

Description of some new genera of Coccoidea

by

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Every recent taxonomic-morphological review of any group of Coccoidea has clearly shown, that the conspicuously obstruse zoogeographical condition of that group is not based upon iron facts, but upon the retaining of a number of some very great collective genera which actually are a rather heterogenous assembly. FERRIS, MCKENZIE, MORRISON, a.o. have done most important spade work to distangle these great heterogenous assemblies, yet much remains to be done.

At the occasion of a revision of the Coccoidea of the Middle East we were forced to separate — on purely morphological grounds — certain groups from these great collective genera. In every case these new genera improved the zoogeographical assembly too. As this monograph waits already eight years for publication, and there is still no prospect to see it published, we wish to publish here a short diagnosis of the new genera which is sufficient to permit recognition. Two of these genera have already been printed in a monograph on the Turkish Coccoidea (Ankara 1949), but following the nomenclature rules these are regarded as being not published.

Family: Asterolecaniidae

A good example for the zoogeographical importance of such revisions can be learned from the monograph on *Asterolecanium* Targ. Toz. of Miss L. M. RUSSELL (1941). She has done all the necessary spadework for the further division of the genus by establishing 12 groups, well characterised by morphological characters, by hosts and by distribution. Only the relative morphological homogeneity of the genus, which perhaps is only convergence, has prevented her to erect these 12 groups as genera (or subgenera at least). In our monograph we have named the following genera, all included into *Asterolecanium* by RUSSELL. (For the full description see RUSSELL, p. 8—11; the roman ciphers indicate RUSSELL's groups):

- I. *Bambusaspis* Cckll. 1902 (Type: *B. miliaris* Boisd., 1869).
- II. *Palmaspis*, nov. gen. (Type: *P. phoenicis* Ram. Rao, 1922).
- III. *Asterodiaspis* Sign. 1876 (Type: *A. ilicicola* Targ. Toz., 1888).
- IV. *Planchonia* Sign. 1870 (Type: *P. fimbriatum* Fonsc., 1834).
- XI. *Russellaspis* nov. gen. (Type: *R. pustulans* Cckll., 1892).

1. Genus: *Morrisonia* gen. nov.

Type: *Morrisonia*, olim *Asterolecanium tenax* Bdhmr., 1929 (Sinai).
 Characters: Differs from *Asterolecanium* Targ. by the absence of an anal ring and of anal setae and caudal setae. Test of mature female tough, not transparent, highly convex, almost bluntly conical.

RUSSELL (1941, p. 232) regards the absence of caudal setae as questionable "because they are present in all other known species (of *Asterolecanium*) although they are sometimes very short". Yet already in 1929 E. E. GREEN (i.l.) remarked upon cotypes, that the lack of caudal and anal setae would necessitate the erection of a special genus. Careful re-

examination of the two type specimens did not reveal their presence or of their insertions.

Family: Coccidae

2. Genus: **Paralecanopsis** gen. nov.

Type: *P. turcica* n. sp. on grass at Nigde (C. Anatolia).

Characters: Differs from *Lecanopsis* Targ. by a very thin, fragile, transparent wax layer of the adult female. Antennae 5-jointed. Legs relatively short. Spiracles with double row of cribose pores in the atrium and with a paraspircular band of similar pores. Spiracular depression obsolete; spiracular and marginal setae wanting.

Family: Pseudococcidae

3. Genus: **Greenoripersia** gen. nov.

Type: *G. kaiseri* Bdhmr., 1929 (Sinai).

Characters: Closely related to *Ripersia* Sign. from which it differs mainly by anal ring with 8 setae. Cerarii wanting. Antennae 6-jointed. Caudal setae twice as long as anal setae. Anal lobes distinct, bearing three short setae laterad of the long caudal setae. Many simple pores. Hairs enlarged at base.

Family: Diaspididae

Subfamily: Aspidiotinae

4. Genus: *Genistaspis* Bodenheimer 1949, p. 38, 83, fig. 18.

Type: *Genistaspis zelihae* Bodenheimer, 1949. Bala (C. Anatolia) on *Genista*.

