

NEW SCOLYTIDAE AND PLATYPODIDAE FROM THE PAPUAN SUBREGION AND NEW CALEDONIA I. 271. CONTRIBUTION TO THE MORPHOLOGY AND TAXONOMY OF THE SCOLYTOIDEA

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ABSTRACT

Descriptions are given of seven new species of Scolytidae—Cryphalops dispar, Cyrtogenius peregrinus, Mimiophthorus orientalis, Ips inclinans, Xyleborus circumspinosus, Xyleborus immersus and Xyleborus papatrae, and nine new species of Platypodidae—Crossotarsus gressitti, Crossotarsus spinipennis, Platypus advena, Platypus diffinis, Platypus distinctipes, Platypus diversiporus, Platypus fracticostis, Platypus grayi and Platypus vesculus and of the subspecies Platypus grayi immersus nov. subsp. Descriptions are also given for the first time of the females of Platypus enormis Schedl fem. nov. and Platypus praepositus Schedl fem. nov.

INTRODUCTION

In New Guinea the majority, if not all, of forest trees are attacked by Scolytidae and Platypodidae soon after felling, thus reducing their merchantable value either directly by the construction of galleries in the outer zones of the logs, or indirectly by allowing spores of wood-destroying fungi an opportunity to enter the wood. As a first step to the future control of these bark and timber beetles a survey of species involved was commenced in 1967 by the Entomology Section of the Department of Forests based at Bulolo in Papua New Guinea. A taxonomic monograph of these two families is the aim of these investigations. While the investigations have been restricted initially to the New Guinea mainland, it is intended to include in this study the whole chain of islands down to New Caledonia.

The plans of the Department of Forests are supplemented by a more general survey of insects of New Guinea being undertaken by a field station of the Bernice P. Bishop Museum at Wau. A large collection of Scolytidae and Platypodidae from the field station has been examined and descriptions of new species are given in this paper.

Further descriptions of new species will be published in a series of papers under the heading "New Scolytidae and Platypodidae from the

Papuan subregion and New Caledonia", while the very numerous new locality and host records of known species are to be included in the monograph at a later date.

In the paper the following abbreviations are used: Bishop (Bernice P. Bishop Museum collection with number allocated to holotype); Dist. (District); For all collections made by the Department of Forests the district is given, while for those made by the Bishop Museum, four quadrants of New Guinea are used; these are noted NE., SE., SW. and NW. respectively.

A. SCOLYTIDAE

Cryphalops dispar nov. sp.

Male ferrugineous, 1.7 (1.6 to 1.8) mm long, 2.16 times as long as wide. The new species is easily recognized by its sexual differences which, so far, are not known for the genus *Cryphalops* Reitter.

Front convex, subopaque, minutely punctulate and finely punctured below, more shining and the punctation gradually reduces above, sparsely placed fine hairs on the anterior half.

Pronotum wider than long (23.5:19.7), postero-lateral angles rectangular and slightly rounded, sides subparallel on the basal fourth, thence gradually incurved, apex drawn out to a beak-like structure armed at the tip with

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six fine pointed teeth, subapical constriction distinct, summit in the centre of the pronotum, anterior area rather sharply convex and moderately densely covered by small asperities, the latter gradually fading away towards the beak, basal area subopaque, densely granulate-punctate, the entire pronotum with very short, rather densely placed, erect setae. Scutellum triangular, distinctly punctured.

Elytra only slightly wider (24.0:23.5) and 1.6 times as long as the pronotum, sides parallel on the basal two-fifths, thence gradually and rather strongly incurved, apex somewhat angulately rounded, declivity commencing after the basal two-fifths, uniformly obliquely convex; disc indistinctly striatepunctate, the interstices wide and densely covered with fine punctures, each with a median row of short semi-erect scales, accompanied on each side with a row of minute inclined reddish hairs; scales slightly more prominent on the declivity.

Female slightly stouter, with similar sculpture as in the male, but the pronotum without beak-like structure at the apex, anterior margin oval in outline, with four pointed asperities in the middle.

Holotype and allotype in the Australian National Insect Collection in Canberra, 3 male, 3 female paratypes in Collection Schedl, 5 male, 12 female paratypes in the collection of the Department of Forests in Bulolo, 2 paratypes in the Bernice P. Bishop Museum collection in Honolulu.

Type-localities: New Ireland Dist., Karbil, 28.IV.1969, in freshly fallen log of *Intsia bijuga*, B. Gray; Manus Dist., Peaga, 21.IV.1969, in freshly fallen log (paratypes), B. Gray.

Cyrtogenius peregrinus nov. sp.

Female ferrugineous, 2.1 to 3.2 mm long, 2.4 times as long as wide. Somewhat allied to *Cyrtogenius perakensis* Schedl but the pronotum distinctly stouter, more convex, and the basal area less coarsely punctured, the elytral disc with the punctures of the main rows of the same size as those of the interstices, so that these two series are difficult to distinguish.

Front slightly concave, very densely punctured, and with a short brush of yellow hairs.

Pronotum not much longer than wide (35:33), widest shortly before the base, posterolateral angles nearly rectangular and strongly rounded, the sides subparallel on the basal fourth, thence gradually incurved, apex rather broadly rounded, subapical constriction evident; disc ascending convex, extremely densely covered by small asperities on the distal three-fifths, densely punctured behind, the punctures of medium size, pubescence consisting of moderately long erect hairs restricted to the sides and the anterior sloping area. Scutellum of medium size, convex and polished.

