

A REVIEW OF THE *PHARINI* (COLEOPTERA :  
COCCINELLIDAE).

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THE primary purpose of this paper is the description of a new genus and species of ladybird from material collected by Mr. J. H. Brettell of Rhodes University, Grahamstown, S. Africa. The determination of the relationships of the new genus with known genera involved, as is so often the case, an investigation of the systematic arrangement of a whole tribe. Although the result of this study is in no way a definitive revision of the group concerned, it is thought that such facts as have come to light may serve the double purpose of indicating the systematic position of the new insect and laying the foundations for a thorough study of the tribe in which it is now placed.

What follows therefore is a preliminary account of the PHARINI with a key to twenty-two genera known to the author, notes on some of the genera with citations of type species and a description of the new species with a discussion of its relationships.

The tribe PHARINI is attributed to Casey (1899). It comprises a number of aberrant coccinellids in which the apical segment of the maxillary palpi does not have the securiform appearance characteristic of the family in general, but is more or less conical, sometimes being sharply pointed. The more extreme forms found within the group show a distinct affinity with the SERANGIINI, a tribe of small coccinellids occurring in the African and Oriental regions as well as the New World and exhibiting very marked, often specialised, aberrant features. The SERANGIINI differ from the PHARINI in that the head is always capable of being withdrawn into the thorax to an extent which conceals the mouthparts and in that the antennal club is always composed of a single, elongate segment.

As treated in this paper, the PHARINI may be defined as follows :— Small to medium-sized Coccinellinae ; frequently subhemispherical, but occasionally elliptical and less convex ; pubescent or glabrous or with a few hairs on the upper surfaces ; usually winged. *Head* with genæ not expanded laterally to cover antennal insertions (*Promecopharus* Sicard p. 633 is an exception to this rule and may at some future date be removed from the group) ; antennæ with from seven to eleven segments and with a club composed of from one to five segments ; maxillary palpi with apical segment more or less pointed and conical, not securiform. *Pronotum* sometimes with a line or ridge separating the anterior angles from the disc (fig. 2). *Scutellum* visible. *Elytra* confusedly punctate. *Prosteronum* usually with longitudinal ridges on process between anterior coxæ,

anterior margin of prosternum at most slightly produced downward. Mesosternum flat. Metasternum more or less convex. First abdominal segment with postcoxal plates usually incomplete externally and reaching to hind border of segment (two genera have the plates complete externally and in a third they do not reach the posterior border of the segment, although they are incomplete externally). Abdomen composed of five or six segments, the fifth segment usually being distinctly longer than the preceding segment. *Legs* with tarsal claws usually simple or at most slightly thickened at bases, appendiculate in a few genera.

A key to twenty-two of the twenty-five genera included by the above definition is given below. Three genera, known to the author from their descriptions alone are not included as some of the required characters have no mention therein.

Two of the three unknown genera are from Africa. Herr Fürsch of Munich is making a special study of African Coccinellidae. He has examined the Weise collections in Berlin and Stockholm and has been kind enough to inform the author that they do not appear to contain any specimens of these genera.

The third genus, erected for a single species from Australia, should be recognisable without difficulty if found. The only other member of the PHARINI found in Australia is *Bucolletus ornatus* Blackburn and this has five segments to the abdomen and does not have the anterior angles of the pronotum separated from the disc by a line or ridge as is the case with Weise's genus *Dichaina*.

#### **Dichaina** Weise.

*Dichaina* Weise, 1923, *Arkiv. Zool.* **15** (12) : 145.

Type Species : *Dichaina inornata* Weise (1923, Australia).

As far as is ascertainable from Weise's description, this genus is one of those in which the anterior angles of the pronotum are separated from the disc by a line or ridge. The insect has six visible abdominal segments and the clypeus is briefly emarginate around the antennal insertions.

These facts relate the genus to *Coccidophilus*, *Microweisea*, and *Stictospilus*, but unfortunately Weise is not sufficiently informative about the elytral epipleura and the antennæ for *Dichaina* to be included in the following key.

#### **Scotoscymnus** Weise.

*Scymnomorphus* Weise (nec Blackburn, 1892), 1897, *Dtsch. ent. Z.* p. 303.

*Scotoscymnus* Weise, 1901, *Dtsch. ent. Z.* p. 458.

Type Species *Scymnomorphus rotundatus* Weise (1897, E. Africa).

Weise (1897), used the name *Scymnomorphus* for a newly erected genus without realising that it was unavailable. He later corrected his error as indicated above. No type species has been, as yet, selected for the genus and it is here proposed that *Scymnomorphus rotundatus* Weise be the type species of *Scotoscymnus* Weise (1901)(=*Scymnomorphus* Weise 1897).