Characters: Closely related to *Targionia* Sign., from which it differs by the duplex second lobes and by the presence of plates.

Pygidial margin with very broad median lobes, second lobes distinctly duplex, with three pairs of short, slender, bifurcate plates. Dorso-pygidial broad tubular ducts one-barred. Small groups of slender tubular ducts along the free margin of the abdominal segments. No genacerores, no paraphyses, no densariae. Female scale and male puparium of the *Targionia*-type.

Subfamily: Diaspidinae

5. Genus: **Ferrisidiaspis** nov. gen.

Type: *Ferrisidiaspis*, olim *Diaspis syriaca* Ldgr., 1912 (Damascus).

Characters: Closely related to *Diaspis*, from which it differs by a very pronounced median emargination of the pygidial margin, anus less than twice its own diameter from pygidial margin and absence of mesospiracerores. The median lobes deeply inserted into emargination, structures of interval as in *Diaspis*. Second and third lobes duplex, L_{2a} being rather small. Glandspines usually in groups of two, excepted the two mesad ones. No dorso-pygidial tubular ducts in intermediate dorso-pygidial area, restricted to margin and submargin. Similar ducts massed in submarginal and again in intermediate areas of prepygidial segments. Female scale and male puparium of the *Diaspis*-type.

6. Genus: **Sinaidiaspis** nov. gen.

Type: *Sinaidiaspis*, olim *Diaspis capperidis* Bdhmr., 1929 (Sinai).

Characters: Body of adult female pyriform, lateral abdominal mar-

gins not produced. Pygidium with median lobes only, which are prominent. Glandspines very rudimentary; a few submarginal setae. Anus at $\frac{3}{5}$ of distance base/margin of pygidium. No broad dorso-tubular ducts, but pores of slender tubular ducts in caudo-median pygidial area. One pair of short hairs in interval. No paraphyses, no pseudodensaria, no genacerores, no spiracerores. Female scale of *Diaspis*-type, male puparium unknown.

Differs from *Pseudodiaspis* Ckll. by absence of paraphyses, of broad dorso-pygidial tubular ducts, by position of anus, absence of spiracerores, etc. Differs from *Neosignoretia* MacGill. by absence of pseudodensaria, of broad tubular ducts, etc., and from *Howardia* Leon. by absence of paraphyses and of glandspines on free abdominal margins.

7. Genus : *Anatolaspis* Bdhmr. 1949, p. 39, 101, fig. 27.

Type : *Anatolaspis abedini* n.sp. on Euphorbia at Antalya.

Characters : Closely related to *Epidiaspis* Ckll., with which it shares the presence of paraphyses. Pygidial margin with second lobes simplex, with many setae, but with two rudimentary glandspines only. One tubular duct-orifice in the median interval. Genacerores few, in four groups. Scale of adult female of the *Diaspis*-type; male puparium unknown.

8. Genus : **Eremohallaspis** gen. nov.

Type : *Eremohallaspis*, olim *Coccomytilus farsetiae* Hall, 1926.

Characters : Body of adult female ovate, broadest behind middle, distinctly segmented. Pygidium very narrow. Pygidial margin forming three broadly rounded projections, from the median of which arise the very broad median lobes. These are closely approaching, with setae in the interval, which are sometimes longer than the short lobes. No other lobes; two similar setae laterad of lobes and one more on each of the margins of the two prepygidial segments. No glandspines or plates, no genacerores. Meso- and metaspiracerores both present. Ventro-caudad of each anterior spiracle a group of about 11 short glandspines. Anus rather remote from base, at $\frac{2}{5}$ the distance base/margin of pygidium. Slender tubular ducts in submarginal band around body, growing scarce in the anterior body-half. Lateral margins of last abdominal segments distinctly protracted. Scale of adult female broad pyriform.

9. Genus : **Eremaspis** gen. nov.

Type : *Eremaspis zillae* Hall, 1923 (Egypt). Includes species belonging before to *Pinnaspis* and *Chionaspis*.