Elytra slightly wider (35:33) and 1.37 times as long as the pronotum, widest at the commencement of the declivity, sides straight but faintly divergent on the basal three-fifths, apex very broadly rounded, declivity commencing shortly after the basal half and rather steeply convex, disc shining and very densely covered with rows of medium-sized deep punctures, so that the two series, the main striae and those of the interstices, are difficult to separate, the interspaces from puncture to puncture much shorter than puncture diameter (in both directions); declivity with the suture feebly elevated, the second interstice somewhat depressed, each interstice densely and finely punctured and with sparsely placed gradules which are missing on a small area of the second interstice, apical margin finely crenulate, some short semi-erect hairs originating from some of the interstitial punctures, especially towards the sides of the declivital convexity.

Male of similar size and proportions to the female but the front convex, shining and densely, more coarsely punctured above, with a transverse lunate impression below which has finer punctures, a fringe of downwardly directed hairs along the anterior margin, a few erect setae around the anterior-lateral angles, elytral declivity with the second interstice more strongly depressed, the suture a little more elevated and the granules of interstices 1 and 3 more prominent.

Holotype female (Bishop 8935) allotype male and 17 paratypes in the Bernice P. Bishop Museum, 2 male, 2 female paratypes in Collection Schedl, 1 male, 2 female paratypes in collection of Department of Forests, Bulolo.

Type-localities: New Guinea (NW.), Wisselmeren, Enarotali, 1,850 m, 2-3.VIII.1962, J. Sedlacek (holotype); New Guinea (NE.), 13 km SE. of Okapa, 1,650 to 1,870 m, 26.VIII.1964, J. Sedlacek (allotype). Paratypes: 1 male, 3 females same data as for holotype; 3 female, same locality, 1,850 to 1,900 m, 19.VII.1962, 1 female, 3 male, same locality, 1,800 to 1,900 m, 26.VII.1962, 1 male, 1 female, same locality, 1,750 to 1,900 m, 11.VIII.1962, J. Sedlacek, 7 female, 9 male, 13 km SE. of Okapa, 1,650 to 1,870 m, 26.VIII.1964, J. & M. Sedlacek, 1 female, Purosa, 20 to 26 km SE. of Okapa, 1,800 to 2,020 m, 28.VIII.1964, J. & M. Sedlacek.

Mimiophthorus orientalis nov. sp.

Female testaceous, 1.53 to 1.59 mm long, 2.9 times as long as wide. Allied to *Mimiophthorus villiersi* Lepesme but smaller stouter, the elytral disc rather strongly striate-punctate, and the declivity without a longitudinal impression.

Front aplanate, extremely densely and finely punctured, with a short dense brush of erect yellow hairs, the latter being a little longer around the margin than in the centre.

Pronotum distinctly longer than wide (18:16), postero-lateral angles rectangular and somewhat rounded, the sides parallel on the basal two-fifths, apex semicircularly rounded, summit distinctly before the centre, anterior area convex and densely covered by small asperities, the long basal area densely and coarsely punctured, pubescence short and erect, more dense on the sides and before the summit. Scutellum small, triangular, impunctate.

Elytra as wide and 1.5 times as long as the pronotum, the sides parallel on little more than the basal half, apex broadly rounded, declivity commencing just behind the basal half and obliquely convex; disc shining, striate-punctate, the striae punctures of medium size and rather closely placed, interstices with a few extremely fine punctures bearing, as far as not abraded, very short fine hairs; declivity with the striae more strongly impressed, the striae punctures a little larger and more closely placed, the punctures of the interstices more distinct and

closely placed and the setae arising from them longer and more prominent, apical margin subacute and finely crenulate.

Male same colour, size and proportions as the female but the front shining, convex, rather coarsely and densely punctured, pubescence rather sparse, inconspicuous except for a fringe along the anterior margin which consists of rather long downwardly directed setae; elytral declivity more convex, the suture distinctly elevated, the first striae deeply impressed but the striae punctures obscure, suture and third interstices with a row of fine setose granules, smaller granules towards the sides.

Holotype female (Bishop 8935) allotype (male), 1 paratype in Bernice P. Bishop Museum, 1 female, 1 male paratype in Collection Schedl, 1 female paratype in collection of Department of Forests, Bulolo.

Type-locality: New Guinea (NW.), Nabire, S. Geelvink Bay, 10 m, 25-27.VIII.1962, light trap, J. Sedlacek.

Ips inclinans nov. sp.

Male testaceous, 2.0 to 2.3 mm long, 3.3 times as long as wide. Of similar shape to *Ips adusticollis* Motsch., but the elytra strongly striate-punctate, the declivity more obliquely truncate and the conical teeth on interstices 2 and 4 smaller.

Front trapezoid in outline between the large eyes, about as high as wide, brightly shining, coarsely and densely punctured, with short sparse pubescence.

Pronotum much longer than wide (25.8:19.2), postero-lateral angles rectangular and slightly rounded, sides parallel on the basal two-fifths, thence gradually incurved, apex broadly rounded, summit distinctly before the centre, anterior area convex and densely covered with minute asperities, the long basal area shining, remotely punctured, pubescence erect and rather long, more conspicuous on the sides and on the anterior area. Scutellum small, shining, impunctate.