Weise makes a particular point of describing the very small prosternum found in this genus and states that the retracted head covers the anterior coxæ. This feature, together with the second impressed line close to the lateral borders of the pronotum and running parallel with the borders should serve to characterise the genus which so far includes three small species, all African and all less than two millimetres long.

### **Xanthorcus** Weise.

*Xanthorcus* Weise, 1898, *Dtsch. ent. Z.* p. 117.

Type Species : *Xanthorcus concinnus* Weise (1898, Cameroons).

The maxillary palpi in this genus have an apical segment which is not so pointed as is usual in the PHARINI. The elytral epipleura are broad and strongly descending externally. These characters, together with the incomplete postcoxal plates of the first abdominal segment relate the genus to *Lotis* Mulsant and *Martinella* Sicard, but Weise states that the front of the head is weakly emarginate around the antennal insertions. *Xestolotis* Casey and *Habrolotis* Weise also have strongly descending elytral epipleura and incomplete postcoxal plates on the first abdominal segment. In the latter two genera however, although the clypeus is emarginate around the antennal insertions, the apical segment of the maxillary palpi is longer and more pointed than it is in the cases of either *Lotis* or *Martinella*.

### KEY TO GENERA.

- |    |   |                                   |
|----|---|-----------------------------------|
| 1. | First abdominal segment with postcoxal plates entire, reaching coxal cavities externally . . .  | 2.                                |
| —  | First abdominal segment with postcoxal plates which are incomplete externally . . . . .   | 3.                                |
| 2. | 1. Upper surfaces finely pubescent. (Africa) . . .  | <b>Hemipharus</b> Weise (p. 631). |
| —  | Upper surfaces glabrous (Japan) . . . . .   | <b>Plotina</b> Lewis (p. 632).    |
| 3. | 1. Species strongly convex, hemispherical ; elytral epipleura strongly descending externally and entirely obscuring retracted legs when viewed from the side, foveate to receive the femoral apices . . . . . | 4.                                |
| —  | Body of variable convexity and outline ; epipleura of elytra sometimes with foveæ, but not strongly descending externally so as entirely to obscure the legs when viewed from the side . . . . .              | 7.                                |
| 4. | 3. Front of head not emarginate around antennal insertions (fig. 8) ; maxillary palpi with apical segment less conical, more obliquely truncated (fig. 9) ; tarsal claws simple or appendiculate . . . . .    | 5.                                |
| —  | Front of head emarginate around antennal insertions (fig. 11) ; apical segment of maxillary palpi more pointed (fig. 10) ; tarsal claws simple . . . . .  | 6.                                |
| 5. | 4. Upper surfaces pubescent ; tarsal claws appendiculate. (Africa) . . . . .  | <b>Trimallena</b> n. n. (p. 632). |
| —  | Upper surfaces glabrous ; tarsal claws simple or appendiculate. (Africa) . . . . .  | <b>Lotis</b> Mulsant (p. 632).    |

6. 4. Anterior border of prosternum downwardly produced medially to form a small plate against which the mouthparts rest when the head is inflected ; postcoxal plates of first abdominal segment reaching apex of segment ; frons without a raised ridge along inner borders of eyes. (Africa)..... **Xestolotis** Casey (p. 632).
- Anterior border of prosternum not downwardly produced medially ; postcoxal plates of first abdominal segment not reaching apical border of segment and not continued laterally beyond middle of coxæ ; frons raised into a shallow, fine ridge along inner borders of eyes. (Madagascar)..... **Habrolotis** Weise (p. 632).
7. 3. Genæ expanded to form a lamella on either side of head after the manner of *Chilocorus* and *Exochomus*, deeply dividing the eyes and covering the antennal insertions. (Elytral epipleura narrow and not foveate ; body pubescent above ; prosternum downwardly produced anteriorly to form a partial cover for the mouthparts when the head is retracted). (S. India)..... **Promecopharus** Sicard (p. 633).
- Genæ not produced to cover antennal insertions and deeply divide eyes..... 8.
8. 7. Front of head emarginate round antennal insertions (fig. 11)..... 9.
- Front of head not emarginate around antennal insertions (fig. 8)..... 17.
9. 8. Antennæ 11-segmented ; size larger, 2 mm. long or more ; pronotum without a ridge or line near anterior angles dividing angles from disc. 10.
- Antennæ less than 11-segmented ; size smaller, less than 2 mm. long ; pronotum with a ridge, line or raised area near anterior angles (fig. 2). 12.
10. 9. Upper surfaces pubescent ; elytral punctures more or less uniform in size ; elytral epipleura without foveæ. (India and Malaya). **Jauravia** Motschulsky (p. 633).
- Upper surfaces glabrous ; elytral punctures of two distinct sizes ; elytral epipleura more or less foveate to receive femoral apices..... 11.
11. 10. Elytra with humeral calli, wings fully developed. (India, etc., Far East, Australia)..... **Sticholotis** Crotch (p. 633).
- Elytra without humeral calli, wings more or less atrophied. (India)..... **Stictobura** Crotch (p. 633).
12. 9. Antenna 7-segmented, club formed from a single segment (fig. 3) ; prosternum downwardly produced to form a small chin-piece. (Africa)..... **Diloponis** gen. n. (p. 633).
- Antennæ at least 8-segmented and with a club made up of at least two segments ; prosternum downwardly produced or not..... 13.
13. 12. Elytral epipleura narrow, scarcely wider than metepisterna ; prosternum with normally-broad intercoxal process (fig. 7)..... 14.
- Elytral epipleura much broader than metepisterna ; intercoxal process of prosternum narrow and knife-like (fig. 12), anterior coxæ almost contiguous. (Upper surfaces conspicuously, though sparsely pubescent). (Africa)..... **Orculus** Sicard (p. 637).

