 5) [v. 5]:21,248.

TYPE-SPECIES: Trionymus distichlii Ferris, 1918, by original designation.

The author placed this genus in the Pseudococcidae, distinct from *Trionymus* Berg. McKenzie, 1960: 692, and 1962: 640, 686, accepted it as a valid genus.

Trigonaspis Ferris, 1941, Atlas of the Scale Insects of North America (ser. 3) [v. 3]: SIII-321.

TYPE-SPECIES: Trigonaspis inclusa Ferris, 1941, by original designation.

The author placed this genus in the *Pseudoparlatoria* Cockerell group of the Diaspidini, Diaspidinae and, 1942: SIV-423. substituted the name *Vinculaspis* because of prior use of *Trigonaspis* in Hymenoptera (1840), in Trilobita (1849) and in Coleoptera (1924). Lindinger, 1957: 552, transferred seven of the included species, but not the type-species, to *Cryptaspidus* Lindinger. This action has not been confirmed by other workers.

Trimerococcus Balachowsky, 1952, Soc. d'Hist. Nat. de l'Afrique du Nord, Bul. 43 (8-9) : 177.

TYPE-SPECIES: Trimerococcus icosianus Balachowsky, 1952, by original designation and monotypy.

The author placed this genus in the *Phenacoccus* group of the Pseudococcidae, related to *Phenacoccus* Cockerell and *Puto* Signoret.

Trionymus Berg, 1899, Mus. Nac. de Buenos Aires Comun. 1: 78.

TYPE-SPECIES: Westwoodia perrisii Signoret, 1875, by substitution of Trionymus for Westwoodia Signoret.

The author proposed this name as a substitute for *Signorctia* Kraatz, 1888, preoccupied, which had been proposed earlier as a substitute for *Westwoodia* Signoret, 1875, preoccupied. It is currently accepted as the valid name for this unit. *See* under *Westwoodia* for details.

Triraphaspis Balachowsky, 1954, Inst. Pasteur [Paris] Mém. Sci., pp. 139-140.

TYPE-SPECIES: Lepidosaphes desmidioides Green, 1917, by original designanation and monotypy.

The author placed this genus as a deviating member of the Diaspidini, Lepidosaphedina, but showing the general characters of the subtribe. Mamet, 1957: 367, and 1959: 126, accepted the genus and described two new species in it.

Troggattiella Lindinger, 1957, Beitr. z. Ent. 7:549.

A lapsus for Froggattiella Leonardi.

Trullifiorinia Leonardi, 1906, Redia (1905) 3:17,41.

TYPE-SPECIES: Fiorinia acaciae Maskell, 1892, by subsequent designation by MacGillivray, 1921: 372.

The author presented this as a subgenus of *Fiorinia* Targioni-Tozzetti. Ferris, 1936a : 23, 26, accepted the genus as valid in the Diaspidini.

Truncaspidiotus MacGillivray, 1921, The Coccidae, p. 390.

TYPE-SPECIES: Lecanium capense Walker, 1852, by original designation and monotypy.

The author placed this genus in the Aspidiotini. Ferris, 1937c: 52, 56, and 1938a: SII-230; and Lindinger, 1937: 197, and 1943b: 220, placed the name as a synonym of *Furcaspis* Lindinger.

Tryonymus Dunham, 1954, [Bahia] Bol. Inst. Biol. 1: 68.

A lapsus for Trionymus Berg.

- Tsimanaspis Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:477-478.
 - TYPE-SPECIES: Tsimanaspis euphorbiae Mamet, 1959, by original designation and monotypy.

The author referred this genus to the Aspidiotini, although he considered its affinities doubtful and noted a relationship to *Comstockiella* Cockerell.

Tsugaspidiotus Takahashi and Takagi, 1957, Kontvu 25: 103.

TYPE-SPECIES: Aspidiotus tsugae Marlatt, 1911, by original designation.

The authors placed this genus in the Aspidiotini, related to *Dynaspidiotus* Thiem and Gerneck.

Tsukushiaspis Kuwana, 1928, [Japan] Min. Agr. and Forestry Dept. Agr. Sci. Bul. 1: 30.