Elytra as wide and 1.4 times as long as the pronotum, sides parallel on the basal two-fifths, apex broadly rounded, apical margin finely carinate, declivity restricted to the distal two-fifths, obliquely truncate, disc strongly striate-punctate, the striae punctures rather coarse and

closely placed; the striae deeply impressed, the interstices narrow, each with a series of numerous small punctures; the suture unarmed at the commencement of the declivity, second and fourth interstices with a small pointed tubercle, three small setose granules between the tooth of the fourth interstice and the carinate, slightly crenulate apical margin, the distance between the two teeth about as wide as that between the first pair; rather long setae along the side margins of the elytra above.

Holotype male (Bishop 8937) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl, 1 paratype in the collection of the Department of Forests, Bulolo.

Type-locality: New Guinea (NW.), Bodem, 100 m, 11 km SE. of Oerberfaren, 10-16.XII.1959, M. V. light trap, T. C. Maa.

Xyleborus circumspinosus nov. sp.

Female ferrugineous, dark brown to nearly black towards and on the elytral declivity, 2.5 mm long, 2.5 times as long as wide. Closely allied to *Xyleborus impexus* Schedl, but a little larger, the truncate declivity aplanate, and with two conical tubercles on the first interstices in the lower third.

Front silky shining, convex, minutely punctulate, rather coarsely, but shallowly punctured, with few fine erect hairs and the usual fringe of longer hairs along the anterior margin.

Pronotum longer than wide (31.0:25.5), postero-lateral angles rectangular and rather strongly rounded, sides parallel on the basal two-fifths, apex semi-circularly rounded, subapical constrictions not evident; summit shortly before the centre, anterior area convex and very densely covered by small asperities, basal area shining, minutely reticulate and with remotely placed small punctures, pubescence short, erect, more conspicuous on the sides and on the anterior area. Scutellum small, triangular, impunctate.

Elytra slightly wider (26.0:25.5) and 1.4 times as long as the pronotum, widest at the commencement of the declivity, sides straight, slightly divergent on the basal three-fifths of the elytra, apex rather abruptly and very broadly rounded, declivity obliquely truncate, slightly

concave in the upper two-thirds; disc shining, with rows of extremely fine widely spaced punctures, the interstices with similar punctures but more irregularly spaced, the striae punctures becoming larger and situated in faintly impressed lines just before the declivity, the interspaces punctures (as far as not abraded) with longish semi-erect hairs; at the well-developed upper margin of the declivity each interstice produced into a short conical tubercle, the lower half of the declivital margin with numerous cylindrical teeth, declivital face shining, the punctures of the main striae large but shallow, disc-like, the interstices with some minute punctures on the first interstice with a blunt tubercle at the beginning of the lower third.

Holotype female (Bishop 8938) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl, 1 paratype in the collection of the Department of Forests, Bulolo.

Type-locality: New Guinea (NE.), Umboi I., 1 km N. of Awelkon, 600 m, 21-28.II.1967, light-trap, G. A. Samuelson.

Xyleborus immersus nov. sp.

Female ferrugineous, brightly shining, 2.1 mm long, 3.0 times as long as wide. Closely allied to *Xyleborus africanus* Egg., but slightly more slender, elytral disc coarsely striate-punctate, punctuation more pronounced on the declivity and the apical margin more distinctly carinate.

Front convex, subopaque, minutely punctulate, sparsely punctured and with few short setae.

Pronotum longer than wide (23:20), postero-lateral angles strongly rounded, sides subparallel on the basal half, semicircularly rounded at the apex, a subapical constriction not noticeable, the apical margin with numerous low and small asperities; summit a short distance before the centre, anterior area convex and densely covered with small asperities, basal area polished, with fine widely placed punctures, short erect hairs along the sides and on the anterior area. Scutellum small, triangular, impunctate.

Elytra just wider (21:20) and 1.6 times as long as the pronotum, sides parallel on the basal half, thence gradually narrowed in straight lines (slightly cuneiform), apex rather abruptly

incurved, apical margin broadly somewhat angulately rounded, declivity restricted to the distal two-fifths, obliquely convex, disc shining, striate-punctate, the punctures of moderate size but not closely placed; the interstices fairly wide and each with a few fine punctures; the striae punctures becoming larger, the striae more deeply impressed towards and on the declivity, a pointed granule on the first interstices just after the beginning of the convexity, another similar pointed granule half-way along the third interstices, distance between the sutural granules distinctly shorter than between granules 1 and 2.

Holotype in the Australian National Insect Collection in Canberra, 1 paratype in Collection Schedl.

Type-locality: Lakunai, East New Britain Dist., 2.V.1969, in freshly fallen log of *Melochia odorata*, B. Gray.

***Xyleborus papatrae* nov. sp.**

Female ferrugineous, elytra faintly darker, 2.1 to 2.3 mm long, 2.1 times as long as wide. More closely allied to *Xyleborus approximatus* Schedl, but the pronotum more broadly rounded in front, the elytral disc very finely punctured, with a single conical tooth on the third interstices at the beginning of the declivital face and the apical margin of the elytra carinate and curved more angulately.

Front convex, subshining, minutely punctulate, finely punctured towards the anterior margin.