14. 13. Antennal club made up of two segments ;  
elytra with at least very short pubescence .. 15.
- Antennal club made up of three segments ;  
elytra glabrous. (America, West Indies) .. **Microweisea** Cockerell (p. 637).
15. 14. Pubescence very long, outstanding, sparse ;  
antennæ 10-segmented. (Chile) ..... **Stictospilus** Brèthes (p. 638).
- Pubescence very short, visible with difficulty by  
viewing tangentially at a magnification of  
100 ; antennæ 9-segmented ..... 16.
16. 15. Apical antennal segment broad, bluntly angled  
apically (fig. 13). (S. America and West  
Indies) ..... **Coccidophilus** Brèthes (p. 638).
- Apical antennal segment elongate, acuminate  
at apex (fig. 14). (Chile) ..... **Pseudosmilia** Brèthes (p. 638).
17. 8. Upper surfaces almost or quite glabrous ;  
antennæ 10-segmented with a 3-segmented  
club. (Africa) ..... **Pharopsis** Casey (p. 639).
- Upper surfaces obviously pubescent ; if  
antennæ 10-segmented then club composed of  
more than three segments ..... 18.
18. 17. Prosternum almost as broad as long between  
anterior coxæ, prosternal carinæ strongly  
divergent in front of coxæ ; postcoxal plates  
of first abdominal segment not reaching apical  
border of segment : (Elytral epipleura  
obviously foveate to receive femoral apices of  
middle and hind legs). (Australia) ..... **Bucolellus** Blackburn (p. 639).
- Prosternum distinctly elongate between anterior  
coxæ, prosternal carinæ, if present, not  
divergent in front of coxæ ..... 19.
19. 18. Prosternal carinæ present and parallel ;  
antennæ consisting of from 8-10 segments,  
two or three of which are enlarged to  
form a club ; abdomen with five visible  
segments ..... 20.
- Prosternal carinæ absent ; antennæ 10-  
segmented with a 5-segmented club ;  
abdomen with six visible segments ..... 21.
20. 19. Antennal club composed of two segments ;  
pubescence of upper surfaces extremely short.  
(E. Europe and Mediterranean) ..... **Coelopterus** Mulsant (p. 639).
- Antennal club made up of three segments ;  
pubescence of upper surfaces moderately  
long, easily visible. (Europe, Asia and  
Africa) ..... **Pharoscymnus** Bedel (p. 639).
21. 19. **Phlyctenolotis** Sicard }  
**Xamerpillus** Sicard } ..... (p. 640).

### **Hemipharus** Weise.

*Hemipharus* Weise, 1897, *Dtsch. ent. Z.* p. 303.

Type Species : *Hemipharus cautus* Weise (1897, E. Africa).

This genus is known to the author from its description alone, but has been placed in the key to genera by means of its pubescent upper surfaces and the complete postcoxal plates on the first abdominal segment.

The type species, so far the only species assigned to the genus, is small, subhemispherical, black with a dark red, oblique stripe on each elytron and is 1.5 mm. long.

**Plotina Lewis.**

*Plotina* Lewis, 1896, *Ann. Mag. Nat. Hist.* (6) 17 : 35.

Type Species : *Plotina versicolor* Lewis (1896, Japan).

*Plotina* is also a monobasic genus. The mandibles are bifid apically, the antennæ are eleven-segmented with a three-segmented club, the tarsal claws are simple ; the elytral epipleura are narrow and not descending externally and there are only five visible abdominal segments.

**Trimallena n. n.**

*Martinella* Sicard, 1907, *Ann. Soc. Ent. Fr.* 76 : 416.

Type Species : *Martinella sellata* Sicard (1907).

(= *Exochomus justitiae* Gorham (1901, Natal)).

The generic name *Martinella* was first used in 1887 by Jousseaume for a group of molluscs. Sicard therefore created a homonym which requires replacement. The new name here proposed is *Trimallena*, a rearrangement of the unavailable name.