TYPE-SPECIES: (Leucaspis bambusae Kuwana, 1902) = Chionaspis pseudoleucaspis Kuwana, 1923, by original designation.

The name has been generally accepted to be a synonym of Kuwanaspis MacGillivray.

Tsurushiaspis Balachowsky, 1930, Soc. Ent. de France Bul. (1930) (No. 10): 179.

A lapsus for Tsukushiaspis Kuwana.

Tulefiorinia Mamet, 1959, Inst. Sci. de Madagascar, Mém. (1959) (Sér. E. Ent.) 11:461-462.

TYPE-SPECIES: Tulefiorinia simplex Mamet, 1959, by original designation and monotypy.

The author placed this genus in the Diaspidini, closely related to Thysanoflorinia Balachowsky.

Tychea Koch, 1857, Die Pflazenläuse Aphiden v. 1:296.

Aphidologists have accepted *Tychea* Koch as an aphid genus with *Tychea* graminis Koch as the type-species. Lindinger, 1943b: 265, 1943c: 250, considered it a coccid genus and announced its precedence over *Ripersia* Signoret, which he placed as a synonym. He placed *Tychea graminis* Koch as a synonym of *Coccus phalaridis* Linnaeus, 1758. Lepesme, 1947: 262, presented this concept of *Tychea* as a valid genus with *Ripersia* placed in synonymy. Other coccidologists have not accepted it.

From an examination of the Koch illustrations and descriptions, it is clear that Koch mixed a mealybug and an aphid in his generic characterization and in his illustrations and description of *Tychea graminis* Koch. *T. amycli* seems to be an aphid, without question. While the beak, the first item mentioned in the generic description, is that of an aphid, the remaining characteristics covered are coccid, as is the insect chiefly involved in the habitus discussion. As to the figures, that (365) of the fully-developed "stem mother" is a mealybug, and the figure (366a) of the larva seems to be also; the figure (366b) of the "perfect daughter" is that of an aphid.

Tylococcus Newstead, 1897, Ent. Monthly Mag. 33:165.

TYPE-SPECIES: Tylococcus madagascariensis Newstead, 1897, by monotypy.

A large number of species have been referred to this ant-associated pseudococcine genus. Of these, Mamet, 1953: 250, reported that only the four species described from Madagascar and one from the African Gold Coast were probably congeneric.

Udinia De Lotto, 1963, Roy. Ent. Soc., London, Proc. Ser. B: Taxonomy 32: 195.

TYPE-SPECIES: Udinia scitula De Lotto, 1963, by original designation.

The author established this genus in the Coccidae (str.) and noted its close resemblance to Saissetia Déplanche.

Uhleria Cooke, 1881, Treatise on the Insects Injuries to Fruit and Fruit Trees of the State of California, p. 41.

TYPE-SPECIES: Eriococcus araucariae [Maskell, 1878], by monotypy.

The author presented "Uhleria araucariae, Comstock" as the name of a coccid found on Norfolk Island Pine at Santa Barbara, with no actual generic description or type designation. The sparse descriptive notes were inadequate, but if this can be considered to be *Eriococcus araucariae* Maskell, a common species on Norfolk Island Pine, *Uhleria* will fall into synonymy with *Eriococcus* Targioni-Tozzetti. If, at some future date, there is a splitting of the genus *Eriococcus* that involves a transfer of the species *E. araucariae*, *Uhleria* Cooke will be available.

Uhleria Comstock, 1883, Cornell Univ. Agr. Expt. Sta., Dept. Ent. Rpt. (1882-1883) 2:110.

TYPE-SPECIES: Fiorinia pellucida Targioni-Tozzetti, 1868, [Diaspis fioriniae Targioni-Tozzetti, 1867], by original designation.

The author proposed this name as a substitute for *Fiorinia* Targioni-Tozzetti, 1868, which he considered invalid for nomenclatorial reasons. Coccid workers have accepted the validity of *Fiorinia* and placed *Uhleria* as a synonym.

Ultracoelostoma Cockerell, 1902, Entomologist 35:114.

TYPE-SPECIES: Coelostoma assimile Maskell, 1890, by original designation and monotypy.

