

## NOTE V.

FOUR NEW SPECIES OF THE MELOLONTHID GENUS  
APOGONIA FROM BORNEO

DESCRIBED BY

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*Apogonia Waterstradti*, n. sp.

Closely allied to and strongly resembling *A. abdominalis* Rits., from Central Borneo (Notes Leyd. Mus. vol. XVIII, p. 26), but somewhat smaller, the punctuation somewhat stronger, the front margin of the clypeus slightly emarginate, the sides of the prothorax more narrowly edged, the pygidium provided with a more or less distinct longitudinal keel, the abdomen black<sup>1)</sup>).

Length 8,5—9,5 mm. — Oblongo-ovate; black, the palpi and antennae ferruginous; glabrous and glossy above, beneath the punctures bear small white scalelike setae.

The clypeus is broad, densely punctured and separated from the face by a distinct suture, the front margin is faintly emarginate, the lateral angles are broadly rounded. The punctures on the face are as large as those on the clypeus but somewhat wider apart.

The prothorax is transverse, broadest at one third from the base and obliquely narrowed towards the front; the punctures are very distinct, smaller and wider apart on

1) Of the 20 specimens before me 3 have the undersurface of the body and the femora more or less red coloured. These specimens are certainly not quite mature.

the middle, larger and closer set towards the sides; in front of the scutellum the punctures are very small and more widely spread; a not very obvious smooth line runs along the middle of the pronotum; the anterior angles are acute and slightly projecting; the sharply margined sides (viewed laterally) are strongly curved behind the middle; the posterior angles are very obtuse. The scutellum is broadly triangular, impunctate or with a few almost imperceptible punctures.

The punctuation on the elytra agrees with that of *abdominalis* but the punctures are somewhat stronger; the two impressions behind each shoulder are, however, a little less distinct, especially the anterior one. There are on each elytron three costae: the first, which bears two irregular rows of very fine punctures, is broad but becomes narrower anteriorly and posteriorly; on the middle of the elytra its width surpasses a little that of the following interspace; the 2<sup>nd</sup> costa is distinctly narrower and bears, like the 3<sup>rd</sup> costa which is still narrower, a series of very fine punctures; outwards from the 3<sup>rd</sup> costa there are three lines of punctures: the outermost is marginal and the innermost joins the 3<sup>rd</sup> costa just beyond the shoulder; the interspaces between the 3<sup>rd</sup> costa and the margin are about of equal width and show a row of punctures which are very distinct on the innermost interspace, almost imperceptible on the two following; the interspace between the 2<sup>nd</sup> and 3<sup>rd</sup> costa bears a row of distinct punctures which is irregular on the basal half, very regular on the apical half of the elytra; the interspace between the 1<sup>st</sup> and 2<sup>nd</sup> costa has likewise a row of distinct punctures which, on the contrary, is regular on the basal half, irregular on the apical one; the interspace between the sutural row of punctures and the 1<sup>st</sup> costa is rather sparsely punctured in an irregular manner. Behind each shoulder two impressions may be observed: the anterior one, just behind the shoulder, is not very distinct; the 2<sup>nd</sup>, situated on the outer boundary line of the 3<sup>rd</sup> costa, is smaller but more distinct.

The sides of the metasternum are very closely punctured, the punctures bear small white scalelike setae; the punctures on the abdomen are strong but not very densely set. A more or less distinct smooth keel runs along the middle of the pygidium.

The anterior tibiae are tridentate.

*Hab.* North Borneo: Mount Kina Balu (John Waterstradt). — In the collection of Mr. René Oberthür and in that of the Leyden Museum.

*Apogonia speculifera*, n. sp.

Resembling *A. rauca* Fabr. & Waterh., from Coromandel (Cist. Ent. II, p. 224) in general appearance, but smaller and less densely punctured and at once recognizable by the tridentate anterior tibiae, the impunctate scutellum and the sharp edge around the abdomen, which characters it has in common with *A. Brenskei* Rits., from Upper Burma (Notes Leyd. Mus. vol. XIX, p. 119). From *Brenskei* the new species is easily distinguishable by its punctuation which is considerably coarser but less dense.

Length 7,5—8,5 mm. — Black, with purple and dark green tinges above, especially on the elytra, the antennae and palpi ferruginous, the tarsi dark pitchy brown; glabrous above, the punctures on the undersurface and on the legs provided with a short, pale-coloured bristle.

The clypeus is broadly rounded, not emarginate in front, separated from the face by a shallow furrow which is somewhat enlarged in the middle and at the sides and here (at the inner orbit) better defined; the punctuation on the clypeus is finer and closer than that on the face, which latter agrees pretty well with that on the pronotum.

The prothorax is strongly transverse and the sides (viewed from above) are slightly converging in faintly curved lines; when viewed laterally the sides are curved just behind the middle; the anterior angles are acute and very slightly protruding, the basal ones very obtuse. The scutellum is

impunctate, very glossy, and of a triangular shape with rounded apex.

The elytra are strongly but not very densely punctured; there are two very distinct flat costae of which the first is somewhat broader than the second; these costae are impunctate or provided with a few exceedingly small punctures; the third or humeral costa agrees perfectly with the interstices between it and the outer margin of the elytra; they are all impunctate; the punctures on the interstice between the first costa and the suture agree with those of the pronotum, but they become larger towards the end of the elytra; the punctures on the second interstice (that between the 1<sup>st</sup> and 2<sup>nd</sup> costa) are slightly larger and closer together, and this is again the case with the punctures on the third interstice.