**Lotis Mulsant.**

*Lotis* Mulsant, 1850, *Spec. Trim. Securipalp.* p. 503.

Type Species : *Lotis neglecta* Mulsant (1850, S. Africa).

This genus is entirely confined to Africa. Its members are small, very strongly convex, usually black with or without red markings on the elytra.

Mader (1954, *Explor. Parc Nat. Albert. Miss. de Witte* 1933-35, fasc. 80 : 177-86) provides a key for the identification of the species of *Lotis* in combination with all other African members of the PHARINI. All described African species of *Lotis* are included in the key with the exception of Casey's misinterpretation of *L. neglecta* Mulsant, renamed *L. quad-rivulneratus* by the present author (Pope, 1957, *South African Animal Life*, 4 : 321, Uppsala).

**Xestolotis Casey.**

*Xestolotis* Casey, 1899, *J. N. York Ent. Soc.* 7 : 164.

Type Species : *Xestolotis stictica* Casey (1899, W. Africa).

A single species is so far referred to this genus. It is small, round, strongly convex, black and with elytral punctures of one size. The antennæ are eleven-segmented with a three-segmented club and the mandibles are bifid apically.

**Habrolotis Weise.**

*Habrolotis* Weise, 1895, *Dtsch. ent. Z.* p. 56.

Type Species : *Habrolotis picta* Weise (1895, Madagascar).

This genus is confined to Madagascar. The antennæ are eleven-segmented with a three-segmented club, the carinæ of the prosternal process are parallel and well-marked and the mandibles are bifid apically. The most characteristic feature of the genus is the formation of the postcoxal plates of the first abdominal segment.

**Promecopharus** Sicard.

*Promecopharus* Sicard, 1910, *Ann. Soc. Ent. Fr.* **79** : 388.

Type Species : *Promecopharus andrewesi* Sicard (1910, India).

This genus, having the genæ produced laterally after the fashion of the CHILOCORINI and PLATYNASPINI, may seem wrongly assigned to the PHARINI, but the apical segment of the maxillary palpi is not securiform. Casey (1899), erected a separate tribe for his genus *Telsimia*. This group has most of the characters displayed by *Promecopharus*, but has only five abdominal segments in contrast to the six of the Sicard genus.

The single species in the genus is small, elliptical and not unlike a species of *Nephus* Mulsant in general appearance.

**Jauravia** Motschulsky.

*Jauravia* Motschulsky, 1858, *Etudes Ent.* **7** : 117.

*Clanis* Mulsant, 1850 (*nec* Hubner, 1819), *Spec. Trim. Securipalp.* p. 949, 999.

Type Species : *Jauravia pallidula* Motschulsky (1858, India).

Kapur (1946, *Ann. Mag. nat. Hist.* (11) **13** : 73-93) revised the genus as a whole and pointed out its relationship with *Sticholotis* Crotch (below) among the PHARINI. He provided a key to the species of the genus, describing three as new and removing four hitherto placed in *Jauravia* by authors.

*Jauravia* is one of the few genera within the group with appendiculate tarsal claws and six visible segments to the abdomen. Most of the species are more or less palely testaceous with or without black markings on the elytra.

**Sticholotis** Crotch.

*Sticholotis* Crotch, 1874, *Revis. Coccin.* p. 200.

Type Species : *Sticholotis substriatus* Crotch (1874, Japan).

Apart from the features mentioned through the key to genera, this genus is characterised by the possession of bifid mandibles, broad elytral epipleura which are not strongly descending externally, simple tarsal claws and well-marked prosternal carinæ.

**Stictobura** Crotch.

*Stictobura* Crotch, 1874, *Revis. Coccin.* p. 201.

Type Species : *Calvia pallideguttata* Mulsant (1853, Malabar).

