

## BIBLIOGRAPHICAL AND NOMENCLATORIAL NOTES ON THE HEMIPTERA. No. 2.\*

By G. W. KIRKALDY.

With great regret I feel it advisable to relinquish the suggestive and characteristic ordinal name "*Rhynchota*" for the prior "*Hemiptera*." I am by no means convinced of the necessity or advisability of enforcing priority in names above family rank; indeed in some cases it would appear inexpedient, if not impossible, to do so; but in such a case as the above, where a prior term has been in frequent, though partial, usage, it seems better to adopt it.

*Hemiptera* is a Linnean term, comprising in 1758 not only the "bugs" but also the *Dermaptera* (later called *Orthoptera*); Geoffroy in 1762 restricted "*Hemiptera*" to the bugs, placing the remainder of the old Linnean assemblage among the *Coleoptera*.

The following shows the synonymy according to priority; I would be sorry, however, to have to adopt "*Siphonata*" instead of "*Homoptera*."

Order: *HEMIPTERA*, Linné, 1758 (part); Geoffroy, 1762.  
type *Cimex*.

= *Rhyngota*, Fabricius, 1775 = *Rhynchota*, Burmeister, 1835.

Suborder 1: *HETEROPTERA*, Latreille, 1802, type *Cimex*.

= *Dermaptera*, Retzius, 1783 (nec De Geer, 1773).

= *Hemiptera*, Westwood, 1838.

2. *SIPHONATA*, Retzius, 1783, type *Cicada*.

= *Homoptera*, Latreille, 1802.

I have recently been led to look into the nomenclature of the Sternorrhynchous forms, &c., and find that these researches do not altogether confirm the changes of recent years; in particular it is to be regretted that Mrs. Fernald, in her recently published 'Catalogue of the Coccidæ,'†—a work for which, as a whole, one can find nothing to say but admiring thankfulness for the labour devoted to it during so many years,—it is to be regretted that the typical genus *Coccus* has been grievously misapplied.

\* See 'Entomologist,' xxxiii. pp. 288-43. (1900).

† Bul. Hatch, Exp. Sta. Mass. Agr. Coll., 88, pp. 1-360. (1908).

The genera *Aphis*, *Chermes*, and *Psylla* also, in most recent works, are evidently incorrectly determined. *Aphis* was founded by Linné in 1758, and continued undivided till 1801, when Lamarck fixed *ulmi*, Linn., Geoffr., Fab., as the type. This, however, is not *Lachnus ulmi* (Linné), as the addition of "Geoffroy, Ins. i. p. 494, t. 10, f. 8," shows, but is the so-called "*Tetraneura ulmi*, De Geer,"\* and therefore, not being a Linnean species, cannot affect the type-fixation. The next year Latreille selected *sambuci*, Linné, as the type, this being available.

*Chermes* has by some been included in the Coccidæ, by others in the Aphidæ, and by others in the Psyllidæ; the latter is the correct position, and the family should be known as Chermidæ.†

Founded in 1758, the genus was turned aside by Geoffroy in 1762,‡ to include part of *Coccus* (because "Kermes" was the Oriental name for certain Coccidæ!) and *Psylla* formed instead. The latter is therefore a pure synonym of *Chermes*, Linn., the type being *ficus*, Linn., Lam., 1801.

*Coccus* was divided by Geoffroy in 1762 (see footnote), and although, owing to the local faunistic nature of the work, the type cannot be definitely fixed, he certainly must be considered to restrict it to those forms which are characterized as "*Fœmina insecti formam servans*." The species he removes to *Chermes*, Geoffr., nec Linn., are characterized "*Fœmina folliculi formam induens*"; it is from this group that Mrs. Fernald has unfortunately chosen the type of *Coccus* (Canad. Entom. xxxiv. 232).§

As the type of *Coccus*, Lamarck (1801) selected "*Coccus mexicanus*, Lam. = *Coccus cacti coccinelliferi* Lin., *Coccus cacti*, Fabr., Ent. (= *Dactylopius coccus*, Costa, which it must supersede, the cochennille insect becoming *Dactylopius mexicanus*

\* The correct name is *Tetraneura gallarum-ulmi* (De Geer).

† I do not think it is necessary to form this name as Chermetidæ. Most entomologists appear to believe that the stem of all words modelled on the third declension of Latin nouns must end in *t* or *d*; hence *Tingitidæ*, instead of *Tingidæ*; *Gerrididæ*, instead of *Gerridæ*; *Chermetidæ*, instead of *Chermidæ*; *Aphididæ*, instead of *Aphidæ*, &c.

‡ A great deal of unnecessary trouble has been caused by the dispute as to the validity of Geoffroy's names. But even if Geoffroy, 1762, be denied, Müller, 1764 (except *Tetigonia*), or Geoffroy in Fourcroy, 1785, must be accepted. I do not know one single Hemipterous genus that is at all vitally affected; for *Tetigonia* one simply has to write 1785 instead of 1762, and, for the rest, "Müller, 1764," instead of "Geoffroy, 1762."

