

SEPARATE

OF A PAPER PUBLISHED BY
THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
ON BEHALF OF
THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

This is a separate of an application to the International Commission on Zoological Nomenclature for a ruling on a nomenclatural problem. The reference to the volume and part of the *Bulletin of Zoological Nomenclature* and the date of publication are printed at the foot of the first page.

2. Applications are published in the *Bulletin* so that zoologists may know what business is before the Commission and comment on any cases that interest them. Authors are provided with separates so that they may encourage zoologists likely to have a special interest to express their views to the Commission. A minimum interval of six months from the date of publication is allowed to elapse before the Commission commences taking a vote on any given application.

3. Recipients of separates are therefore particularly requested to forward their comments as soon as possible to the Secretary, the International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London, S.W.7, 5BD, England.

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PROPOSED CONSERVATION OF THE FAMILY-GROUP NAME ERIOCOCCIDAE COCKERELL, 1899 (INSECTA, HOMOPTERA) AND THE DESIGNATION OF A TYPE-SPECIES FOR *ERIOCOCCUS* TARGIONI-TOZZETTI, 1868 UNDER THE PLENARY POWERS. Z.N.(S.)2140

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1. The purpose of this application is to request the International Commission on Zoological Nomenclature (I.C.Z.N.) to use its Plenary Powers to insure continued usage of the family name ERIOCOCCIDAE Cockerell, 1899 and the generic name *Eriococcus* Targioni-Tozzetti, 1868. Should the Rules be strictly applied, *Eriococcus* would be removed from the group of genera traditionally placed in the ERIOCOCCIDAE, and the commonly used family-group name ERIOCOCCIDAE would have to be replaced by one based on one of the remaining nominal genera.

2. Numerous accounts in the literature indicate problems surrounding the usage of the names *Eriococcus* and ERIOCOCCIDAE (e.g. Ferris, 1955, pp. 69, 70, 1957, pp. 81, 82; Hoy, 1962, pp. 11-14; Miller and McKenzie, 1967, p. 480; Morrison and Morrison, 1966, pp. 1, 69; Williams, 1969, pp. 318, 325), but no application to the Commission has been made.

History of *Eriococcus*

3. Targioni-Tozzetti (1868, p. 726) described the genus *Eriococcus* but did not designate a type-species. He included five species previously described in *Coccus* Linnaeus by Fonscolombe (1834, pp. 204, 209, 216-218): *C. festucae*, *C. rorismarinis*, *C. buxi*, *C. crispus*, and *C. fimbriatus*. Because no detailed description of *Eriococcus* was given, Borchsenius (1948, p. 501) regarded *Eriococcus* Targioni-Tozzetti as a nomen nudum and attributed authorship to Signoret (1870, p. 283). Hoy (1962, p. 29) and Morrison and Morrison (1966, p. 69) correctly concluded that *Eriococcus* Targioni-Tozzetti was not a nomen nudum and was available according to Article 16 (a) (v) of the Code.

4. Signoret (1870, p. 283) in his treatment of *Eriococcus* stated that he was reserving that genus for *C. festucae* (..."*Eriococcus* Targioni, que nous réservons pour le *C. festucae* Fonscolombe" ...). Between 1870 and 1872 he apparently changed his mind, because he stated (1872, p. 429) that he was reserving *Eriococcus* for *C. buxi*. Although both of these "réservations" have been considered correct type-species designations (e.g. Lindinger, 1933, p. 78; Morrison and Morrison, 1966, p. 69), neither is valid according to Article 67(c) of the Code because they are not

ACANTHOCOCCIDAE. As evidence of the general usage of the family-group name ERIOCOCCIDAE, the following list of citations is given: Afifi, 1968, p. 167; Balachowsky, 1942, p. 42; Bazarov, 1963, p. 67; Boratynski, 1962, p. 55; Borchsenius, 1948, p. 501; Borchsenius and Danzig, 1966, p. 41; Danzig, 1964, p. 820; Danzig, 1975, pp. 63, 81; Ferris, 1957, p. 81; Green, 1922, p. 345; Hoy, 1962, p. 5, 1963, p. 5; Kosztarab, 1968, p. 12; Koteja, 1972, p. 569; Koteja and Zak-Ogaza, 1969, p. 362; Maxwell-Lefroy, 1909, p. 758; McDaniel, 1964, p. 101; McKenzie, 1964, p. 21; Miller, 1970, p. 157; Miller and McKenzie, 1967, p. 471.

11. All major studies of the family have used ERIOCOCCIDAE including "A catalogue of the ERIOCOCCIDAE of the world" (Hoy, 1963), "ERIOCOCCIDAE of New Zealand" (Hoy, 1962), "A review of the family Eriococcidae" (Ferris, 1957), "Morphology and taxonomy of the adult males of the families PSEUDOCOCCIDAE and ERIOCOCCIDAE" (Afifi, 1968), and "A systematic study of *Ovaticoccus* Kloet and its relatives, with a key to North American genera of ERIOCOCCIDAE" (Miller and McKenzie, 1967).

12. Use of the name ACANTHOCOCCIDAE in its various forms has been very limited since Cockerell first used ERIOCOCCINI. Hoy (1963, p. 22) listed only two such citations and to our knowledge ACANTHOCOCCIDAE has been used only by Koteja (1974a, p. 46; 1974b, p. 248) since Hoy's study. Hoy (1962, p. 14) stated that if *Eriococcus* and *Acanthococcus* are distinct genera as proposed by Borchsenius (1948), then the name ACANTHOCOCCIDAE by the Law of Priority might be used instead of ERIOCOCCIDAE. However, he did not accept Borchsenius' concepts and continued to use *Eriococcus* and ERIOCOCCIDAE in the traditional manner.

