

A contribution to the knowledge of the African Coccoidea (Homoptera)

by

G. DE LOTTO

Plant Protection Research Institute, Pretoria

During my work on the taxonomy of the Coccoidea carried out at the Scott Agricultural Laboratories, Nairobi, a large amount of material from many parts of Africa was forwarded for identification by entomologists and farmers, or collected by me in Kenya, Tanganyika, Uganda and Zanzibar. Of the several species, old and new, thus accumulated in the departmental collection, only those belonging to the families Coccidae and Pseudococcidae have been thoroughly reviewed in my papers published to date. Although the remainder are no longer available for critical study, numerous notes on most of them are at hand dealing with their identity, distribution and host plants.

This paper presents the data pertaining to the first group of sundry species which, though previously known from Africa south of the Sahara, were collected in countries or on plants from which they have not hitherto been recorded. To them have been added a few new records of some mealy bugs and soft scales from African territories outside South and South West Africa, based on material submitted for identification since I joined the Plant Protection Research Institute, Pretoria.

Altogether seventy one species belonging to seven families are listed in the following pages. The classification here adopted that proposed by Ferris (1937). Owing to the unusually large number of records, dates of collection and collectors' names have been omitted.

From our present knowledge on the coccoid fauna of East Africa two preliminary general conclusions can be drawn: one concerns its composition, the other the vertical distribution of some of its components.

Leaving aside ubiquitous species, many of which are probably immigrants, the scale insects of East Africa have numerous forms in common with the fauna of the Oriental region, and particularly with that of the Indo-Ceylonese subcontinent. Most of the species seem to be restricted to the coastal districts and offshore islands. Among them are: *Ceroplastes rubens* Maskell; *Coccus acutissimus* (Green); *C. bicruciatu*s (Green); *C. mangiferae* (Green); *Kilifia acuminata* (Signoret)*); *Marsipococcus marsupialis* (Green); *Poliaspoides formosana* (Takahashi); *Pseudococcus citriculus* Green; and *Rastrococcus iceryioides* (Green). A few species, however, extend well inland as indicated by the records of *Centrococcus insolitus*

*) The identity and status of this species will be further discussed in the near future.

(Green) from Naivasha in the Rift Valley of Kenya (James, 1934); and *Coccus asiaticus* Lindinger from Toro in Uganda (De Lotto, 1957). Some of these species are certainly intrusive, others probably endemic: which are which can hardly be said at present.

In my opinion altitude often affects the natural dispersion of scale insects, and certainly accounts for the gaps in the distribution of some species observed in East Africa. According to my findings, species which, on the basis of the published records, would appear to be diffused from the coast to the shore of Lake Victoria, 3726 ft above sea level, do not actually occur in the area of Nairobi. This city is roughly midway between Mombasa to the east and Kisumu or Entebbe to the west, but is situated at an altitude about 2000 ft higher than Lake Victoria. These species are: *Aspidiotus destructor* Signoret; *Hemiberlesia palmae* (Morgan and Cockerell); *Pinnaspis strachani* (Cooley); and *Pseudoaonidia trilobitiformis* (Green). Conversely, species established in the highlands very likely do not occur at low altitudes. Apart from the single case discussed in the next paragraph, I refrain from listing any species which may fall within this group, as collecting in localities far from Nairobi was intermittent.

The selective rôle played by altitude on the distribution of the scale insects is better evaluated in instances where two or more species morphologically closely related occupy the same geographical area but thrive at different altitudes. This interesting behaviour has been rather extensively observed by me when studying the identity and distribution of the coffee green scales, *Coccus viridis* (Green) and *C. alpinus* De Lotto. According to my observations (De Lotto, 1960) the former is established only in low-lying districts up to about 3000 to 4000 ft above sea level, while the natural habitat of the latter ranges exclusively above that mark.

On the whole my study did not reveal many new elements which especially characterize the Ethiopian fauna of the African continent. The most important of them is the group of new species of the genus *Planococcus*, many having a strong structural affinity with the common citrus mealy bug, which suggest that not only the genus but also the type species *P. citri* (Risso), may have their centre of origin somewhere south of the Sahara.

ASTEROLECANIIDAE

Asterolecanium bambusae (Boisduval, 1869)

Fairly common in East Africa on cultivated bamboos.

KENYA: Nairobi, on *Bambusa vulgaris* Schrad. (Gramineae).