Characters : Body of adult female circular to short ovate, segmentation distinct, lateral abdominal margins flatly rounded, but never protracted into deep separated lateral lobes. No densaria in interval or at base of second lobes. Dorso-tubular ducts on pygidium always present in fair numbers beyond the marginal ones. Genacerores in five groups. With submarginal and submedian band of dorso-infundibular ducts on all abdominal segments. Scale of female circular to ham-shaped, exuviae marginal, convex, always covered with white secretion. Male puparium elongate, narrow rectangular, exuviae cephalad. Carenation apparently never distinct, so far at most one median carena observed.

E. zillae Hall, *E. acantholimoni* Bdhmr. 1949, *E. bilobis* Newst. are united here, all inserted before into *Pinnaspis*. The shape of the scale, the body shape and the bands of infundibular ducts separate them easily from *Pinnaspis*.

10. Genus : **Marchaliella** gen. nov.

Type : *Marchaliella*, olim *Chionaspis lepineyi* Bal.

Characters : Closely related to *Chionaspis* Sign., from which it differs mainly : Second lobes notched, but not duplex ; third lobes neither notched nor duplex. Anus very much farther caudad than in *Chionaspis*, where it is always cephalad of vulva. Dorso-pygidial macroducts entirely wanting. In all other characters like *Chionaspis*, also female scale and male puparium.

11. Genus : **Mongrovaspis** gen. nov.

Type : *Mongrovaspis*, olim *Leucaspis quadrispinosa* Green, 1934 (Egypt), also including *M.*, olim *Fiorinia pygosema* Green, 1923 (Tanganyika).

Characters : Closely related to *Leucaspis* Targ. Adult female cryptogynous, elongate elliptic, broadest about middle. Neither lobes nor plates on pygidial margin, which is however produced into at least four long, ensiform caudal processes, about as long as their base is distant from anus. Anus in centro-pygidial position. Genacerores present or absent.

Pygidium of second larva without plates or marginal gland ducts, but with two to three marginal processes, which possibly are true lobes, the median ones prominent, fused at base, with no structures in interval.

Scale of female and male puparium of the *Leucaspis*-type.

12. Genus : **Archangelskaia** gen. nov.

Type : *Archangelskaia*, olim *Parlatoria ephedrae* Ldgr., 1911 (Iran).

Characters : Related to *Parlatoria* Targ. Female oval with retracted pygidium, narrower than body, broad triangular. Pygidium with lobes wanting or with two pairs of lobes : the first larger, broad and bluntly rounded, second ones bluntly pointed, both slightly sclerotic only ; with many broad fimbriate plates, rising from crescent-shaped openings of broad tubular ducts. Two such broad plates in median interval. Genacerores wanting. Female scale elongate oval with cephalad exuviae ; second exuviae very large.

The Hebrew University, Jerusalem, Israël, February 1951.

Heterochila buccata Fal. (Dipt.). De systematische plaats van deze langs het strand algemeen voorkomende fucicole vlieg is niet duidelijk. SCHINER rekent deze soort nog tot het genus *Heteromyza* Fall. (Helomyzidae), ofschoon hij zegt „sehr zweifelhaft für diese Gattung”. Bij SÉGUY (Faune de France, Acalyptères) wordt de soort tweemaal vermeld nl. bij de Coelopidae als *Oedoparea buccata* Fall. en bij de Dryomyzidae als *Heterochila buccata* Fall. Het gemakkelijke is dat hetzelfde dier onder de naam *Oedoparea* „très commun” is en als *Heterochila buccata* Fall. niet in Frankrijk voorkomend. SÉGUY kent *Heterochila buccata* dus niet, maar het is gemakkelijk na te gaan dat *Oedoparea* een synoniem is van *Heterochila buccata* Fall. Door CZERNY wordt deze soort in het deel Dryomyzidae op goede gronden tot deze, voor een deel fucicole familie gerekend, zodat *Oedoparea buccata* Fall. bij SÉGUY niet alleen van genusnaam moet veranderen, maar ook naar een andere familie moet verhuizen.

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