

ON NEW SPECIES OF CURCULIONIDAE (COLEOPT.)
FROM JAVA AND SUMATRA.

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Subfamily OTIORRHYNCHINAE.

Dermatodes viridisparvus, sp. n.

♂ ♀. Integument black or piceous, the scaling light brown or sandy grey and densely intermingled (except on the forehead and rostrum) with pale metallic green scales; the lower surface paler, greenish white with a strong metallic reflection.

Head with the forehead clothed with dense erect scales, so that its surface appears to be raised much above the eyes and above the level of the flat-scaled vertex, and the median sulcus seems very deep; behind the middle of the eye is a bare patch showing transverse striation; the eyes slightly more convex in the ♂ than in the ♀. Rostrum not or but little longer than its apical width, parallel-sided at the base and gradually widened anteriorly, clothed like the forehead and with similar erect curved flattened setae; the epistome with the median portion elevated and separated from its margin by a shallow sulcus containing the usual bristles; when abraded the rostrum is seen to bear two large deep oval depressions on the disk, separated by a narrow carina, and the basal margin is deeply sinuate in the middle. Antennae with joint 1 of the funicle as long as 2 + 3, joints 3—6 about as long as broad, 7 slightly transverse. Prothorax transverse (7 : 5), rounded at the sides, widest at the middle; the dorsum coarsely and rugosely punctate, without granules, and with a broad shallow median furrow in the basal half; the sculpture partly concealed by the dense scaling, and the elevations between the punctures each with a short squamiform dark seta. Elytra ovate, obliquely rounded at the shoulders; the striae so densely scaled that the punctures are concealed or visible only as very narrow slits; intervals 1, 3, 5, 7 much more raised than the intervening ones and all without granules, the lateral intervals with scattered conspicuous granules; the setae dark, short, broad and elevated. Legs with dense pale scaling having a greenish or coppery reflection; the hind tibiae of the ♂ with a row of 4 or 5 small teeth on the inner face.

Length, 4.5—5.7 mm.; breadth, 1.9—2.7 mm.

Java: S. Preanger, IX. 1920 (type), and Mt. Salak, 800 m., IX. 1920 (L. G. E. KALSHOVEN).

Described from twelve specimens.

In Dr. HELLER's table (Ent. Mitt. IV, 1915, p. 208), this species runs

down to *D. aeruginosus* BOH., but in that insect the prothorax is granulate and the intervals on the elytra are all equal.

***Mylocerus kalshoveni*, sp. n.**

♀. Integument testaceous brown, clothed above with dense uniform green or blue-green scaling; the sternum and venter with grey scaling in the middle and green at the sides.

Head with fine striolation which is completely hidden by the scaling, though the shallow median stria is sometimes perceptible; the width of the forehead a little greater than the length of the eyes, which are moderately convex; the setae erect and clavate. Rostrum broader than long, a little shorter than the head, parallel-sided in the basal half and only slightly dilated at the apex; the median dorsal area very shallowly impressed, narrowing anteriorly and with a very feeble ridge on each side; the inter-scerobal area bare, concave, and bounded behind by a distinct transverse carina; the epistome short sloping very steeply; and obtusely angulate behind; the mentum with four setae. Antennae testaceous brown, the scape gently curved, gradually clavate, with sparse narrow scales and erect spatulate setae; the funicle with joint 1 longer than 2, and 3 longer than 4, the terminal joints being longer than broad. Prothorax transverse, gently rounded at the sides, widest at the middle, very shallowly constricted near base and apex; the base distinctly bisinuate and scarcely wider than the apex, which is vertically truncate at the sides; the dorsum with its sculpture entirely hidden by the scaling. Elytra much wider than the prothorax at the roundly rectangular shoulders (8 : 5) and slightly dilated behind the middle; the dorsum gently convex longitudinally, the striae with shallow punctures, and the intervals each with a row of stiff erect spatulate pale setae; the scales small, subcircular and hardly overlapping. Legs testaceous, thinly clothed with narrow pale scales, and with some broader greenish ones on the apical half of the femora; all the femora with a very small sharp tooth; the tibiae simple.

Length, 2.4—3 mm.; breadth, 0.9—1.2 mm.

Java: Kedoengdjati, 25. I. 1924, 6 ♀♀ (L. G. E. KALSHOVEN).

Subfamily ANTHONOMINAE.