Asterolecanium robustum Green, 1908

Originally described by Green as a variety of *A. miliaris* (Boisduval, 1869), the insect has been raised to specific rank by Ferris (1955). A serious pest on all cultivated bamboos.

KENYA: Nairobi, on *Bambusa vulgaris* Schrad. (Gramineae).

UGANDA: Entebbe, on *Bambusa* species.

Cerococcus coffeae Vayssière, 1946

Several lots of a *Cerococcus* attacking arabica and robusta coffee were received from Kenya, Tanganyika, Uganda and Angola. Apart from slight variations on the colour of the covering test, ranging from deep yellow to pink, the material agreed adequately with the original description of *C. coffeae* presented by Vayssière (1946). Though widely distributed in East and Central Africa, the species is not very common.

Lecaniodiaspis erratica De Lotto, 1955

Since first described, many more samples of this species from arabica coffee from Kenya were submitted for identification. In no instance, however, had the infestations any economic importance.

KENYA: Nairobi, on *Ficus mallatocarpa* Warb. (Moraceae).

COCCIDAE

Ceroplastes ficus Newstead, 1910

ANGOLA: Nova Lisboa, on *Euphorbia pulcherrima* Willd. (Euphorbiaceae).

Coccus hesperidum Linnaeus, 1758

ANGOLA: Nova Lisboa, on *Citrus sinensis* Pers. (Rutaceae).

Coccus subhemisphaericus (Newstead, 1917)

ANGOLA: Assango, on *Coffea canephora* Pierre (Rubiaceae).

Gascardia brevicauda (Hall, 1931)

ANGOLA: Nova Lisboa, on *Coffea arabica* Linn. (Rubiaceae).

Gascardia destructor (Newstead, 1917)

ANGOLA: Nova Lisboa, on *Citrus sinensis* Pers. (Rutaceae); *Coffea arabica* Linn. (Rubiaceae).

Gascardia longicauda (Brain, 1920)

ANGOLA: Nova Lisboa, on *Jacaranda ovalifolia* R. Br. (Bignoniaceae); *Euphorbia pulcherrima* Willd. (Euphorbiaceae).

Pulvinaria aethiopica (De Lotto, 1959) **comb. nov.**

As I have pointed out previously (De Lotto, 1965) this species, in spite of the total absence at maturity of the ovisac, is structurally more closely related to the genus *Pulvinaria* Targioni-Tozzetti, 1867, (type species: *Coccus vitis* Linnaeus, 1758) to which it is here transferred, than to the genus *Coccus* Linnaeus, 1758

(type species: *Coccus hesperidum* Linnaeus, 1758), under which it was originally described.

ANGOLA: Nova Lisboa, on *Coffea arabica* Linn. (Rubiaceae); Cassongue: on *Coffea canephora* Pierre.

DIASPIDIDAE

In common with faunas of other regions, most of the coccoid forms occurring in Africa south of the Sahara belong to the armoured scale family Diaspididae, subfamily Diaspidinae.

Several mounted series of specimens of apparently new species referable to the genera *Diaspis*, *Gadaspis*, *Hemiberlesia*, *Lepidosaphes*, *Ledaspis* and its very close relative *Rolaspis*, etc., were presented to the collection of the British Museum (Natural History), London.

ASPIDIOTINI

All species of the genus *Selenaspidus* and its relatives accumulated in the departmental collection have been recently reviewed by Mamet (1958) in his monograph of the group. Their records are therefore omitted from the present list.

Africonidia africana (Newstead, 1913)

KENYA: Nairobi, on *Aleurites moluccana* (Linn.) Willd. (Euphorbiaceae).

Africonidia fiorineides (Newstead, 1920)

KENYA: Nairobi, on *Coffea robusta* Lindl. (Rubiaceae); *Jasminum* species (Oleaceae).

Africonidia subsimplex (Hall, 1931)

KENYA: Thika, on *Acacia* species (Leguminosae).

Aonidiella aurantii (Maskell, 1879)

Very common through East Africa where it ranks as a serious pest on citrus and roses.

KENYA: Nairobi, on *Rosa* species (Rosaceae); *Citrus limonia* Osbeck and *C. aurantium* Linn. (Rutaceae); *Ricinus communis* Linn. (Euphorbiaceae); *Persea gratissima* Gaertn. f. (Lauraceae); *Yucca* species (Liliaceae); Kisumu, on *Pyrus* species (Rosaceae).