Pronotum wider than long (30:25), widest just before the base, postero-lateral angles of more than 90 deg, slightly rounded, sides carinate and distinctly divergent on the basal fourth, apex semicircularly rounded, without noticeable subapical constriction, apical margin with six pointed asperities, the median two distinctly larger than the others; summit very high, situated in the centre of the pronotum, anterior area steeply convex densely covered with asperities, these being very fine above, gradually increasing in size towards the anterior margin, basal area minutely chagrined, very finely punctured, without remarkable pubescence. Scutellum small, triangular, impunctate.

Elytra as wide and 1.5 times as long as the pronotum, sides subparallel on the basal fifth, thence almost parallel, abruptly incurved at the

beginning of the distal fourth, apex angulately rounded, declivity comprising the distal four-fifths of the elytra, obliquely convex, nearly aplanate behind; disc very short, confusedly finely punctured and with some fine wrinkles, thence gradually striate-punctate, the interstices finely reticulate, the third interstices each with a small conical tooth on a somewhat raised base on the upper third of the declivital face, the other two-thirds of the declivity distinctly striate-punctate, the medium-sized striae punctures very distinct, the striae slightly impressed, the interstices finely reticulate and each with a median row of minute punctures; apical margin carinate up to the seventh interstices.

Holotype female in the Australian National Insect Collection in Canberra, 2 paratypes in Collection Schedl, 2 paratypes in the collection of the Department of Forests, Bulolo, 1 in the Bernice P. Bishop Museum in Honolulu.

Type-locality: Rapontamon, New Ireland Dist., 30.IV.1969, in branch of fallen tree, B. Gray.

B. PLATYPODIDAE

***Crossotarsus gressitti* nov. sp.**

Male testaceous, head and elytral declivity dark red, 2.7 mm long, 3.3 times as long as wide. Allied to *Crossotarsus ventrispinis* Schedl, but smaller, the elytral declivity shorter and the postero-lateral processes reduced to inconspicuousness, small and pointed angles not exceeding the apical margin when viewed from above.

Front fairly shining, flat, minutely punctulate, shallowly reticulate-punctate, with few erect hairs along the anterior margin, on the sides in front and on the vertex.

Pronotum a little longer than wide (23:22), widest behind the deep and short femoral emarginations, the latter angulate on both ends, disc shining, minutely chagrined, median sulcus very short, punctation very sparse and fine.

Elytra slightly wider (24:22) and 1.8 times as long as the pronotum, sides parallel on the basal three-fifths, thence incurved, apex wide and transverse, the postero-lateral angles indicated by very small pointed teeth; disc shining, with rows of extremely fine submerged punctures, the latter becoming larger and rising to the

surface towards the declivity, the interstices nearly impunctate, the third with four to five sparsely placed granules towards the base; declivity restricted to the distal third of the elytra, convex, deeply striate-punctate, the interstices carinate, each with a row of distinct punctures giving rise to short semi-erect setae, apical margin broadly concave when inspected from behind, rather acute and accompanied by a narrow groove-like structure. Hind coxae well developed, second abdominal sternite with a thin pointed tooth in the middle.

Holotype male (Bishop 8939) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl.

Type-locality: New Guinea, Papua, Western Dist., Oriomo Gov. Station, 26-28.X.1960, Malaise trap, J. L. Gressitt.

Crossotarsus spinipennis nov. sp.

Male testaceous, head, pronotum and apex of the elytra ferrugineous, 3.2 to 3.4 mm long, 3.1 times as long as wide. A peculiar new species resembling *Crossotarsus brownei* Schedl, but distinctly smaller, the elytral interstices 1 to 5 terminating as short blunt spines behind and the lateral interstices 7 to 9 drawn out to a triangular postero-lateral process much longer than the interstices 1 to 5.

Front flat, coarsely punctured on the upper two-thirds, the punctures much finer on the sides below, nearly impunctate in the centre, with sparse and very short pubescence above.

Pronotum longer than wide (31:27), femoral emarginations shallow, disc minutely chagrined and very finely punctured, the density of the fine punctation varied, median sulcus moderately long and fine, with a series of short setae along the anterior margin originating from somewhat coarser punctures.

Elytra slightly wider (30:27) and 1.7 times as long as the pronotum, the sides straight and subparallel throughout, distally terminating into triangular postero-lateral processes distinctly exceeding in length the horizontal teeth of interstices 1 to 5 of the elytral disc, the latter shining, with rows of extremely fine sparsely placed punctures, the interstices wide, subimpunctate, the punctures of the main rows becoming slightly larger and situated in deeply impressed striae immediately before the apex,

the small teeth of interstices 1 to 5 gradually becoming shorter from suture to sides; below serrate apical margin of elytra a narrow impressed shining lunate furrow from side to side. Abdomen concave, hind coxae rather prominent.

Female larger, 3.5 to 3.7 mm long and 3.5 times as long as wide. Front more shining than in the male, the coarse setose punctation restricted to the sides in the upper two-thirds, slightly impressed in the centre, the impression and the anterior part brightly shining, subimpunctate, pronotum as wide as the elytra, the latter cylindrical, the sides straight and subparallel on the basal two-thirds, thence slightly constricted, apex broad and transverse, so that the postero-lateral angles distinctly measure more than 90 deg, disc horizontal in the basal four-fifths, with similar punctation as in the male, but third interstices with a very short longitudinal set of fine granules near the base, distal fifth of elytra subopaque and slightly convex, extremely finely rugose and with very short semi-erect setae, followed by a nearly perpendicular lunate face, apical margin slightly biconvex when viewed from behind. Abdomen ascending convexly.