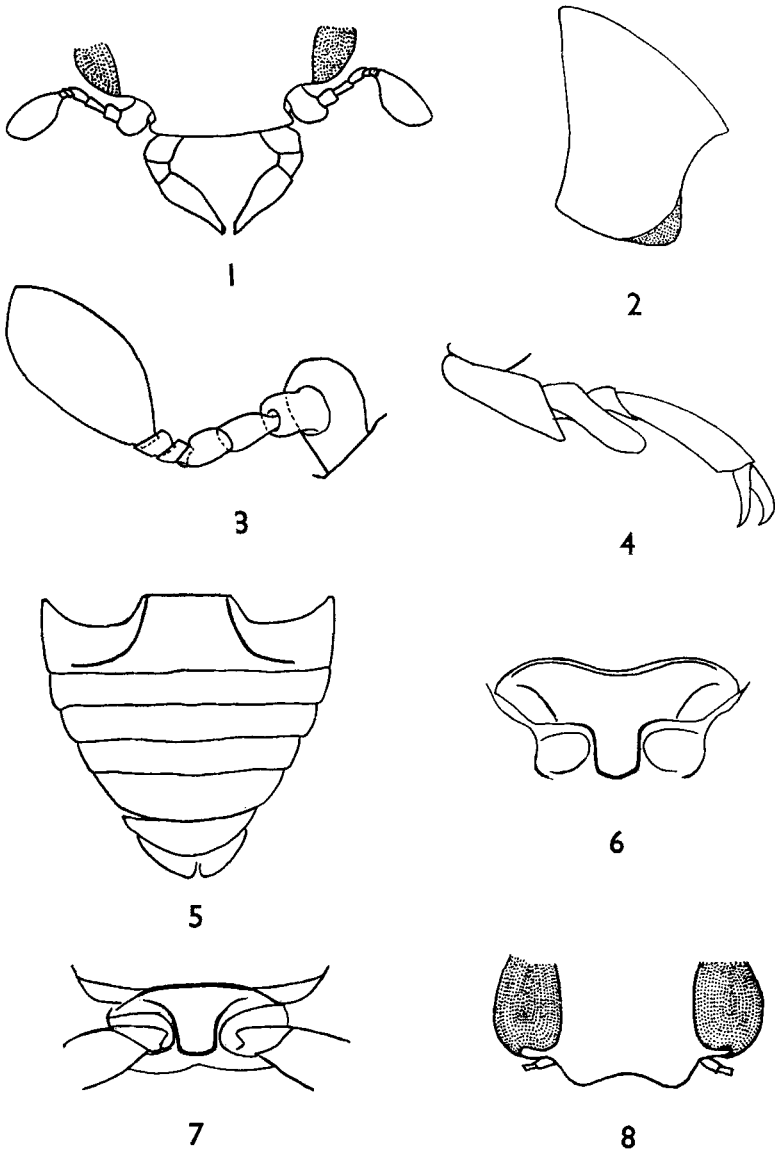
*Stictobura* is very closely related to *Sticholotis*, differing from it as indicated in the key to genera. Crotch refers to the hypomera of *Sticholotis* as being foveolate whereas those of *Stictobura* are not. This character is not always found in *Sticholotis* and so is of no great value as a means of distinguishing between the two genera.

**Diloponis** gen. n.

Type Species : *Diloponis inconspicuus* sp. n. (S. Africa).

Minute ; strongly convex ; oval-elliptical ; clothed with very short pubescence above. *Head* (fig. 1) produced in front of rather coarsely

Figs. 1-8.



- 1-6. *Diloponis inconspicuus* gen. et sp. n.  
 1. Head. 2. Pronotum, lateral view with triangular area dotted. 3. Antenna. 4. Hind tarsus. 5. Abdomen (Slide preparation). 6. Prosternum (Intercoxal process emphasized by thickening of the outline). 7. *Microweisea suturalis* Schwarz. Prosternum (Intercoxal process emphasized by thickening of the outline). 8. *Lotis neglecta* Muls. Head.



faceted eyes, emarginate around antennal insertions ; anterior border of head almost straight between rounded anterior angles ; labrum broadly transverse ; mandibles with a simple, pointed apex ; maxillæ with apical segment of palpi semi-fusiform, very obliquely truncated at narrow apex ; antennæ seven-segmented with a single-segmented club (fig. 3), segments five and six together about as long as third or fourth segment. *Pronotum* strongly transverse and strongly convex ; anterior angles produced and median third of anterior border forwardly arcuate ; lateral margins with a fine raised border which is widened along its anterior third to form a narrow, triangular area inside anterior angles (fig. 2) ; hind angles briefly rounded ; hind margin with an extremely faint and fine line just inside hind edge, edge very slightly arcuate on either side of narrowly truncated portion immediately in front of scutellum. Scutellum equilateral, triangular. *Elytra* convex ; lateral margins narrowly but entirely explanate ; punctures of one size ; epipleuræ narrow, never much broader than metepisterna, much narrower behind level of hind coxæ. Prosternum broadly produced anteriorly so as to form a partial cover to mouthparts when head is inflected (fig. 6) ; carinæ of prosternal process short, parallel, following lines of lateral border of process, ending freely before reaching level of anterior borders of coxæ. Mesosternum transversely trapezoidal between midcoxæ, anterior border raised, biarcuate. Metasternum without a noticeable longitudinal median suture. First abdominal segment with postcoxal plates incomplete externally, almost, if not quite reaching hind border of segment (fig. 5) ; segments two, three and four progressively shorter, segment two little more than half as long as first segment ; fifth segment broadly rounded apically ; a sixth segment just visible in *males*, not so in *females*. *Legs* with broadly expanded femora ; tibiæ somewhat expanded apically ; tarsi as in fig. 4, tarsal claws simple.