Aonidiella orientalis (Newstead, 1894)

KENYA: Nairobi, on *Agave sisalana* (Engelm.) Perr. (Amaryllidaceae).

SOMALIA: Hargeisa, on *Citrus limonia* Osbeck (Rutaceae).

TANZANIA: Arusha, on *Agave sisalana* (Engelm.) Perr. (Amaryllidaceae).

Aonidiella replicata (Lindinger, 1909)

A rare species occurring in isolated, scattered specimens on the leaves of the host plants.

KENYA: Nairobi, on *Acrocarpus fraxinifolius* Wight (Leguminosae); *Chetachmae aristata* Planch (Ulmaceae); *Myrianthus arboreus* P. Beauv. (Moraceae).

Aspidiotus destructor Signoret, 1869

KENYA: Mombasa, on *Plumeria acutifolia* Poir (Apocynaceae); Gazi, on *Cocos nucifera* Linn. (Palmae); Kisumu, on *Carica papaya* Linn. (Caricaceae).

Aspidiotus hederæ (Vallot, 1829)

Widely distributed throughout Eastern Africa. In Kenya, however, I have never seen the host plants so heavily attacked by this species as those observed in Eritrea. The following is a selected list of the plants on which the species has been collected up to 1955.

ERITREA: Asmara, on *Nerium oleander* Linn. (Apocynaceae); *Vitis vinifera* Linn. (Vitaceae); *Phoenix canariensis* Host. (Palmae); *Acacia mollissima* Willd. (Leguminosae).

KENYA: on *Passiflora* species (Passifloraceae); *Aleurites moluccana* (Linn.) Willd. (Euphorbiaceae); *Melia azedarach* Linn. (Meliaceae); *Nerium oleander* Linn. and *Acokanthera schimperi* (D.C.) Benth. (Apocynaceae); *Caesalpinia bonduc* (Linn.) Roxb. and *Cajanus cajan* (Linn.) Mils. (Leguminosae); *Annona squamosa* Linn. (Annonaceae); Limuru, on *Solanum macrocarpum* Linn. (Solanaceae); Naivasha, on *Cassia didymobotrya* Fres. (Leguminosae); Ruiru, on *Citrus limonia* Osbeck (Rutaceae).

Aspidiotus vernoniae Hall, 1929

In my opinion this species is not a true representative of *Aspidiotus*, as the genus was conceived by Ferris (1941).

KENYA: Nairobi, on *Vernonia lasiopus* O. Hoffm. (Compositae).

Chrysomphalus dictyospermi (Morgan, 1889)

Apparently distributed on the coastal districts of East Africa and on the shore of Lake Victoria, where, however, it has never been recorded as a pest of economic importance. Once only a few specimens were collected by me in the central highland of Kenya. They were found among a large population of the closely related species *C. pinnulifer* (Maskell, 1891).

ERITREA: Ghinda, on *Citrus deliciosa* Ten. (Rutaceae).

KENYA: Mombasa, on *Mangifera indica* Linn. (Anacardiaceae); *Hyphaene thebaica* (Linn.) Mart. (Palmae); Nairobi, on *Eugenia jambos* Linn. (Myrtaceae); Kisumu, on *Mangifera indica* Linn. (Anacardiaceae).

Chrysomphalus ficus Ashmead, 1880

KENYA: Mombasa, on *Anacardium occidentale* Linn. (Anacardiaceae); *Citrus*

aurantium Linn. (Rutaceae). Namanga: on *Cycas* species (Cycadaceae).
 TANZANIA: Arusha, on *Citrus* species (Rutaceae).
 UGANDA: Kyembogo, on *Citrus* species.

Chrysomphalus pinnulifer (Maskell, 1891)

Very common in the central highland of Kenya, where at times it ranks as a pest on some cultivated plants.

KENYA: Karatina, on *Citrus* species (Rutaceae); Nairobi, on *Eugenia jambos* Linn. and *Callistemon lanceolatus* (Sims.) D.C. (Myrtaceae); *Gladiolus* species (Iridaceae); *Mangifera indica* Linn. (Anacardiaceae); *Aleurites moluccana* (Linn.) Willd. (Euphorbiaceae); *Acrocarpus fraxinifolius* Wight and *Ceratonia siliqua* Linn. (Leguminosae); *Agave sisalana* (Engelm.) Perr. (Amaryllidaceae); *Persea gratissima* Gaertn. f. (Lauraceae); *Grevillea robusta* A. Cunn. (Proteaceae); *Thea sinensis* (Linn.) Kuntze (Camelliaceae); Thika, on *Citrus aurantium* Linn. (Rutaceae).