13. Williams (1969, p. 318) in his paper on family-group names of scale insects agreed with Hoy and suggested that the name ACANTHOCOCCIDAE be accepted depending on whether Borchsenius' (1948) concepts of *Eriococcus* and *Acanthococcus* are considered valid or not. Williams further pointed out that both family-group names *Kermesites* Signoret (1875, p. 15) and *Dactyloptes* Signoret (1875, p. 305) in the past have been considered part of the ERIOCOCCIDAE and have priority. However, it is now established that both DACTYLOPIIDAE and KERMESIDAE are distinct from ERIOCOCCIDAE.

14. If the Rules are followed, the genus *Eriococcus* with its type-species *Coccus crispus*, would be removed from the taxon presently considered under the family-group name ERIOCOCCIDAE and would have to be discarded as it is currently understood. The seldom used family-group name ACANTHOCOCCIDAE would be used in place of ERIOCOCCIDAE. This situation would be extremely undesirable, because in the current systematic literature the family-group name ERIOCOCCIDAE is utilized by nearly all scale taxonomists. Although the generic name *Eriococcus* has somewhat varied usage, it is presently considered only as a member of the taxon generally recognized under the family-group name ERIOCOCCIDAE.

15. The taxon generally recognized as the family ERIOCOCCIDAE contains species of economic importance. Because of this, a large quantity

of economic literature has been generated utilizing the current concepts of this name. Strict application of the Rules would upset general usage of this important name.

16. Of the five species first included in *Eriococcus* by Targioni-Tozzetti, only *Coccus buxi* is a representative of the taxon generally placed in the family ERIOCOCCIDAE. *Coccus festucae* is now placed in the COCCIDAE, *C. rorismarinis* in the PSEUDOCOCCIDAE, *C. crispus* in the MARGARODIDAE(?) (not an eriococcid), and *C. fimbriatus* in the ASTEROLECANIIDAE. Because *C. buxi* is a common, well-known species in Europe and because it is the only eriococcid of the first five species originally included in *Eriococcus*, we here suggest that it be designated as the type-species of *Eriococcus*.

17. *Eriococcus buxi* is not congeneric with *Acanthococcus aceris* (type-species of *Acanthococcus*). If *Acanthococcus* is not treated as a junior synonym of *Eriococcus*, the family-group name ACANTHOCOCCIDAE (*Acanthococcites*) has priority over ERIOCOCCIDAE (ERIOCOCCINI). Because the family-group name ERIOCOCCIDAE is used instead of ACANTHOCOCCIDAE by all but one living coccidologist including workers from Egypt, England, France, India, New Zealand, Poland, Russia, United States, etc., and because all major works on the taxon for the past 50 or more years have used ERIOCOCCIDAE (rarely DACTYLOPIIDAE), we are here requesting that the Commission grant the generally used name ERIOCOCCIDAE precedence over ACANTHOCOCCIDAE.

18. In the interests of stability and universality of scale-insect nomenclature, we therefore ask the Commission:

- (1) to use its plenary powers
 - (a) to set aside all designations of type-species made prior to the ruling now requested for the nominal genus *Eriococcus* Targioni-Tozzetti, 1868, and, having done so, to designate the nominal species *Coccus buxi* Fonscolombe, 1834, as the type-species of that genus;
 - (b) to rule that the family-group name ERIOCOCCINI Cockerell, 1899 (type-genus *Eriococcus* Targioni-Tozzetti, 1868) is to be given precedence over the family-group name ACANTHOCOCCIDAE (correction of "*Acanthococcites*") Signoret, 1875 (type-genus *Acanthococcus* Signoret, 1875) by any zoologist who believes that both names denote a single taxon at any given level in the family-group;
- (2) to place the following names on the Official List of Generic Names in Zoology:
 - (a) *Eriococcus* Targioni-Tozzetti, 1868 (gender: masculine), type-species, by designation under the plenary powers in (1) (a) above, *Coccus buxi* Fonscolombe, 1834;
 - (b) *Acanthococcus* Signoret, 1875 (gender: masculine), type-species, by monotypy, *Acanthococcus aceris* Signoret, 1875;

- (3) to place the following names on the Official List of Specific Names in Zoology:
- (a) *buxi* Fonscolombe, 1834, as published in the binomen *Coccus buxi* (specific name of type-species, by designation under the plenary powers in (1) (a) above, of *Eriococcus* Targioni-Tozzetti, 1868);
 - (b) *aceris* Signoret, 1875, as published in the binomen *Acanthococcus aceris* (specific name of type-species, by monotypy, of *Acanthococcus* Signoret, 1875);
- (4) to place the following names on the Official List of Family-Group Names in Zoology:
- (a) ERIOCOCCINI Cockerell, 1899 (type-genus *Eriococcus* Targioni-Tozzetti, 1868) with an endorsement that it is to be given precedence over ACANTHOCOCCIDAE Signoret, 1875 by any zoologist who believes that both names denote a single taxon at any given level in the family-group;
 - (b) ACANTHOCOCCIDAE (correction of "Acanthococcites") Signoret, 1875 (type-genus *Acanthococcus* Signoret, 1875) with an endorsement that it is not to be given priority over ERIOCOCCINI Cockerell, 1899 by any zoologist who believes that both names denote a single taxon at any given level in the family-group.

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