***Tachypterellus nodulosus*, sp. n.**

♂. Integument red-brown, with the apices of the mandibles, usually a median stripe on the lower surface of the rostrum, a large triangular patch (mainly bare) on each side of the mesosternum, some indefinite markings on the lower surface of the anterior pairs of femora, and the apices of the tarsal claws, black or blackish; the upper surface thinly clothed with fulvous setiform scales variegated with whitish ones; the sides of the sternum with fulvous setiform scales, the median area and the venter with long recumbent whitish

with a median fovea situated well behind the eyes. Rostrum a little shorter than the front femora, gently curved, with rather strong confluent punctation throughout, and with a sharp median carina from the base to the antennae. Antennae testaceous; the scape reaching the eye; the funicle with joint 1 as long as the next four joints together, joints 3—7 equal and slightly longer than broad. Prothorax a little broader than long, with the sides straight and slightly divergent from the base to beyond the middle, then roundly but very abruptly narrowed into the tubular apical constriction; the base deeply bisinuate, the apex truncate dorsally and very oblique at the sides; the dorsum somewhat uneven, closely and rugulose punctate, with a curved transverse row of four squamose tubercles at about the middle, and a faint median carina in the basal half. Scutellum very prominent, subconical; the anterior slope almost perpendicular, convex transversely and blackish in colour; the posterior face pale, flattened and sloping much more gradually. Elytra oblong-ovate, separately lobate at the base and projecting over the base of the prothorax, much wider at the roundly rectangular shoulders than the prothorax and parallel-sided from there to beyond the middle; the dorsal outline almost flat for a short distance from the base, then abruptly and very strongly convex, the posterior declivity being very steep; the striae shallow, rather irregular and containing small deep separated punctures; the intervals uneven and finely rugulose, interval 3 with a small callus at the extreme base and with a very large elongate conical tubercle behind the middle, int. 5 with a similar smaller oblique tubercle a little before the middle and a still smaller and sharper one at its apex, int. 1 with a small conical tubercle at the middle on the highest point of the elytra, and int. 10 somewhat thickened and elevated at the apex; the setiform scales dense and erect on the tubercles, elsewhere recumbent and rather unevenly distributed. Legs elongate, especially the front pair, rugulose punctate, and thinly clothed with fulvous and whitish setiform scales; the front femora with a long stout straight tooth and beyond it a much shorter and broader tooth, which is finely denticulate on its anterior edge; the middle femora with a smaller sharp thorn-like tooth and three or four denticles beyond it; the hind femora with only a single still smaller tooth; the tibiae all uncinata at the apex, and the anterior pairs moderately curved; the tarsal claws with a long tooth.

Length, 3.3—4.5 mm.; breadth, 1.2—1.6 mm.

Java: Mt. Gede, 1400 m., 1923, 3 ♂♂ (L. G. E. KALSHOVEN).

The specimens were bred from *Pygeum parviflorum*, but the part of the plant is not stated.

So far as I am aware, the genus *Tachypterellus* has not previously been recorded from outside of North America, but I can find no character by which the present species can be separated generically from the well-known apple pest, *T. quadrigibbus* SAY, to which it presents a close general resemblance, though differing in its larger size, tuberculate thorax, and more numerous elytral tubercles.

Bathrorygma, gen. nov.

Head globular, emplaned in the prothorax so that the hind margin of the eyes almost reaches the front margin of the prothorax; the eyes very large, subcontiguous on the forehead, their curvature continuous with that of the head. Rostrum deflected almost vertically in the position of rest; the scrobes very short and broad, situated at the base, occupying the basal one-fourth of the rostrum in the ♂ and the basal three-sixteenths in the ♀, lateral in position; but somewhat oblique; the mentum minute, transverse; the peduncle of the submentum oblong, convex and much broader than the apertures on each side of it. Antennae short, the scape very short, hardly longer than the two basal joints of the funicle, just reaching the eye, sub-compressed and rapidly widening from base to apex; the funicle 5-jointed; the club elliptical, nearly as long as the four preceding joints, and compact, the joints not being very conspicuous. Prothorax about as long as broad, narrowing anteriorly, shallowly bisinuate at the base, and with the anterior prosternal margin deeply sinuate. Scutellum very small, triangular. Elytra oblong-ovate, with the basal angles embracing the base of the prothorax, the apices separately rounded and leaving the pygidium fully exposed. Legs slender; the front coxae closely contiguous, the middle coxae rather widely separated, and the space between the hind coxae much less than the width of one coxa; the femora clavate and without any tooth; the tibiae straight and subcylindrical, the anterior pairs with a very small mucro; the tarsi rather thinly clothed beneath with long silky hairs, joint 2 short and slightly transverse, 3 longer than 1 but scarcely broader, parallel-sided, deeply excised and with the lobes sharply pointed, joint 4 very broad at the apex, the claws very long and each with a long basal tooth. Abdomen with the pygidium only exposed in the ♀, and the propygidium also in the ♂, the basal limits of the exposed area indicated by a bisinuate carina that fits against the apex of the elytra; the venter much more strongly convex transversely than usual, ventrite 2(4) rather longer than either of the two succeeding ones, and separated from the basal one by a sinuate incision. Sternum with the front coxae in the middle of the prosternum; the mesosternum almost vertical, with the median process bifid at its apex and the mesepimera very large; the metasternum unusually deep dorso-ventrally, its shortest length equal to that of a mid coxa and bearing a median sulcus on its posterior two-thirds, the metepisterna very broad in front and rapidly narrowing behind, the metepimera conspicuous, the hind coxae being widely separated from the elytra.