Clavaspis herculeana (Doane and Hadden, 1909)

KENYA: Nairobi, on *Erythrina caffra* Thunb. (Leguminosae).

Duplaspidiotus tesseratus (Grandprè and Charmoy, 1899)

KENYA: Nairobi, on *Acalypha* species (Euphorbiaceae).

Hemiberlesia cyanophylli (Signoret, 1869)

KENYA: Nairobi, on *Callistemon lanceolatus* (Sims.) D.C. and *Eugenia jambos* Linn. (Myrtaceae); *Schinus molle* Linn. (Anacardiaceae); *Persea gratissima* Gaertn. f. (Lauraceae).

Hemiberlesia lataniae (Signoret, 1869)

Very common on several plants. The following is a selected list of the hosts on which it has been found up to 1955.

ERITREA: Asmara, on *Vitis vinifera* Linn. (Vitaceae); *Eriobotrya japonica* Lindl. (Rosaceae).

KENYA: Thika, on *Persea gratissima* Gaertn. f. (Lauraceae); South Tetu, on *Acacia mollissima* Willd. (Leguminosae). Nairobi: on *Solanum campylacanthum* Hochst. (Solanaceae); *Psidium guajava* Linn. (Myrtaceae); *Cordia holstii* Guerke (Boraginaceae); *Thea sinensis* (Linn) Kuntze (Camelliaceae); *Schinus molle* Linn. (Anacardiaceae); *Carissa edulis* Vahl (Apocynaceae); *Aberia caffra* Hook f. Harv. (Flacourtiaceae); *Berberis vulgaris* Linn. (Berberidaceae); *Cassia didymobotrya* Fres., *Erythrina caffra* Thunb., *Indigofera arrecta* Hochst., *Acacia abyssinica* Hochst., and *Cajanus cajan* (Linn.) Millsp. (Leguminosae); *Aleurites moluccana* (Linn.) Willd., *Clutia mollis* Pax, and *Gelonium procerum* Prain (Euphorbiaceae); *Eriobotrya japonica* Lindl. (Rosaceae); *Dodonaea viscosa* (Linn.) Jacq. (Sapindaceae); *Chaetachme aristata* Planch (Ulmaceae); *Trema guineensis* (Schum. & Thonn.) Ficalho (Urticaceae); *Urena lobata* Linn. (Malva-

ceae); *Calodendron capense* (Linn. f.) Thunb. (Rutaceae); *Limuru*, on *Mangifera indica* Linn. (Anacardiaceae).

Hemiberlesia palmae (Morgan and Cockerell, 1893)

This species has never been found in the Kenya central highland. In the coastal districts it is commonly found on leaves of coconut.

KENYA: Mombasa, on *Ehretia littoralis* Guerke (Boraginaceae); *Cocos nucifera* Linn. (Palmae); *Anacardium occidentale* Linn. (Anacardiaceae); Kisumu, on *Grewia* species (Tiliaceae).

Hemiberlesia rapax (Comstock, 1881)

KENYA: Nairobi, on *Bauhinia purpurea* Linn., *Pterolobium exosum* (Gmel.) Baker f., and *Pueraria thunbergiana* Benth. (Leguminosae); *Schinus molle* Linn. (Anacardiaceae); *Solanum macrocarpum* Linn. (Solanaceae).

Hemiberlesia securidacae (Hall, 1929)

Originally described as a variety of *Aspidiotus (Hemiberlesia) zizyphi* Hall, 1929, the form is here raised to specific rank. The differentiating characters given by Hall (1929) fully warrant this action in my opinion.

KENYA: Nairobi, on *Chaetachme aristata* Planch (Ulmaceae).

Hemiberlesia tectonae (Lindinger, 1913)

KENYA: Nairobi, on *Coffea robusta* Lindl. (Rubiaceae); *Ficus mallatocarpa* Warb. (Moraceae); *Calodendron capense* (Linn. f.) Thunb. (Rutaceae).

Howardia biclavis (Comstock, 1883)

A very rare species.

KENYA: Nairobi, on *Annona squamosa* Linn. (Annonaceae); *Bauhinia purpurea* Linn. (Leguminosae).