Holotype and allotype in the Australian National Insect Collection in Canberra, a pair of paratypes in Collection Schedl, 1 male, 2 female paratypes in the collection of the Department of Forests, Bulolo.

Type-locality: Tonolei, Bougainville Dist., 8.V.1969, in freshly fallen log of "white wood", B. Gray.

Platypus advena nov. sp.

Male ferrugineous, 4.2 mm long, 3.6 times as long as wide. Closely allied to *Platypus setaceus* Chap., but the pronotum without a patch of punctures surrounding the median sulcus, all interstices of the elytral disc finely carinate (without fine granules on the first and second), and the declivity with a single tubercle in the continuation of the third interstices near the apical margin.

Front flat, of a silky texture, minutely punctulate, shallowly areolate-punctate, a few setae directed downwards near the anterior margin, convex towards the vertex, the latter with a transverse row of setose punctures.

Pronotum longer than wide (39:33), widest behind the posterior angulate extremity of the well-developed femoral emarginations, disc brightly shining, irregularly covered with fine punctures, median sulcus long but shallow, a few punctures across the anterior margin.

Elytra slightly wider (36:33) and 1.6 times as long as the pronotum, widest at the commencement of the declivity, sides straight, subparallel on the basal two-thirds of the elytra, apex rather broadly rounded, declivity restricted to the distal third, obliquely convex; disc fairly shining, sulcate-striate, the striae shallow towards the base, more distinctly sulcate behind, the stria punctures obscure, the interstices subconvex, with very scattered minute punctures, the low interstitial carinae ceasing at the beginning of the declivital convexity, but continued on the declivital face with rows of setose granules on the upper half, fading away lower down, entire declivital face opaque, minutely punctulate, more shining in the lower third, where a secondary swollen area on each side of the suture bears a small tubercle in continuation of the third interstices of the disc. Abdomen opaque, sternites 3 and 4 with a ridge-like dentate elevation on each side near the anterior margin.

Holotype male (Bishop 8940) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl.

Type locality: New Guinea (NW.), W. of Sentani, 75 m, 24-25.VI.1959, T. C. Maa; New Guinea, Papua, Western Dist., Oriomo Gov. Station, 26-28.X.1960, Malaise trap, J. L. Gressitt.

Platypus diffinis nov. sp.

Female dark reddish brown, very shiny, 3.7 to 4.0 mm long, 4.4 times as long as wide. This new species which is represented by the female only is rather difficult to place in any of the known groups of the genus *Platypus* Herbst but it might belong to the *Platypi semidepressi* group, probably near *Platypus distinctipes* nov. sp.

Front about as high as wide, finely impressed, minutely punctulate, therefore silky shining, rather coarsely punctured, the punctures larger in the upper half and all bearing semi-erect

setae, a short longitudinal carina above the centre, convex towards the vertex, the latter with a transverse row of larger setose punctures.

Pronotum much longer than wide (33:23), widest at the posterior angulate extremity of the well-developed femoral emarginations, disc shining, with irregularly scattered minute punctures, median sulcus very fine and long, surrounded by an oval patch of deep punctures (as if pierced with a needle), these very fine near the base, somewhat larger in the anterior half.

Elytra a little wider (25:23) and 1.8 times as long as the pronotum, sides parallel on the basal two-thirds, thence very slightly incurved, apex biconvex (a very shallow triangular emargination between the suture and the short postero-lateral angles when seen from above), declivity restricted to the distal fourth of the elytra, evenly convex above, subperpendicular below; disc brightly shining, with rows of extremely fine rather remotely placed punctures, those of the first in finely impressed striae, interstices wide, nearly impunctate, third interstice triangularly widened and transversely rugose towards the base; upper convex part of the declivity coarsely and irregularly punctured, the punctures bearing short semi-erect setae, the lower lunate perpendicular part less shining and granulate punctate, the apical margin when viewed from behind forming a wide triangular emargination.

Holotype female (Bishop 8941) and 5 paratypes in the Bernice P. Bishop Museum, 2 paratypes in Collection Schedl and 1 paratype in the collection of the Department of Forests, Bulolo.

Type-locality: 5 female New Guinea (NE.), Wau, Morobe Dist., Kunai Creek, 1,250 m, 26.VIII.1963, Malaise trap, J. Sedlacek, Wau, 1,190 m, 15.IX.1964, Malaise trap, 1 female same locality, 21.IV.1962, 1 female same locality, 1,200 m, 29.VIII.1963, M. V. light trap, J. Sedlacek (all), 1 female same locality, 1,200 m, 24.XII.1965, Malaise trap, J. & M. Sedlacek, 1 female same locality, 1,200 m, 26.XII.1961, G. Monteith (holotype).

Platypus distinctipes nov. sp.

Male ferrugineous, 4.2 mm long, 4.1 times as long as wide. A new species to be provisionally placed in the *Platypi semidepressi* group, with

the apical margin of the elytra extended to two triangular appendages, the tips being situated in continuation of the third interstices and separated by a triangular emargination.