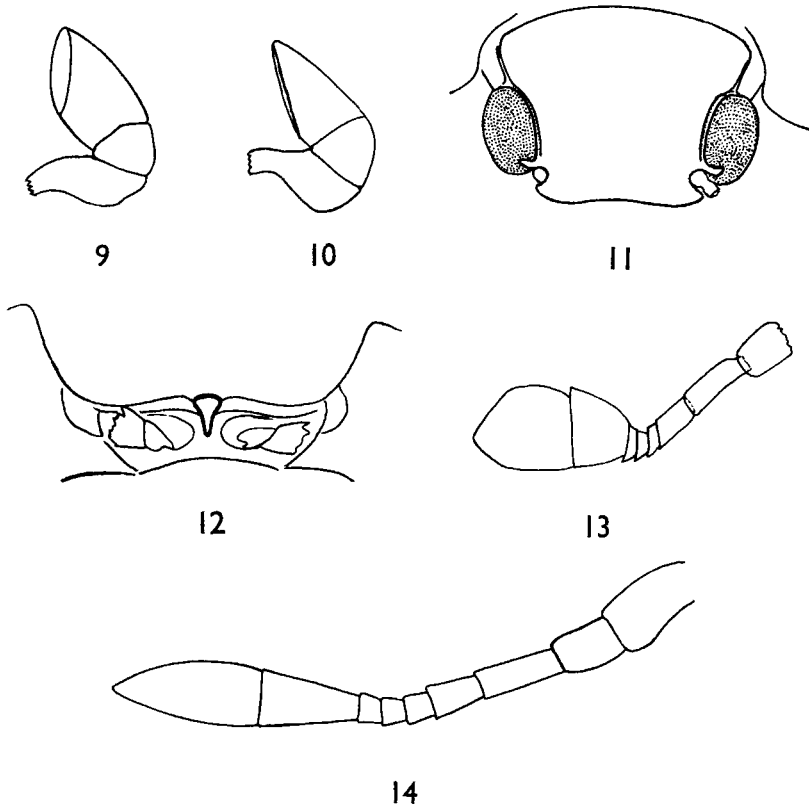
***Diloponis inconspicuus* sp. n. (Figs. 1-6).**

Length 1.10-1.30 mm. Breadth 0.80-0.92 mm.

Upper surface dark fuscous ; underside testaceous or darker, legs usually darker than rest of underside. *Head* with antennæ and mouthparts in outline as in figs. 1 & 3 punctures of head small, sparse, smaller than eye facets, separated by two diameters or more ; intervals between punctures faintly shagreened. *Pronotum* with anterior border finely raised ; lateral borders arcuate, more strongly so for anterior half ; pronotal punctures small, variable in size, similar in size and spacing to punctures on front of head ; intervals between punctures not quite smooth, bearing traces of shagreening ; minute setæ in punctures more noticeable toward lateral borders. Scutellum with a few punctures of similar size and spacing to those of pronotum ; intervals almost smooth. *Elytra* together not much longer than broad (11 : 9), strongly convex, widest at about two fifths from basal border, subacuminately rounded together to apicosutural angles ; humeral callosities present ; punctures of disc similar in size and separation to those of pronotum and bearing

similar setæ, intervals between punctures almost smooth. Prosternum almost impunctate; anterior margin with a finely and shallowly raised anterior border, border briefly and shallowly emarginate medially, arcuate on either side to junction with hypomera. Mesosternum with a few punctures on either side toward each lateral margin. Metasternum with coarse, scattered punctures, variably spaced, but usually separated by two diameters or more on disc, punctures a little closer toward lateral margins. First abdominal segment with punctures similar in size to those of metasternum, separated by from one to two diameters; postcoxal plates shaped as in fig. 5; second and third segments together about as long as first segment, fourth segment about as long as third segment; fifth abdominal segment with punctures similar in size to those of fourth

Figs. 9-14.



9. *Trimallena justitiae* (Gorh.). Maxillary palp. 10. *Xestolotis stictica* Casey. Maxillary palp. 11. *Habrolotis picta* Wse. Head. 12. *Orculus castaneus* Sic. Prosternum (Intercoxal process emphasized by thickening of the outline). 13. *Coccidophilus citricola* Brèthes. Antenna. 14. *Pseudosmilium arrowi* Brèthes. Antenna (After Brèthes).

segment, but more closely and regularly arranged, punctures bearing short, fine setae. *Male* with a very short sixth segment showing beyond apex of fifth ventrite.

*Holotype* : A *male* in the British Museum (Nat. Hist.), London. 4m. N. of Ft. Brown, E. Cape Prov., S. Africa (Ex orange tree infested by red scale) J. H. Brettell.