The author presented this as a subgenus of *Coelostoma* Maskell. Morrison and Morrison, 1922: 11-14, redescribed the type-species and placed the genus in the monophlebine, margarodine series, with affinities uncertain but closer to *Xylococcus* Löw than to any other genus known at that time.

Umbaspis MacGillivray, 1921, The Coccidae, p. 306.

TYPE-SPECIES: *Diaspis regularis* Newstead, 1911, by original designation and monotypy.

The author placed this genus in the Diaspidini. Hall, 1946a: 515, 547, Lindinger, 1937: 197, and Ferris, 1937d: 105, placed the name as a synonym of *Diaspis* Costa. Balachowsky, 1954e: 198, accepted its validity in the Diaspidini, Diaspidina, very close to *Diaspis* Costa, noting that it included a series of African species.

Unachionaspis MacGillivray, 1921, The Coccidae, p. 307.

TYPE-SPECIES: (Chionaspis colemani Kuwana, 1902)=Fiorinia signata Maskell, 1897, by original designation.

Coccid workers have accepted the validity of this genus. Balachowsky, 1954e: 171, placed it in his Diaspidina, group II, chionaspiform.

Unaspidiotus MacGillivray, 1921, The Coccidae, p. 387.

TYPE-SPECIES: Aspidiotus corticispini Lindinger, 1909, by original designation and monotypy.

Lindinger, 1937: 197, said: "= Morganella Ckll." Ferris, 1937c: 52, and 1941e: 42, listed the genus and its type-species without comment.

Unaspis MacGillivray, 1921, The Coccidae, p. 308.

TYPE-SPECIES: Chionaspis acuminata Green, 1896, by original designation and monotypy.

Lindinger, 1937: 197, synonymized this name with *Chionaspis* Signoret but other authors have accepted the genus as valid. Rao, 1949: 59-65, reviewed and redescribed it. Balachowsky, 1954e: 170, 288-289, assigned it to his Diaspidina.

Ungulaspis MacGillivray, 1921, The Coccidae, p. 274.

TYPE-SPECIES: Lepidosaphes ungulata Green, 1905, by original designation and monotypy.

The author placed this genus in the Lepidosaphini. Ferris, 1937a: 6, considered its generic status indeterminate but Balachowsky, 1954e: 23, accepted the genus, and assigned it to his Lepidosaphedina.

Urococcus Lindinger, 1937, Ent. Jahrb. 46: 192, 197.

A lapsus for Ourococcus Fuller.

Variaspis Lindinger, 1932, Konowia 11:186.

TYPE-SPECIES: Protodiaspis lagunae Ferris, 1921, by original designation and monotypy.

Ferris, 1937a: 3, 6, placed this name as a synonym of Protodiaspis Cockerell.

Varicaspis MacGillivray, 1921, The Coccidae, p. 390.

TYPE-SPECIES: Aspidiotus fiorineides Newstead, 1920, by original designation and monotypy.

The author placed this genus in the Aspidiotini. Lindinger, 1937: 197, said, "=*Aspidiotus Bouche.*" Ferris, 1937e: 52, listed the genus with its type-species without comment.

Velataspis Ferris, 1937, Atlas of the Scale Insects of North America (ser. 1) [v. 1]: SI-131.

TYPE-SPECIES: Scobinaspis dentata Hoke, 1921, by original designation.

The author placed this genus in the Diaspidini. Balachowsky, 1954e: 91, assigned it to the Lepidosaphedina and included among its species, *serrifrons* Leonardi, type-species of *Scobinaspis* MacGillivray, 1921. If this placement is confirmed, *Velataspis* will fall into synonymy with *Scobinaspis*.

Versiculaspis MacGillivray, 1921, The Coccidae, p. 312.

TYPE-SPECIES: Chionaspis (Dinaspis) diosmae Brain, 1920, by original designation and monotypy.

The author placed this genus in the Diaspidini. Ferris, 1938b: 58, considered it valid as to separation from *Chionaspis* Signoret. Hall, 1946a: 499, accepted it. Balachowsky, 1954e: 171, assigned it to his Diaspidina, group II, chionaspiform.

Villigera Karsch, 1877, Revision der Gallmücken, p. 16.

TYPE-SPECIES: Villigera frauenfeldi Karsch, 1877, by original designation and monotypy.