The entire abdomen is strongly and closely punctured; it is surrounded by a raised line which is not interrupted by the propygidium; the pygidium is slightly convex.

The anterior tibiae are tridentate.

*Hab.* North Borneo: Mount Kina Balu (John Waterstradt). — In the collection of Mr. René Oberthür and in that of the Leyden Museum.

*Apogonia lobata*, n. sp.

Allied to *Apogonia Waterhousei* Rits., from Central Borneo (Notes Leyd. Mus. vol. XVIII, p. 29), but differing by the finer punctuation on the elytra which makes these parts more shining; by the shape of the prothorax this having the sides more regularly rounded, the basal angles rounded and the middle of the base distinctly projecting, thus forming a short lobe which covers the base of the scutellum; by the shape of the scutellum which is shorter and broader and broadly rounded at the tip.

Length 8,5—9,5 mm. — Above metallic green with bright coppery and purple tinges, beneath and legs reddish brown with green and coppery tinges, the antennae and

palpi ferruginous; above glabrous, the sides of the metasternum with short white setae in the punctures.

The clypeus obliquely narrowed in straight lines at the sides, the front margin straight or faintly emarginate, the lateral angles rounded; deeply and densely punctured, this punctuation strongly contrasting with that on the face where it is fine and rather remote.

The prothorax is strongly transverse, narrowed in slightly curved sides towards the front margin when viewed from above, and broadest near the base; the sides rather regularly curved when viewed laterally; the anterior angles subacute, the posterior ones strongly rounded so that they have disappeared, the middle of the base distinctly projecting backwards, thus forming a short, broadly rounded lobe which covers the base of the scutellum; the pronotum is covered with punctures which are a trifle larger than those on the face; they are equally spread over the whole surface like those on the face. The scutellum is at the base distinctly broader than long, with broadly rounded tip and with a few fine punctures.

The interspaces of the elytra are remotely punctured, the punctures are slightly larger than those on the pronotum; the first costa is broad though distinctly narrower than the second interspace and provided with two rather irregular series of fine punctures; the second costa is somewhat narrower than the space between it and the third costa and bears one series of fine punctures; the third costa, which is as broad as each of the following (three) interspaces, bears, like these, a series of fine punctures; on the outer boundary line of the third costa, a little before the middle of the length, a small longitudinal impression may be observed which is, however, very obsolete or wanting in some of the specimens before me.

The abdomen, which has a raised smooth line along the sides, is strongly and closely punctured laterally, sparsely and finer along the middle; the pygidium is convex and covered with very large punctures.

The anterior tibiae are bidentate.

*Hab.* West Borneo: Sarawak (Wallace); Pontianak (Mulot, Buffat and Ledru). — In the collection of Mr. René Oberthür and in that of the Leyden Museum.

*Apogonia Helleri*, n. sp.

Resembling *Apogonia Brenskei* Rits., from Upper Burma (Notes Leyd. Mus. vol. XIX, p. 119), but quite distinct by the much finer punctuation, smaller head, slightly emarginate clypeus, bidentate anterior tibiae, by the raised line which surrounds the entire abdomen, whereas this line is interrupted by the propygidium in *Brenskei*, etc.

Length 7—7,5 mm. — Elongate ovate; glabrous, black <sup>1)</sup>, above with dark purple tinges; the antennae and palpi ferruginous, the tarsi pitchy brown; the sides of the sternum bear short white setae in the punctures.

The clypeus is obliquely narrowed towards the front margin which is faintly emarginate and has the lateral angles broadly rounded; it is punctured about in the same way as the face from which it is distinctly separated.

The prothorax is strongly narrowed in oblique lines in the larger anterior half, subparallel in the smaller basal half, so that it is broadest (when viewed from above) at the basal portion; the anterior angles are acute but not prominent, the basal ones very obtuse. The punctuation on the pronotum is fine and very dense, somewhat finer and denser than that on the face. The scutellum has a regular triangular shape with slightly convex sides; it is finely and remotely punctured and has a smooth line along the middle.

The elytra are coarsely and regularly densely punctured which makes the costae not easy to be discerned. The first costa is broad (almost as broad as the following interspace) but gradually narrowing towards the base and the end;

1) In a somewhat immature specimen the end of the elytra and the propygidium are rufous.

on the middle it is covered with three irregular series of punctures, on the base and on the end with two series; the second costa is about half as narrow as the first, all along of equal width (except at the base where it is slightly enlarged) and provided with a regular row of very distinct punctures which are placed close together; the third costa agrees with the following (three) interspaces which are very regular, of equal width and provided with a series of very distinct punctures; on the narrow interspaces along the suture a regular row of small but distinct punctures is present, these punctures are close together.

The abdomen is surrounded by a raised smooth line which is continued (more finely however) across the propygidium; the sides of the abdomen are coarsely and rather densely punctured, the punctuation on the propygidium is finer, and the pygidium bears a more or less distinctly raised longitudinal keel.

The anterior tibiae are bidentate.

*Hab.* North Borneo: Mount Kina Balu (John Waterstradt). — In the collection of Mr. René Oberthür and in that of the Leyden Museum.

I dedicate this species to Prof. K. M. Heller of the Dresden Museum, who has published (Abh. & Ber. K. Zool. Mus. Dresden, VI, 1897, n<sup>o</sup>. 10; pp. 4—10) a very useful key to facilitate the identification of those species of *Apogonia* (57 in number) which are represented in the Dresden Museum collections. Of these species 32 originate from Celebes.

Leyden Museum, November 1904.