Lindigaspis opima (Silvestri, 1915)

KENYA: Nairobi, on *Rhus glaucescens* A. Rich. (Anacardiaceae); *Acokanthera schimperi* (D.C.) Benth. (Apocynaceae).

Pseudoaonidia trilobitiformis (Green, 1896)

This species has never been found on the Kenya central highland, whilst in the coastal districts it is fairly common.

KENYA: Mombasa, on *Anacardium occidentale* Linn. (Anacardiaceae); Kisumu, on *Grewia* species (Tiliaceae); *Citrus aurantium* Linn. (Rutaceae).

Separaspis capensis (Walker, 1852)

KENYA: Nairobi, on *Teclea simplicifolia* (Engl.) Verdoorn (Rutaceae).

DIASPIDINI

All species of *Africaspis* are omitted from this list. They will be dealt with by Mr J. Munting, who is working on a revision of the genus.

Aonidomytilus albus (Cockerell, 1893)

Samples of this species attacking stems and branches of cassava [*Manihot utilissima* Pohl (Euphorbiaceae)], were received from Teita Hills, Kenya; Kampala, Uganda; and Hargeisa, Somalia. In all instances the plants were heavily infested.

Aulacaspis tubercularis (Newstead, 1908)

Very common on leaves and young branches of mangoes.

KENYA: Nairobi, on *Mangifera indica* Linn. (Anacardiaceae); *Cinnamomum* species (Lauraceae).

UGANDA: Kampala, on *Mangifera indica* Linn. (Anacardiaceae).

Carulaspis visci (Schrank, 1781)

ERITREA: Asmara, on *Cupressus* species (Pinaceae).

Cooleyaspis praelonga (Newstead, 1920)

KENYA: Nairobi, on *Acokanthera schimperi* (D.C.) Benth. (Apocynaceae); *Strychnos* species (Loganiaceae).

Dentaspis hargreavesi (Laing, 1925)

KENYA: Nairobi, on *Teclea simplicifolia* (Engl.) Verdoorn (Rutaceae).

Diaspis boisduvalii Signoret, 1869

KENYA: Nairobi, on *Phoenix canariensis* Hort. (Palmae).

UGANDA: Kampala, on *Coffea robusta* Lindl. (Rubiaceae).

Diaspis bromeliae (Kerner, 1778)

KENYA: Thika, on *Ananas sativus* Schult. f. (Bromeliaceae).

Ischnaspis bipindensis Lindinger, 1909

KENYA: Nairobi, on *Acokanthera schimperi* (D.C.) Benth. (Apocynaceae); *Strychnos* species (Loganiaceae).

Ischnaspis longirostris (Signoret, 1882)

ERITREA: Asmara, on *Phoenix canariensis* Hort. (Palmae).

KENYA: Nairobi, on *Mangifera indica* Linn. (Anacardiaceae); *Chaetachme aristata* Planch (Ulmaceae); *Phoenix canariensis* Hort. (Palmae).

Ledaspis reticulata (Malenotti, 1916)

ERITREA: Debaroa, on *Capparis persicaefolia* A. Rich. (Capparidaceae).

KENYA: Athi River, on *Capparis* species.

Lopholeucaspis cockerelli (Grandprè and Charmoy, 1899)

KENYA: Nairobi, on *Dendrobium densiflorum* Wall. (Orchidaceae).

Parlatoria zizyphus (Lucas, 1853)

A serious pest on citrus in the eastern and western escarpments of Eritrea, in areas situated between 3000 and 5000 ft altitude.

ERITREA: Ghinda, on *Citrus deliciosa* Ten. (Rutaceae).

Phenacaspis cockerelli (Cooley, 1897)

KENYA: Mombasa, on *Cocos nucifera* Linn. (Palmae).

Pinnaspis strachani (Cooley, 1897)

KENYA: Mombasa, on *Cocos nucifera* Linn. (Palmae). Kisumu: on *Manihot* species (Euphorbiaceae).

Tecaspis fiorii (Leonardi, 1913), **comb. nov.**

ERITREA: Debaroa, on *Rhus abyssinica* Hochst. (Anacardiaceae).

Tecaspis retigera (Cockerell, 1901)

KENYA: Nairobi, on *Scutia myrtina* (Burm. f.) Kurz (Rhamnaceae).

ODONASPINI

Poliaspoides formosana (Takahashi, 1930)

The material listed below was kindly identified by the late Dr W. J. Hall.