The type-species was first described in considerable detail and figured under the name of "eine *Cecidomyia*" by von Frauenfeld, 1859: 247. From the Karsch discussion, it appears that the new genus and species were based wholly on the original Frauenfeld description and figure. A study of these shows that the insect represented is quite certainly the male of a species of *Drosicha* Walker.

- Vinculaspis Ferris, 1942, Atlas of the Scale Insects of North America (ser. 4) [v. 4]: SIV-423.
 - TYPE-SPECIES: Trigonaspis inclusa Ferris, 1941, by substitution of Vinculaspis for Trigonaspis Ferris.

The author presented this name as a substitute for *Trigonaspis* Ferris, preoccupied.

Vinsonia Signoret, 1872, Soc. Ent. de France Ann. (ser. 5) 1: 423; 1872, (ser. 5) 2:33.

TYPE-SPECIES: (Vinsonia pulchella Signoret, 1892) = Coccus stellifer Westwood, 1871, by monotypy.

The author described this genus as very close to *Ceroplastes* Gray. Lindinger, 1937: 198, placed the name in synonymy with *Ceroplastes*. Other authors have accepted it as a distinct genus.

Visonia Ashmead, 1891, Amer. Ent. Soc. Trans. 18:99.

A lapsus for Vinsonia Signoret.

Vitacoccus Řeháček, 1954, Časopis Moravskeho Mus. Vědy přír. 39: 141.

A lapsus for Vittacoccus Borchsenius.

Vittacoccus Borchsenius, 1952, Akad. Nauk SSSR Zool. Inst. Trudy 12:271.

TYPE-SPECIES: Lecanopsis longicornis Green, 1916, by original designation and monotypy.

The author placed this genus in the Filippiinae, Coccidae (str.), close to *Lecanopsis* Targioni-Tozzetti and *Exacretopus* Newstead.

- Volvicoccus Goux, 1945, Marseille Mus. d'Hist. Nat. Bul. [n.v. (v. 5?)] (1-2): 30.
 - TYPE-SPECIES: Volvicocous volvifer Goux, 1945, by original designation and monotypy.

The author presented this as a subgenus of *Trionymus* Berg. Its zoological status remains unsettled pending study of related forms in the Pseudococcidae.

Voraspis Hall, 1946, Roy. Ent. Soc., London, Trans. 97: 499, 539.

TYPE-SPECIES: Chionaspis carpenteri Laing, 1929, by original designation.

The author referred this genus to the Diaspidini close to *Phenacaspis* Cockerell. Balachowsky, 1954e: 356, placed it in his Diaspidina, group II, chionaspiform. Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 370, confirmed its identity and noted its closeness to *Rolaspis* Hall.

Walkerana Lindinger, 1937, Ent. Jahrb. 46, 198.

An emendation of Walkeriana Signoret.

Walkeriana Signoret, 1876, Soc. Ent. de France Ann. (1876) (ser. 5) 5:390.

TYPE-SPECIES: Coccus floriger Walker, 1858, by monotypy.

Morrison, 1928: 141, redescribed this genus and placed it in the Monophlebini, group 2.

Warajicoccus Kuwana, 1922, [Japan] Dept. Agr. and Comm., Imp. Plant Quar. Sta. Bul. 1:7.

TYPE-SPECIES: Monophlebus corpulentus Kuwana, 1902, by original designation.

This name is currently considered a synonym of Drosicha Walker.

Warburtonia Green, 1918, Ann. Appl. Biol. 4: 231, nomen nudum.

TYPE-SPECIES: Warburtonia frenchi [Green ?] 1918, by monotypy, nomen nudum.

The author presented the name "Warburtonia frenchi" in a list of coccid species affecting *Eucalyptus* without other information. No other reference to this name has been located.

Websteriella Leonardi, 1899, (separate) Riv. di Patol. Veg. 8: 6-7; 1900, 8: 208-209.

TYPE-SPECIES : Coccus zizyphi Lucas, 1853, by original designation.

The author presented this as a subgenus of *Parlatoria* Targioni-Tozzetti with type-species as stated above. MacGillivray, 1921: 247, mistakenly named *blanchardii* Targioni-Tozzetti as type-species, and Ferris, 1936a: 23, repeated the error. This name is currently considered a synonym of *Parlatoria*.