Front much higher than wide, shallowly impressed, very densely and rather coarsely punctured, with short sparse pubescence, a plush pile of somewhat longer and inwardly directed hairs along the sides in front of the eyes, convex towards the vertex, the latter densely and coarsely punctured and with some scattered setae.

Pronotum longer than wide (35:23), widest at the angulate posterior extremity of the well-developed femoral emarginations, disc shining, very finely and irregularly punctured, medium sulcus rather short, surrounded by a cordiform patch of rather deep punctures.

Elytra just wider (30:29) and twice as long as the pronotum, sides parallel on the basal two-thirds, thence gradually and slightly incurved, apical margin with a triangular extension in the continuation of the third interstices separated from each other by a shallow wide trapezoid emargination at the suture, disc shining, the main rows of punctures largely obscure, the first row narrowly striate, some fine punctures evident towards the sides, interstices wide and subimpunctate, the third triangularly widened and transversely rugose near the base; declivity restricted to the distal fourth of the elytra, evenly convex above, obliquely truncate below, the upper convexity covered by confusedly placed rather coarse setose punctures, the lower truncate part separated from the upper convexity by obliquely elevated ridges, the lower part with conical tubercles, sometimes followed by small setose granules in continuation of the third interstices just above the triangular extensions of the apical margin.

Holotype male (Bishop 8942) and 4 paratypes in the Bernice P. Bishop Museum, 2 paratypes in Collection Schedl, 1 paratype in the collection of the Department of Forests, Bulolo.

Type-locality: New Guinea (NE.), Wau, Kunai Creek, 1,270 m, 22.VIII.1963, J. Sedlacek (holotype), same locality, 1,250 m, 26.VIII.1963, Malaise trap, same locality, 1,190 m, 15.IX.1964, same locality, 1,180 m, 20.IX.

1964, New Guinea (NE.), 6 km W. of Wau, Nami Creek, 1,700 m, 15.VI.1962, Malaise trap, all J. Sedlacek.

Platypus diversiporus nov. sp.

Female testaceous, head and elytra somewhat darker, 3.4 mm long, 3.7 times as long as wide. Until the male is known this new species might be placed in the *Platypus pseudospinulosi* group, especially on account of the pronotal pores, although a similar arrangement is also evident in the *Platypus oxyuri* group, but in the latter group the elytral declivity is somewhat different.

Front flat, minutely punctulate and slightly shining, covered by many medium-sized punctures on the anterior third, above opaque, the punctures larger, bearing short erect setae, convex towards the vertex.

Pronotum longer than wide (31:26), widest at the posterior extremity of the well-developed femoral emarginations, the latter angulate behind, more gradually incurved in front, disc shining, with scattered extremely fine punctures, a few larger and setose ones along the anterior margin, median sulcus long and very fine, surrounded by a cordiform patch consisting of medium-sized pores on the anterior two-thirds, small densely placed punctures behind, an arrangement similar to that on females of *Platypus solidus* Walk.

Elytra just wider (27:26) and 1.8 times as long as the pronotum, the sides subparallel on the basal three-fourths, very slightly incurved behind, apical margin transverse, shallowly bi-convex when viewed from above, declivity restricted to the distal fourth of the elytra, convex above, perpendicular below, disc with rows of fine rather sparsely placed punctures in faintly impressed lines, the first row more strongly so, the interstices minutely chagrined, nearly impunctate, the third interstices slightly elevated and with a short row of minute granules near the base; upper convexity of the declivity more confusedly and coarsely punctured, each puncture given rise to a short semi-erect seta, perpendicular face densely granulate punctate, the two areas separated by an angulate ridge-like structure.

Holotype female (Bishop 8943) and 1 paratype in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl, 1 paratype in the collection of the Department of Forests, Bulolo.

Type-locality: Papua, Western Dist., Oriomo Gov. Station, 26-28.X.1960, Malaise trap, J. L. Gressitt (holotype); 1 paratype New Guinea (NW.), W. of Sentatni, 75 m, 24-25.VI.1959, T. C. Maa.

Platypus enormis Schedl, fem. nov.

Female ferrugineous, very shiny, 3.6 mm long, 3.8 times as long as wide. The female is easily recognized by the stout oval patch of punctures surrounding the sulcus of the pronotum closely placed to the basal margin.

Front flat, densely granulate in the upper two-thirds, the punctures more shallow and more widely spaced below, pubescence rather long, directed upwards.

Pronotum distinctly longer than wide (35.0:25.5), femoral emarginations rather short and angulate on both ends, disc shining, minutely chagrinata, with sparsely placed, very fine punctures slightly difficult to see, median sulcus long, surrounded by a stout oval patch of densely placed fine punctures, this patch being longer than wide and bordering the basal margin of the pronotum, a few fine setose punctures along the anterior margin and on the antero-lateral angles.

Elytra wider (28.0:25.5) and 1.5 times as long as the pronotum, sides subparallel on the basal half, thence very slightly incurved, the apical margin shallowly biconvex when viewed from above, therefore the postero-lateral angles distinct, declivity restricted to the distal fourth of the elytra, slightly convex above, perpendicular below, the two areas separated by a low, somewhat indistinct, oblique carina; disc polished, with rows of extremely fine remotely placed punctures, the first row in a finely impressed line, interstices wide, with some scattered very fine punctures, the third widened towards the base and with densely placed fine transverse rugae; on the upper part of the declivity the main rows distinctly striate, the interstices confusedly and rather coarsely punctured, the punctures bearing short semi-erect setae, the third interstices wide, slightly convex and impunctate, the perpendicular face with some fine and setose granules, the apical margin when inspected from behind shallowly arcuate, thus producing a short curved lobus on each side of the suture.