*Paratypes* : Seven *females* with same data as holotype : 1 *male* nr. Ft. Brown, Fish R. Valley, S. Africa, v.1960 (On citrus with red scale) J. H. Brettell. 1 *female* ditto.

Through the kindness of Mr. Brettell, who has been studying the biology and life-history of this most interesting species, the holotype and some paratypes are deposited in the British Museum (Nat. Hist.), London.

### **Orculus** Sicard.

*Orculus* Sicard, 1931, *Ann. Mag. Nat. Hist.* (10) 8 : 233.

Type Species : *Orculus castaneus* Sicard (1931, W. Africa).

Sicard made no definite assignment of this genus to a particular tribe, but pointed out its relationships with *Martinella* Sicard (= *Trimallena* n.n. see p. 632). He also commented upon the similarity of the prosternal process to that found in some species of *Rodolia* Mulsant, but although noting the shape of the apical segment of the maxillary palpi as conical, he did not suggest an affinity with the PHARINI. The curious form of the prosternal process may indicate a relationship with *Scotoscymnus* Weise (p. 628), but in the absence of material belonging to the latter genus it is not possible to be sure of this.

### **Microweisea** Cockerell.

*Microweisea* Cockerell, 1903, *Canad. Ent.* 35 : 38.

*Smilia* Weise, 1891 (nec Germar, 1833), *Dtsch. ent. Z.* p. 288.

*Epismilia* Cockerell, 1900 (nec Fromental, 1861), *Science Gossip* p. 606.

*Pseudoweisea* Schwarz, 1904, *Proc. Ent. Soc. Wash.* 6 : 118.

Type Species : *Smilia felschei* Weise (1891, N. America).

(= *Pentilia ovalis* Leconte, 1878).

*Microweisea* is, as was pointed out by Weise when he established the genus under the preoccupied name of *Smilia*, related to *Sticholotis* and other PHARINI. It is not, as recorded by the Coleopterorum Catalogus, a synonym of *Pentilia* Mulsant (1850). Horn (1895, *Trans. Amer. Ent. Soc.* 22 : 82) first noted that the North American species assigned to *Pentilia* were properly included in *Smilia* Weise. He recorded *Smilia* as a junior synonym of *Pentilia*, originating the error, noted and corrected by Casey (1899, *J. N. Y. Ent. Soc.* 7 : 134), but followed by the Junk catalogue.

Cockerell (1900) noted that the name *Smilia* Weise was preoccupied and proposed *Epismilia* as a substitute. The latter name had also been used before at the generic level and so in 1903 he proposed a second new name for Weise's genus. The name *Pseudoweisea* is simply a misquotation by Schwarz when referring to the second Cockerell substitute name.

Up to the time of writing this note, nine species have been placed in *Microweisea*, all but one occurring in North America and the West Indies, the exception being described by Nunnemacher from British Guiana and Brazil.

#### **Stictospilus Brèthes.**

*Stictospilus* Brèthes, 1924, *Ann. Mus. Nat. Hist. Buenos Aires* **33** : 153.

Type Species : *Stictospilus darwini* Brèthes (1924, Chile).

Placed in the SCYMNINI in the Coleopterorum Catalogus, the single included species in this genus is obviously a member of the PHARINI. It is small (1.4 mm. long), black, convex, pubescent, oval in outline and, as in *Microweisea* (p. 637), *Coccidophilus* (p. 638) and *Diloponis* (p. 633), has the anterior margin of the prosternum produced to form a sort of plate against which the mouthparts rest when the head is inflected. The mandibles have a simple, pointed apex, without a second tooth.

#### **Coccidophilus Brèthes.**

*Coccidophilus* Brèthes, 1905, *Ann. Soc. Cient. Argent.* **59** : 76-79.

*Coccidophilus* Brèthes, Costa Lima, 1941, *Rev. Brasil Biol.* **1** : 409-414.

Type Species : *Coccidophilus citricola* Brèthes (1905, Argentina).

Brèthes (1905) described *Coccidophilus* and likened it to *Fallia* Sharp, but did not definitely assign it to any particular family. Later (1924) the same author established *Pseudosmilia* for a single species (*arrowi*) from Chile, stating that the new genus was related to *Microweisea* Cockerell. He did not refer again to *Coccidophilus*.

A. da Costa Lima (1941) wrote up *Coccidophilus citricola* at some length, placing it definitely among the Coccinellidae and near to *Microweisea*. He also reached the conclusion that *Pseudosmilia* was very closely related to, if not identical with *Coccidophilus*.

The type specimen of *Pseudosmilia arrowi* was deposited in the British Museum (Nat. Hist.), London, but has disappeared. From the original description it is easy to see the close relationship with *Coccidophilus*, but until material identifiable as *Pseudosmilia* can be obtained, the two nominal genera are best kept apart.