Westwoodia Signoret, 1875, Soc. Ent. de France Ann. (ser. 5) 5: 337.

TYPE-SPECIES : Westwoodia perrisii Signoret, 1875, by monotypy.

This name was preoccupied by Westwoodia Brullé, 1846, and other earlier applications. Kraatz, 1888: 176, proposed the name Signoretia, as a substitute, but later, 1888a: 360, in the same volume, indicated that Signoretia Kraatz was preoccupied by Signoretia Stål, 1859. See discussion under Signoretia. Trionymus Berg is the currently accepted valid name for this unit.

Xanthophthalma Cockerell and Parrott, 1899, in Cockerell, Biol. Centr. Amer. 2 (pt. 2):33.

TYPE-SPECIES: Xanthophthalma concinnum Cockerell and Parrott, 1899, by original designation and monotypy.

Ferris, 1938a: SII-173, redescribed this genus and placed it in the Xanthophthalmini, Diaspidinae, which he erected to receive it.

Xanthopkthmalma Ferris, 1957, Microentomology 22:65.

A lapsus for Xanthophthalma Cockerell and Parrott.

Xenococcus Silvestri, 1924, Indian Mus. Rec. 26: 311-312.

TYPE-SPECIES: Xenococcus annandalei Silvestri, 1924, by original designation and monotypy.

The author suggested similarity to *Orthezinella* Silvestri in the Orthezinae. Balachowsky, 1957a: 163, suggested that the affinities of this peculiar genus lie with the Eriococcini rather than the Orthezinae. Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 15, rejected its placement in the Eriococcidae.

Xenolecanium Takahashi, 1942, Formosa Govt. Agr. Res. Inst. Dept. Agr. Rpt. 81: 26-27.

TYPE-SPECIES: Xenolecanium mangiferae Takahashi, 1942, by original designation and monotypy.

The author noted a relation to Alecanium Morrison, Coccidae (str.).

Xerococcus Ferris, 1921, Stanford Univ. Pubs., Univ. Ser., Biol. Sci. 1:80.

TYPE-SPECIES: Xerococcus fouquieriae Ferris, 1921, by original designation and monotypy.

The author noted the wide divergence of this genus from the usual eriococcine type, yet believed that it belonged to the *Eriococcus* Targioni-Tozzetti group (Dactylopiidae, sens. str.). Hoy, 1963, New Zeal. Dept. Sci. and Indus. Res. Bul. 150: 15, accepted its assignment to the Eriococcidae.

Xerophilaspis Cockerell, 1897, U.S. Dept. Agr., Div. Ent., Tech. Ser. 6:14.

TYPE-SPECIES: Aspidiotus prosopidis Cockerell, 1895, by original designation and monotypy.

The author presented this as a subgenus of *Aspidiotus* Bouché. Ferris, 1921b: 94, placed the genus in the Diaspidini, rejecting the MacGillivray, 1921: 395, assignment to the Aspidiotini.

Xiphuraspis Borchsenius and Williams, 1963, Brit. Mus. (Nat. Hist.) Ent. Bul. 13: 370, 372, 375.

TYPE-SPECIES: Chionaspis spiculata Green, 1919, by original designation and monotypy.

The authors placed this genus in the Diaspidini, allied to Kuwanaspis MacGillivray.

Xylococculus Morrison, 1927, Biol. Soc. Wash. Proc. 40: 101.

TYPE-SPECIES: Xylococcus betulae Pergande, 1898, by original designation and monotypy.

The author established this genus for the reception of the North American species that had previously been placed in *Xylococcus* Löw. See Ferris, 1919b: 108-113, for comments on the validity of the included species.

Xylococcus Löw, 1883, Zool.-Bot. Gesell. Wien. Verhandl. (1882) 32: 274.

TYPE-SPECIES : Xylococcus filiferus Löw, 1883, by monotypy.

Morrison, 1928: 41-44, redescribed both genus and type-species, placing them in the Xylococcini, Xylococcinae, Margarodidae. He reassigned the American species, formerly included, to his new genus Xylococculus.



