

NOTE IV.

REMARKS ON THE CURCULIONID GENUS
CHALCOCYBEBUS

BY

Dr. K. M. HELLER.

In my last paper ¹⁾ I described a new species of Coleoptera from New Guinea, Astrolabe Bay, viz. *Eurhynchus superbus*, supposing *Aporhina bispinosa* Boisd. to be identical with *bispinosa* Lac., which has four white spots on each elytron.

Since then I have made further studies on this genus and my best thanks are due to Messrs. J. Faust, J. R. H. Neervoort van de Poll, C. Ritsema, G. Severin, W. Rothschild and Dr. K. Jordan, for intrusting to me the specimens, in part typical ones, of their collections. Through the kindness of these gentlemen I have been able to recognize the following species and subspecies:

- I. *Chalcocybeus bispinosus* Boisd., 1 ♀, type! Waigeou, R. Mus. Brussels; 1 ♂, type of *Eurhynchus superbus* m., New Guinea, Bongu, R. Zool. Mus. Dresden; 1 ♀, Waigeou, coll. J. Faust; 1 ♀, New Guinea, Dorey, leg. Wallace (ex cab. Janson), Beukenstein Mus. (Neervoort van de Poll).
bispinosus aruensis, subsp. n., 1 ♀, Aru, leg. v. Rosenberg, Mus. Leyden; 1 ♂, Aru (ex cab. Jekel), Beukenstein Mus.
bispinosus australis, subsp. n., 3 ♂ and 1 ♀, Geraldton, Queensland (Meek), Mus. Tring.
bispinosus guttifer, subsp. n., 1 ♀, New Guinea, Andai, Mus. Tring.

1) Abhandl. u. Ber. d. K. Zoolog. Mus. Dresden, 1894/5, N^o. 16, p. 12.

- bispinosus intermedius*, subsp. n., 1 ♀, New Guinea, Port Moresby, Beukenstein Mus.
- II. *Chalcocybebus alboguttatus* Voll., 1 ♂, type! Salwatty, leg. Bernstein, Mus. Leyden; 1 ♂, Waigeou, leg. Bernstein, Mus. Leyden; 1 ♂, without locality (ex coll. Dejean-Roelofs), R. Mus. Brussels, probably the type of *Aporhina bispinosa* Lac.; 1 ♂, North-west New Guinea, leg. Wallace (ex cab. Janson), Beukenstein Mus.
- III. *Chalcocybebus Richteri* Faust, 1 ♂, type! New Guinea (ex cab. Richter), coll. J. Faust; 1 ♂ and 1 ♀, New Guinea, Astrolabe Bay, leg. Rhode, Beukenstein Mus.
- IV. *Chalcocybebus nitens* Voll., 1 ♀, type! Waigeou, leg. Bernstein, Mus. Leyden.
- nitens papuanus*, subsp. n., 1 ♀, New Guinea, Bongu, R. Zool. Mus. Dresden; 1 ♂ and 1 ♀, New Guinea, coll. J. Faust; 5 ♀, New Guinea, Astrolabe Bay, leg. Rhode, Beukenstein Mus.
- nitens papuanus*, var. *auratus*, 1 ♀, New Guinea, Humboldt Bay, coll. J. Faust; 1 ♀, Humboldt Bay, Sept.-Oct. 1893, leg. W. Doherty, Mus. Tring.
- V. *Chalcocybebus splendidus* (Blackb.)¹⁾, 1 ♂, Geraldton, Queensland (Meek), Mus. Tring.

In my above mentioned paper I overlooked that the genus *Chalcocybebus* Voll., comprising the metallic species of *Eurhynchus* (Munich Catalogue, VIII, p. 2457), was re-established by Faust²⁾, and moreover I was able to point out, that my *Eurhynchus superbus* is identical with *bispinosus* Boisd.

All the known species of this genus are variable in colour and size and very closely allied to one another, representing properly three or four species with several local races or subspecies, the determination of which offers some difficulty on account of the white hairlike scales which are very easily worn off. The distinction of the sexes is facilitated, besides by the different length of the club, by the examination of the underside of the rostrum, which

1) Transactions of the Royal Society of South Australia, Vol. XVIII, for 1893-94, p. 163.

2) Ent. Zeit. Stettin, 1892, p. 205, note.

in the male shows on both sides rows of strong tubercles, whilst in the female it is only coarsely punctured; moreover the anterior femora in some species are, in the male sex, more strongly mucronated towards the end.

The species and subspecies of *Chalcocybebus*, known to me, may be easily distinguished by the following key¹⁾:

- a. Thorax smooth on the disk.
- b. Elytra with dots of white hairlike scales.
- c. Femora red, the anterior ones in both sexes hardly mucronated.
- d. Elytra only near the apex with a white dot *bispinosus* Boisd.
- d'. Elytra not only near the apex with white dots.
- e. Elytra with a white dot near the apex and with a similar one on the 3rd and 5th spatium behind the dorsal spine *bispinosus guttifer*, m.
- e'. Elytra with a white dot near the apex, with a transverse similar one across the 3rd, 4th and 5th spatium behind the dorsal spine, and with another on the 4th spatium before this spine *bispinosus aruensis*, m.
- e''. Elytra with a white dot near the apex, with a similar one across the 4th and 5th spatium behind the dorsal spine, and with two others on the 4th spatium before this spine, one of which is placed at the base of the spatium *bispinosus australis*, m.
- c'. Femora, like tibiae and tarsi, black.
- f. Elytra with a white dot near the apex, and with a similar one on the 4th spatium before as well as behind the dorsal spine *bispinosus intermedius*, m.