*Allotype** (Bishop 8944) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl.

Type-locality: New Guinea (NE.), Wau, Morobe Dist., Kunai Creek, 1,250 m, 26.VIII.1963, Malaise trap, J. Sedlacek (allotype); New Guinea (NE.), Wau, Morobe Dist., 1,200 m, 17.20.I.1963, J. Sedlacek.

Platypus fracticostis nov. sp.

Male dark reddish brown, 3.0 mm long, 3.1 times as long as wide. A new species of the *Platypus adjuncti* group with the alternate interstices on the elytral disc as well as on the commencement of the obliquely truncate declivity, apical margin with four toothlike structures.

Front silky shining, slightly impressed in the centre, minutely punctulate, shallowly punctured, with short inconspicuous pubescence, a transverse row of longer and erect hairs on the vertex.

Pronotum longer than wide (27:26), widest at the posterior angulate extremity of the femoral emargination, the latter moderately deep, disc minutely chagrinata, sparsely and very finely punctured, a few larger punctures on each side of the moderately long median sulcus and along the anterior margin, the latter bearing short setae.

Elytra distinctly wider (29:26) and 1.8 times as long as the pronotum, widest at the commencement of the declivity, the sides straight and slightly divergent on the basal four-fifths, declivity restricted to the distal fourth, obliquely truncate; disc silky shining, striate-sulcate, the interstices alternate, the first very narrow and slightly elevated, the third rather wide, convex and polished, the fifth, seventh and ninth of moderate height, and like the sulci between the interstices minutely chagrinata, the even interstices depressed, the striae punctures rather small and indistinct in parts, at the commencement of the declivity the alternate interstices gradually more carinate, ceasing abruptly and followed by a dense brush of short hairs, face of declivity slightly convex, of a silky texture, the alternate interstices continued as elevated ridges each bearing a row of fine punctures giving rise to short semi-erect setae, apical margin with a very narrow parallel-sided slit at the suture and

* 'Plesiotype' of some authors.

four short toothlike structures in continuation of interstices 1, 3, 5 and 7, teeth 1, 3 and 5 of similar size and triangular, that of interstice 7 much smaller.

Holotype male (Bishop 8945) in the collection of the Bernice P. Bishop Museum, 1 paratype in Collection Schedl.

Type-locality: New Guinea (NE.), Wau, Morobe Dist., Kunai Creek, 1,250 m, 26.VIII.1963, Malaise trap, J. Sedlacek.

Platypus praepositus Schedl, fem. nov.

Female ferrugineous, 4.5 (4.2 to 4.6) mm long, 4.2 times as long as wide. Similar to the male, but larger, the pronotum with a patch of punctures surrounding the median sulcus, the elytra not cuneiform behind, the declivity more uniformly convex, the postero-lateral processes small, triangular, the apical margin between the processes transverse.

Front flat, silky shining, minutely punctulate, with a long longitudinal median carina in the upper half, with sparsely placed coarse and setose punctures on the sides, a weakly developed circular callosity in the lower half just within the insertion of the antennae and a few coarse setose punctures below.

Pronotum distinctly longer than wide (40:31), widest at the posterior angulate extremity of the moderately deep femoral emarginations, disc shining, sparsely and finely punctured, median sulcus long and fine, surrounded by a long oval patch of densely placed fine punctures, posterior extremity of this patch well apart from the basal margin of the pronotum.

Elytra a little wider (32:31) and twice as long as the pronotum, sides parallel on the basal half, thence gradually incurved, postero-lateral processes well-developed, triangular, apical margin between the processes transverse when viewed from above, declivity restricted to the distal third of the elytra, gradually convex, a narrow lunate impression below on the perpendicular face; disc shining, with rows of extremely fine and remotely placed punctures difficult to recognize in parts, the first row situated in a fine impressed line, interspaces only indistinctly punctured, the third widened towards the base and covered with fine transverse rugae; upper

convex part of the declivity with irregularly placed setose and coarse punctures on the interstices, the lower perpendicular lunate impression with some setose granules.

*Allotype** female (Bishop 8946) 2 paratypes in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl and 1 in the collection of the Department of Forests, Bulolo.

Type-locality: New Guinea (NE.), Wau, Kunai Creek, 1,270 m, 22.VIII.1963, J. Sedlacek; same locality, 5.IX.1961, ex *Araucaria hunsteinii*, J. & J. H. Sedlacek.

Platypus vesculus nov. sp.

Male ferrugineous, 3.0 to 3.2 mm long, 3.4 times as long as wide. Allied to *Platypus setaceus* Chap. but distinctly smaller, the pronotum more elongate, the elytra less strongly sulcate-striate, without granules on interstices 1 and 2, the declivity rather convex, with two very small tubercles on each side, one in continuation of the third interstices half-way down, the other above the postero-lateral angles, the entire beetle densely pubescent.