#### **Pseudosmilia Brèthes.**

*Pseudosmilia* Brèthes, 1924, *Ann. Mus. nat. Hist. Buenos Aires* **33** : 156.

Type Species : *Pseudosmilia arrowi* Brèthes (1924, Chile).

The close relationship of this genus with *Coccidophilus* has been referred to above.

The sole included species is small (1.4 mm. long) ; oval ; convex ; scantily pubescent ; rather darkly ferruginous with a longitudinal black mark on the pronotum and a black patch around the scutellum.

**Pharopsis** Casey.

*Pharopsis* Casey, 1899, *J. N. Y. Ent. Soc.* **7** : 166.

Type Species : *Pharopsis subglaber* Casey (1899, S. Africa).

This genus also includes a single small species. It is a little less than one and a half millimetres long, very convex, black, glabrous as to the elytra, but with very short pubescence on the head and pronotum. The antennæ are ten-segmented with a three-segmented club, the mandibles are bifid apically, the prosternum has parallel carinæ on the intercoxal process and the abdomen has five visible segments.

**Bucolellus** Blackburn.

*Bucolellus* Blackburn, 1889, *Trans. Roy. Soc. S. Austr.* **11** : 210.

Type Species : *Bucolellus ornatus* Blackburn (1889, W. Australia).

The single species of this genus is well-characterised in the key to genera. It is small, not more than two millimetres in length, convex, pubescent, ferruginous with pale yellow markings on the elytra and with mandibles which are bifid at their apices.

**Coelopterus** Mulsant.

*Coelopterus* Mulsant, 1852, *Mem. Acad. Lyon* (2) **2** : 224.

Type Species : *Coelopterus salinus* Mulsant (1852, Europe).

There seems to have been some difference of opinion as to the number of segments making up the antennæ in this genus. Most authors have agreed that there are eight in all, but Ganglbauer (1899, *Käfer Mitteleuropa* **3** : 974) insisted that ten segments were involved. In the examples examined by the present author the antennæ were composed of eight segments, two of which went to make up the club.

The only features clearly separating *Coelopterus* from *Pharoscymnus* are given in the key to genera. The type species is small (1.7 mm. long), almost hemispherical, black, covered above with extremely short pubescence. Mulsant remarks upon the strongly-marked foveæ in the elytral epipleuræ.

**Pharoscymnus** Bedel.

*Pharoscymnus* Bedel, 1906, *Bull. Soc. Ent. Fr.* p. 306.

*Pharus* Mulsant, 1850, *Spec. Trim. Securipalp.* p. 948, 949.

subgen. *Gymnopharus* Sicard, 1909, *Ann. Soc. Ent. Fr.* **78** : 157.

*Pharoscymnus* Bedel, Smirnof, 1956, *Trav. Orig. Serv. Def. Veg. Rabat* No. **9** : pp. 35.

Type Species : *Coccinella 6-guttata* Gyllenhal (1817, S. Africa).

Smirnof revised the genus in the work referred to above, giving a synonymic list and grouping the species into palaeartic, those from the islands in the Indian ocean, those from Africa and finally on a different basis, those species incorrectly assigned to the genus.

The species are described, or redescribed ; in most instances the *male* genitalia are illustrated, at least the distal extremity of the siphon which Smirnof uses for specific characterisation.

At the end of the work, Smirnofï deals with certain species which were incorrectly assigned to *Pharoscymnus* by their authors. One of these, *Pharoscymnus pictus* Sicard (1912, *Novit. Zool.* **19** : 267) is transferred to *Scymnus* by Smirnofï. The species was based upon material sent to Sicard from the British Museum (Nat. Hist.) and part of the type series was returned to that institution. From these specimens it is clear that Smirnofï is correct in removing *pictus* Sic. from *Pharoscymnus*, but it is also evident that the species does not belong to *Scymnus*. Sicard's insect is properly placed in the genus *Rhizobius*, having as it does, long antennæ, coarsely faceted eyes and atrophied wings.

#### **Phlyctenolotis** Sicard.

*Phlyctenolotis* Sicard, 1912, *Trans. Linn. Soc. Lond.* **15** : 364.

Type Species : *Phlyctenolotis scotti* Sicard (1912, Seychelles).

A single species is placed in this genus which is, as Sicard remarked, distinguished by the possession of a shining, glabrous, semi-transparent callosity on each elytron, near the shoulder.

#### **Xamerpillus** Sicard.

*Xamerpillus* Sicard, 1912, *Trans. Linn. Soc. Lond.* **15** : 366.

Type Species : *Xamerpillus gahani* Sicard (1912, Seychelles).

This genus is very closely related to the foregoing, differing according to its author in that the elytra are pubescent and by the shape of the apical segment of the maxillary palpi. The elytra are certainly pubescent, but the present author has been unable to confirm Sicard's observations as to the shape of the palpi.