1) Owing to the rarity of the *Chalcocybebus*-specimens in collections, I think it best to record by name every form which seems to be geographically localized.

- f.* Elytra with a white dot near the apex, and with a similar one on the 4th spatium before the dorsal spine as well as on the 3rd and 5th spatium behind it. *alboguttatus* Voll.
- f'*. Elytra with a white dot near the apex, and with a similar one at the base of the 4th spatium *Richteri* Faust.
- b.* Elytra without dots of white hairlike scales.
- g.* Dorsal spines of elytra moderately elongated, not sharply pointed; elytra metallic green or blue.
- h.* Dorsal spines of elytra more divergent and straight, elytra green. *nitens* Voll.
- h'*. Dorsal spines of elytra more erect and curved inwards, elytra generally blue. *nitens papuanus*, m.
- g'*. Dorsal spines sharply pointed; elytra golden red or golden green, the dorsal spines blue *nitens papuanus*,
- a'*. Thorax with transverse wrinkles on the disk [var. *auratus*, m. and, like the elytra, with an ochraceous vitta on each side. *splendidus* Blackb.

REMARKS.

Ch. bispinosus Boisd. The typical specimen, ex coll. Dejean-Roelofs, in the R. Mus. at Brussels, and labelled: »*Aporrhina bispinosa* d'Urville — hab. ins. Waigeou — D. Lesson", is a small female (length 9,5 mm.) which has the head and prothorax black, the elytra dark purplish violet (like those of *Pterostichus Justusi* Redtb.), the clavate femora red, moderately sinuated towards the apex, the tibiae blackish red and the tarsi black. A small spot, passing from the outer margin of the anterior coxae to the anterior margin of the prothorax, another between the intermediate coxae, the episterna of the mesothorax, the outer margin of the metasternum, the episterna of the metasternum on the lower half, a spot on each side of the

second abdominal segment and another near the apex of each elytron, with white hairlike scales of moderate density. These white scales are often rubbed off, as is already mentioned, and a female specimen of 11,5 mm. length and of a more blackish green tint in the collection of Mr. Faust has lost them all on the second ventral segment and also, except one or two on each side, on the elytra. The type of *superbus*, erroneously described by me as a female, measures 12,5 mm., and is of a somewhat bluish green colour, like *Lema cyanella* L.; the apical spot on the elytra is almost entirely rubbed off, and therefore it is not mentioned in my diagnosis. The specimen in Mr. van de Poll's collection agrees perfectly with the type, but it is a little smaller (9 mm. without the rostrum).

Ch. bispinosus guttifer resembles *alboquittatus* Voll. with regard to the postspinal dots, but the antespinal mark is wanting and the femora are red and hardly mucronated.

Ch. bispinosus arucensis. This local-race differs from the typical species by the extension of the postspinal mark, which begins close behind the spine on the third spatium and extends over the fourth and fifth spatium like an oblique and outward-directed band; the fourth spatium shows sometimes, besides the ante-apical mark, a basal dot like in *Ch. Richteri* Faust. Scutellum strongly impressed along the middle.

Ch. bispinosus australis, with dark bluish green elytra and the basal half of the fifth stria more strongly impressed than in the typical species, has on the fourth spatium a basal, an antespinal and a postspinal, densely scaled mark; the latter extends inwardly somewhat beyond the fourth stria.

Ch. bispinosus intermedius. The unique specimen is a female of 11,5 mm. length (without the rostrum) and resembles *Richteri* Faust by the blackish femora.

Ch. Richteri Faust. The female in the collection of Mr. van de Poll measures 13,5 mm. and shows no supra-

orbital wrinkles; the basal dot on the fourth spatium is wanting in both his specimens (♂ and ♀).

Ch. nitens Voll. The type of this species is a female of 13,5 mm. length (without the rostrum), and in colour it is like the bluish variety of *Chrysomela menthastris*. Not a single female among the Papuan specimens agrees absolutely with the type, and, since the male of the Waigeou-species is still unknown, I prefer to indicate provisionally¹⁾ the New Guinea-form by a subspecific name. The only plastic difference between *nitens* type and *papuanus* consists in the more erect and inward-curving dorsal spines of the latter, so that an imagined prolongation of its axis hardly touches the margin of the opposite elytron (when seen from behind), whilst in the typical *nitens* the axis evidently passes through the opposite elytron. The male of *Ch. nitens papuanus* (*Ch. hamatus* Faust in coll.) has the anterior femora strongly mucronate near the apex and ordinarily blue shining elytra, like *Diacanthus aeneus*, var. *coeruleus* Schilsky. The *papuanus* var. *auratus* shows that the form and direction of the dorsal spines have no great value from a systematical point of view.

Ch. splendidus Blackb. is a quite aberrant form in virtue of its strong sculpture, having an intermediate position between the genus *Chalcocybebus* and *Eurhynchus*, but, since it agrees with the characteristics of *Chalcocybebus* given by Mr. J. Faust, it must be referred to this genus.

Royal Zoological Museum,
Dresden, April 1896.

1) Whilst the typical *bispinosus* inhabits Waigeou and New Guinea, it is probable that the specimens of *Ch. nitens* from both localities belong to the same species.