§ As regards the definite fixation of the type of *Coccus*, Geoffroy is excluded, first because he specifies no type, and secondly because his work is not a "Histoire abrégée des Insectes," but a "Histoire abrégée des Insectes qui se trouvent aux environs de Paris;" therefore, apart from types specially noted, or species of genera thereon erected, has no more value for our present purposes than a mere list of captures, the inclusion of certain species being due simply to the faunistic nature of the work. This applies also to Schrank, Scopoli, and other authors, often cited in the type-fixation of genera. "Historical" type-fixation can come into force from 1794 (as regards Hemiptera) when Fabricius instituted the type-system.

(Lam.)), but this is not available, the species being non-Linnean. In fact, I cannot find that the type of *Coccus* has ever been fixed, or that any species but the true Linnean *cacti* is available.

In a recent publication ("Homopteren aus Nordostafrika gesammelt von Oscar Neumann" (Zool. Jahrb., Abth. für Syst., xix. pp. 761-82, pl. 44 (1903)), Dr. A. Jacobi criticises my usage of *Tetigonia*, Geoffroy (p. 779), and proposes a new name—*Tettigoniella*. I regret that I cannot accept this. It is true that the name "*Tetigonia*" is very near the dermapterous genus *Tettigonia*, Linné, but not more so than, say, *Chrysocoris* (Hemiptera) and *Chrysocorys* (Lepidoptera), both of which are generally accepted. Geoffroy nowhere refers to Linné's genus, and indeed mentions that he has used the word for the "procigales" because other authors have employed it for these insects. As to the validity of the Geoffroyan genera, there is not the unanimity for their rejection that Dr. Jacobi supposes; in Hemiptera I mention the names of Champion (also a coleopterist!), Cockerell, Mrs. Fernald, Horváth, E. Saunders, and Stål, among those who accept them; and in fact—especially when genera like *Cylindrostethus* and the other extra-European genera founded by Fieber in the 'Europäischen Hemiptera,' and the Latreillean genera of the 'Précis' (1796), openly erected without any species, are universally accepted—I fail to see how they can be rejected. In the case of *Tetigonia* it was omitted by Müller (1764), but again maintained by Geoffroy in Fourcroy's 'Entomologia Parisiensis' (1785). Thirty-three species are included therein under *Cicada* (pp. 184-93), but on p. 193 he differentiates *Tetigonia* with two ocelli from *Cicada* with three, and adds in a footnote to the latter, "Adduntur hic characteres *Cicadae verae* Gallo-provincialis, nostrae *Cicadae Tetigonia* vocatae oppositi."

The following synonymy will summarize the above:—

1. APHIS, Linné, 1758; type *sambuci*, Linn., Latreille, 1802.
2. CHERMES, Linné, 1758 = *Psylla*, Geoffr., 1762 = *Homotoma*, Guérin, type *ficus*, Linn., Lamarck, 1801.
3. COCCUS, Linné, 1758 = *Llaveia*, Signoret, 1875; type *cacti*, Linn., Kirkaldy, 1904.
4. CALYMMATA, Costa, 1828 = || *Chermes*, Geoffroy, 1762, nec Linné; = || *Coccus*, Fernald, 1903, nec Linné.
5. DACTYLOPIUS MEXICANUS (Lamarck) = *Coccus mexicanus*, Lam., 1801 = *Coccus cacti*, auctt. = *Dactylopius coccus*, Costa, Fernald.
6. TETIGONIA, Geoffroy, 1762 = *Tettigoniella*, Jacobi, 1903; type *viridis* (Linné), Latr.

A few other notes on Mrs. Fernald's Catalogue are as follows:—

- P. 18. To *Drosicha* add *Drosycha*, Signoret (5), v. 351 (1875).

N.B.—This is a synonym of *Monophleba*, Latr., as will be noted shortly by Prof. Cockerell.

P. 31. To *Callipappus* add *Gallipappus*, Sign., 1869, Ann. S. Ent. France (4), ix. 103.

P. 46. To *Opisthoscelis* add *Ophisthoscelis*, Sign., *op. cit.* 100.

P. 57. For *Amorphococus* read *Amorphococcus*.

P. 82. The first citation of *Dactylopius tomentosus* is *Coccus tomentosus*, Lamarek, 1801, Syst. Anim. sans vertèbres, p. 299.

N.B.—Lamarek himself gives this as a synonym of *Coccus sylvestris*, Thiéry de Menonville, Traité de la Culture du Nopal, &c., p. 347 (1787), a work unknown to me.