Genotype, *Bathrorygma rectirostre*, sp. n.

A curious and very isolated form, remarkable for the following combination of characters: the very large Zygopid-like eyes, the straight downwardly directed rostrum, the short basal scrobe, the 5-jointed funicle, the vertical mesosternum and very deep metasternum.

Bathrorygma rectirostre, sp. n.

♂ ♀. Colour piceous brown; the rostrum, legs and antennae rather paler; the upper surface very sparsely clothed with pale recumbent setae; the lower surface with a feathered grey scale in every puncture. Head with the vertex rather coarsely punctate, except for a smooth rounded area in the middle. Rostrum almost straight and cylindrical (except for a slight dilatation at the insertion of the antennae); a little shorter than a front tibia and with sparse fine punctation in the ♂, distinctly longer, more slender and almost impunctate in the ♀; with a few recumbent setae at the base and a short median sulcus between the antennae. Antennae with joint 1 of the funicle as long as but much thicker than 2, the remainder progressively diminishing in length, joint 5 about as long as broad. Prothorax subconical, almost straight at the sides, widest near the base, the basal angles being broadly rounded; the apex five-eighths the width of the base, truncate dorsally and very oblique laterally; the dorsum gently convex longitudinally and sloping steeply forwards, strongly punctate, the punctures being larger and more or less confluent longitudinally in the basal half, and leaving an irregular smooth median line in the basal two-thirds; each puncture bearing a transversely recumbent flavescent seta, but in the extreme basal angles these are replaced by small feathered grey scales. Scutellum bare, unpunctate. Elytra obtusely rounded at the shoulders, subparallel-sided in ♀ to beyond the middle, gradually narrowing from behind the shoulders in ♂; the sulci containing very deep oblong punctures, each bearing a horizontal flavescent seta; the intervals not broader than the sulci, densely and rugulosely punctate, clothed with short recumbent flavescent setae, intervals 2 and 3 bearing at about the middle a few narrow feathered grey scales, and a denser patch of similar scales at the base of intervals 1 and 2, interval 1 being markedly depressed in the basal fourth. Legs with the femora clothed sparsely above and densely below with feathered scales; the tibiae setose.

Length 3 mm.; breadth, 1.5 mm.

Java: Mt. Gede, 1400 m., Tjibodas, 1 ♂, 1 ♀, (L. G. E. KALSHOVEN).

The insects were bred from the fruits of *Cyrtandra sandei*.

Genus **Amorphoidea** MOT. 1858.

It is evident from his description that MOTCHULSKY regarded *A. arcuata* MOT., as the type of his genus, but as this has not yet been definitely fixed, that species is now cited as the genotype of *Amorphoidea*. Fortunately there is in the British Museum a specimen of this species which was sent by MOTCHULSKY to FRANCIS WALKER and which may be regarded as a cotype.

It is difficult to understand how FAUST (Stett. Ent. Zeit. 1893, p. 151) was led to assign this genus to the subfamily *Laemosaccinae*. It undoubtedly belongs to the *Anthonominae* and is nearly related to *Parimera*, FAUST (1896), which FAUST rightly placed in the latter subfamily.

The genus *Imera*, PASC. (1885), appears to me to be undoubtedly synonymous with *Amorphoidea* (new syn.).

Mr. KALSHOVEN has sent from Java a species which, from the description, I attribute to *A. lata* MOT.; it was found in flowers of *Gossypium* at Bodjonegoro, XII. 1920.

There is also in the British Museum an authentic specimen of *A. rufescens* MOT. This is certainly not an *Amorphoidea*, but belongs to the subfamily *Tychiinae*, and a new genus is proposed for it below.

Subfamily TYCHIINAE.

Imerodes, gen. nov.