Front flat, fairly shining, covered by small punctures and longitudinal rugae, with short semi-erect pubescence. Antennal scape small, stout, triangular.

Pronotum longer than wide (28:24), widest at the posterior angulate extremity of the moderately deep femoral emarginations; disc shining, with rather numerous small setose punctures, median sulcus long and very fine, surrounded by an elongate cordiform patch of closely placed deep punctures.

Elytra slightly wider (26:24) and 1.6 times as long as the pronotum, sides parallel on the basal half, thence gradually incurved, apex rather broadly rounded, declivity commencing just behind the basal half of the elytra, nearly uniformly convex, disc very strongly striate-punctate (sulcate-punctate), the sulci fairly deep, the striae punctures of moderate size and very closely placed, the interstices slightly convex, each one with a double row of extremely fine punctures bearing small semi-erect setae; on the upper part of the declivity the inter-

* 'Plesiotype' of some authors.

stices becoming more narrow, each with a row of minute setose granules, the sulci gradually fading away towards the lower more perpendicular part of the declivity which is irregularly and very densely granulate-punctate and with more erect, very short, pubescence on the line separating the two parts of the declivity with a very small tubercle in continuation of the third interstices, another one in continuation of interstices 7 near the apical border. Abdomen ascending convexly, densely punctured with erect pubescence.

Holotype male (Bishop 8947) in the Bernice P. Bishop Museum, 1 paratype in Collection Schedl.

Type-locality: New Guinea (NE.), Karimui, 1,000 m, 4.VI.1961, Malaise trap, J. L. & M. Gressitt (holotype); Papua, Western Dist., Oriomo Gov. Station, 26-28.X.1960, Malaise trap, J. L. Gressitt.

Platypus grayi nov. sp.

Male dark reddish brown, 4.6 (to 4.8) mm long, 3.0 times as long as wide. The new species belongs to the *Platypi sulcati* group near *Platypus suffodiens* Samps., but is larger than any other species of the subgroup with a patch of densely placed punctures on the anterior half of the pronotum and remarkable by the carinate interstices 2 and 3 abruptly ceasing at the beginning of the elytral declivity.

Front slightly concave from eye to eye, subshining, minutely punctate, moderately coarsely punctured, the punctures giving rise to short semi-erect setae on the sides and towards the vertex, somewhat padded along the epistomal margin and with some very coarse punctures below the insertion of the antennae.

Pronotum as wide as long, femoral emarginations shallow, not angulate at the extremities, disc minutely chagrinate, with very sparsely placed fine punctures, median sulcus fine and long, with a small cordiform patch of densely placed deep punctures on the anterior half of the pronotum.

Elytra slightly wider (12:11) and 1.9 times as long as the pronotum, widest at the commencement of the declivity, sides straight and somewhat divergent on the basal three-fifths,

thence rather abruptly incurved, apex narrowly rounded; disc opaque except the distal parts of the carinate interstices, sulcate-carinate, the sulci wide and flat, the striae punctures indistinct, the interstices finely carinate in the middle flattening out towards the base, especially the third interstices which also become widened; declivity restricted to the distal two-fifths of the elytra, convex, more strongly so below, the first interstices not elevated, opaque and gradually declivous behind, the others carinate and shining towards the declivity, the second and third more strongly so, smooth and abruptly ceasing, the third somewhat longer than the second, interstices 4 to 7 gradually declivous but each with a regular row of setose granules, those of the seventh interstices becoming larger, the last one produced into a short triangular tooth making a kind of postero-lateral process, a large triangular tooth half-way down the declivity, in continuation of the third interstices, the tip distinctly surpassing the apical margin of the elytra when viewed from above and connected with the postero-lateral processes by a transverse carina. Abdomen ascending, convex, with long erect hairs.

Female of similar size and proportions to the male. Front silky shining, flat, an impressed median longitudinal sulcus just below the centre, with a few very scattered fine punctures bearing long fine hairs, especially along the side margins, a few others not setose, fine punctures on the padded anterior margin. Pronotum as in male but the cordiform patch of punctures somewhat larger. Elytra less opaque, the sulci narrower, the interstices wider and more evenly convex, the third triangularly widened and finely granulate towards the base, the uneven interstices with irregular rows of fine punctures; declivity restricted to the distal third, more evenly convex, all interstices with a median row of setose granules above, the dentation of the males indicated by an obliquely transverse ridge followed by a triangular space on which the setose granules are less numerous and more irregularly placed.

Holotype and allotype in the Australian National Insect Collection in Canberra, 1 male, 1 female paratype in Collection Schedl, 2 male paratypes in the collection of the Department of Forests, Bulolo, 1 male in the Bernice P. Bishop Museum in Honolulu.

Type-locality: Namarodu, New Ireland Dist., 29.IV.1969, in freshly fallen log, B. Gray.
Platypus grayi subsp. *immersus* nov. subsp.

Of the same size, proportions, general structure and sculpture as *Platypus grayi* nov. sp. but the carinate third interstices at the commencement of the elytral declivity a little longer than the second interstices and the tooth in prolongation of the seventh interstices replaced

by a small pointed tubercle preceded by two small setose granules.

Holotype (male) in the Australian National Insect Collection in Canberra; 1 paratype in Collection Schedl.

Type-locality: Tonolei, Bougainville Dist., 9.V.1969, in freshly fallen log "white wood", B. Gray.

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