KENYA: Nairobi, on *Bambusa vulgaris* Schrad. (Gramineae).

ERIOCOCCIDAE

Eriococcus araucariae Maskell, 1879

KENYA: Nairobi, on *Araucaria braziliensis* A. Rich. (Coniferae).

Eriococcus juniperinus De Lotto, 1954

ETHIOPIA: Harar, on *Juniperus procera* Hochst. (Coniferae).

MARGARODIDAE

Icerya aegyptiaca (Douglas, 1890)

KENYA: Gazi, on *Mangifera indica* Linn. (Anacardiaceae).

Icerya maxima Newstead, 1914

KENYA: Eldoret, on *Acacia mollissima* Willd. (Leguminosae); Kisumu, on *Ficus sycomorus* Linn. (Moraceae).

Icerya seychellarum (Westwood, 1855)

KENYA: Nairobi, on *Ficus ingens* Miq. (Moraceae); Kisumu, on *Mangifera indica* Linn. (Anacardiaceae).

Icerya tremae Vayssière, 1926

KENYA: Thika, on *Coffea arabica* Linn. (Rubiaceae).

PSEUDOCOCCIDAE

The records from East Africa and Congo listed below are based on material examined after my last paper on African mealy bugs (De Lotto, 1964) was sent to the press.

The generic status of *Pseudococcus hargreavesi* Laing, 1925; *P. transvaalensis* Brain, 1915; and *Trionymus longipilosus* De Lotto, 1961, is still provisional.

Maconellicoccus perforatus (De Lotto, 1954)

My suspicions that this species is a virus carrier (De Lotto, 1964) were further strengthened when surveying the experimental plots of cocoa in Zanzibar, where I observed a sort of S-shaped distortion of young branches attacked by it.

Nipaecoccus vastator (Maskell, 1895)

ANGOLA: Nova Lisboa, on *Coffea arabica* Linn. (Rubiaceae); *Cajanus* species (Leguminosae).

Paracoccus brugierae (De Lotto, 1961)

TANZANIA: Arusha, on *Hibiscus* species (Malvaceae).

Paracoccus burnerae (Brain, 1915)

ANGOLA: Nova Lisboa, on *Cassia* species (Leguminosae); *Solanum tuberosum* Linn. (Solanaceae); *Hibiscus rosa-sinensis* Linn. (Malvaceae).

Planococcoides ireneus De Lotto, 1964

This species, originally described under the name of *Pseudococcus latipes*

De Lotto, 1955 [*non*: Green, 1917], has been recently transferred by me (De Lotto, 1964) to the genus *Planococcoides* Ezzat and McConnell, 1956, on the ground of having the frontal (xvi) and the last three or four abdominal cerarii anterior to the anal lobes with five or six spines. In the material from Angola listed below all cerarii are normally formed with but two spines, thus displaying a closer affinity with species of the genus *Planococcus* Ferris, 1950. In all other body structures the specimens examined agree well with the original description.

ANGOLA: Golungo Alto, on *Coffea canephora* Pierre (Rubiaceae); Amboim, on *Coffea arabica* Linn.

Planococcus citri (Risso, 1813)

ANGOLA: Santa Comba, on *Solanum tuberosum* Linn. (Solanaceae); Nova Lisboa, on *Punica granatum* Linn. (Punicaceae).

Pseudococcus hargreavesi Laing, 1925

ANGOLA: Gabela, on *Coffea canephora* Pierre (Rubiaceae).

UGANDA: Tororo, on *Coffea arabica* Linn. and *C. robusta* Lindl.

Pseudococcus occiduus De Lotto, 1961

ANGOLA: Amboim, on *Coffea canephora* Pierre (Rubiaceae).

Pseudococcus transvaalensis Brain, 1915

CONGO: Nyatja, on roots of *Coreopsis* species (Compositae).

Trionymus longipilosus De Lotto, 1961

TANZANIA: Zanzibar, on *Theobroma cacao* Linn. (Sterculiaceae).

STICTOCOCCIDAE

Stictococcus brachystegiae Hall, 1935

ANGOLA: Nova Lisboa, on *Brachystegia* species (Leguminosae).

Stictococcus diversiseta Silvestri, 1915

KENYA: Kisumu, on *Gossypium* species (Malvaceae).

Stictococcus formicarius Newstead, 1910

KENYA: Nandi Hills, on *Coffea arabica* Linn. (Rubiaceae).

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