P. 98. To *Calccolaria*, Mask., add var. *minor*, Mask., Tr. N.Z., Inst. xxix. 322.

P. 146. To *Ericerus* add *Eurycerus*, Tozzetti, 1867, Mem. Soc. Ital. iii. no. iii., 19.

P. 158. To *Chelonococcus* add *Chelinococcus*, Signoret, 1869, Ann. S. Ent. France (4), ix. 104.

P. 166. For "*perforatus*" (line 13) read "*Coccus perforatum*, Kirkaldy," &c.

P. 167. For *Coccus* use CALYMMATA (see above).

P. 180, no. 906. Read EULECANIUM CURTISI, n. n. = *Coccus aceris*, Curtis nec Fabricius.

P. 209. RHIZOBIMUM, Tozzetti, 1867, is "described", though very scantily, and must replace *Lecanopsis*. The type, though not specified, can be nothing but *rhizophila* (Signoret).

P. 244. Replace "*Leucaspis*, Targ.," by the following:—

LEUCODIASPIS, Signoret, 1869, Ann. Soc. Ent. France (4), ix. 99; type *signoreti*.

= *Leucaspis*, Sign., 1870, *op. cit.* x. 100.\*

P. 314. *Major*, Cockerell nec Maskell.

P. 318. *Parlatoria*, Sign., 1869, *op. cit.*, ix. 99; types *zyzyphus* (sic!) and *proteus*.

N.B.—The genus *Encarsia* was listed under Coccidæ in error in the Zool. Record for 1895!

P. 256, line 29. "*Ohia*" is a species of *Metrosideros*.

P. 277, line 11 from bottom. After "Full." read "Trans. Ent. S. London, 1897, p."

P. 304. LEPIDOSAPHES COCKERELLIANA, n. n. for *Mytilaspis albus*, Cockerell, nec Maskell, 1896.

I regret that I cannot admit any names taken from Tozzetti's Catalogue of 1868,† this work being to me of academic interest only, consisting as it does of a confused series of names, without descriptions or intelligible references. The correct references to the following genera appear to me to be as follows:—

\* *Leucaspis* is preoccupied by Burmeister, 1835, Arch. für Naturg. i. pt. 2, p. 47.

† Mrs. Fernald cites "1869," but it is quoted in part of Signoret's "Essai," published in the volume for 1868.

P. 49. *Asterolecanium*, Signoret, 1869, Ann. S. Ent. Fr. ac (4), ix. 101.

P. 59. *Pollinia*, Sign., l. c.

P. 246. *Fiorinia*, Sign., l. c., 99; type *arecae* (Bdv.), Sign. = *fiorinæ* (Tozz.).

P. 295. *Targionia*, Sign., l. c., 100.

P. 301. *Aonidia*, Sign., l. c., 99; type *aonidium* = *lauri*.

P. 304. *Mytilaspis*, Sign., l. c., 99 (syn. of *Iepidosaphes*)

P. 128. *Pulvinaria*, Tozzetti, 1867, Mem. Soc. Ital. iii., no iii. 30.

The subfamily nomenclature of the Coccidæ seems to be as follows:—

P. 15 (1). COCCINÆ = *Monophlebinae*, Fernald.

P. 28 (2). *Margarodinae*.

P. 33 (3). *Orthezinae*.

P. 38 (4). *Phenacoleachiinae*.

P. 38 (5). *Conchaspinae*

P. 39 (6). KERMINÆ = *Dactylopiinae*, Fernald.

P. 123 (7). *Tachardiinae*.

P. 127 (8). CALYMMATINÆ = *Coccinae*, Fernald.

P. 213 (9). *Diaspinae*.

P.S.—*Pseudococcus* was founded by Westwood in 1839 (2) (Introduction, ii. 447), type *cacti*, (nec Linn.); it is therefore a pure synonym of *Dactylopius*, Costa; for *Pseudococcus*, Fernald (p. 96), *Trechocorys*, Curtis, must be used, type *adonidium* (Linn.) = *longispinus* (Riley).

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## NEW RHYNCHOTA-CRYPTOCERATA.

By W. L. DISTANT.

Fam. NAUCORINÆ.

Subfam. NAUCORINÆ.

*Macrocoris transvaalensis*, sp. n.

Head and pronotum ochraceous, punctured with piceous, the rostrum with two central piceous lines, which join a subbasal transverse piceous line, behind which the piceous punctures are absent; scutellum black; hemelytra piceous, apex of clavus and anterior lateral margin of corium ochraceous; connexivum ochraceous, with piceous spot at the incisures; body beneath and legs ochraceous, lateral areas of the mesosternum more or less piceous; head shorter than its breadth between eyes, which are anteriorly somewhat convergent; lateral margins of the pronotum broadly convex; scutellum finely granulate; anterior femora more or less strongly fuscously punctate. Length 10 millim., lat. post. pronot. angl.  $5\frac{1}{2}$  millim.

*Hab.* Transvaal; Lydenburg Distr.

Differs from *M. flavicollis*, Sign., by the much narrower head,