Head well exerted, the forehead much narrower than the base of the rostrum, the eyes moderately prominent. Rostrum* subcylindrical, rather stout, strongly curved, shorter or not much longer than a front femur; the antennae inserted at about the middle, and the scrobes passing obliquely beneath the base of the rostrum. Antennae with the scape abruptly clavate and slightly exceeding the front margin of the eye; the funicle 6-jointed, the first joint the longest and inflated, the club ovate. Prothorax much narrower than the elytra. Elytra with ten complete striae, with the shoulders obtusely prominent and the apices separately rounded, leaving the pygidium exposed. Legs: the femora unarmed; the tibiae simple, not strongly or abruptly narrowed at the base, the two anterior pairs uncinatate at the apex, the hind pair only mucronate; the tarsal claws appendiculate. Sternum with the front coxae slightly nearer to the base than to the apex of the prosternum; the mesosternal process truncate at the apex. Venter with the intercoxal process about as broad as a hind coxa and feebly angulate in the middle; the three intermediate ventrites with their external angles curved backwards.

Genotype *Amorphoidea rufescens*. MOT.

In *Amorphoidea*, as here restricted, the forehead is as broad as the base of the rostrum; the scrobes are lateral in position; the antennae have the funicle 7-jointed; the prothorax is only slightly narrower than the elytra, and the prosternum is very elongate before the front coxae; the two outer striae on the elytra cease at some distance from the base; all the femora bear a sharp tooth; and the intermediate ventrites are truncate at the external angles.

Amorphoidea angusticollis MOT., as determined by FAUST, is also referable to this genus. I have examined a long series of specimens captured by Mr. E. JACOBSON, at Fort de Kock, Sumatra, in flowers of *Gardenia florida*.

Subfamily ALCIDINAE.

Alcides hopeae, sp. n.

♂♀. Integument black or piceous, with sparse pale recumbent setae above and more densely clothed beneath with pale separated feathery scales.

Head with rather coarse shallow punctures, each containing a small fringed scale; the forehead broadly but shallowly depressed, with the punctures almost obliterated. Rostrum about as long as (σ) or rather longer than (φ) a front femur, parallel-sided to near the apex and there slightly dilated, gently curved in σ , much more strongly so in φ , almost vertically deflected in a position of rest; coarsely and subconfluently punctate throughout in σ , with an elongate median fovea between the antennae and a narrow smooth median line on the apical half; in the φ , with the punctures rather smaller and not confluent. Antennae with joint 1 of the funicle a little longer than 2 + 3, joints 3—6 subequal and longer than broad, 7 more elongate and longer than its apical breadth. Prothorax much broader than long, widest at the base, rounded at the sides and distinctly constricted at the apex; the dorsum closely set with depressed separated granules, each bearing a short curved recumbent seta on its front margin, the setae being simple or bifid. Scutellum small and not enclosed. Elytra broadly ovate, widest at the shoulders, rapidly narrowing behind and broadly rounded at the apex; the striae containing round deep punctures which are separated by more than their own diameter; the intervals broader than the striae, convex, transversely rugulose, and sparsely set with short recumbent setae, there being a shallow transverse impression behind the scutellum. Legs comparatively short and stout, rugosely punctate, and thinly clothed with narrow scales, which are broader on the lower surface of the femora; the hind legs unusually short, the femora not exceeding the 4th (6th) ventrite; the front femora with a rather long straight perpendicular tooth, truncate at its apex and bearing 3 or 4 small denticles on its distal edge, and below it a low simple basally-directed tooth; the middle femora with a much shorter and broader denticulate tooth, which is also truncate at the apex; the hind femora with a small simple tooth; the front tibia with an obtuse median tooth on the inner edge united by a sharp carina with a subapical tooth; the middle tibiae with only a much smaller subapical tooth, and the hind pair simple. Venter with a shallow median depression on ventrite 5 (7) of the σ .

Length, 4.2—4.8 mm.; breadth, 2.7—3 mm.

Sumatra; Palembang, IV. 1921, 2 $\sigma\sigma$, 1 φ , bred from fruits of *Hopea*. This small rhomboidal species is closely related to *A. dipteroearpi* MSHL. (Bull. Ent. Res. XII. 1921, p. 166, fig. 2), but is a smaller and rather narrower insect, with the shoulders less prominent, and the armature of the front femora is very distinctive.

Subfamily CRYPTORRHYNCHINAE.

Cryptorrhynchus gonioenemis, sp. n.

$\sigma\varphi$. Integument black or piceous, densely clothed above with brown scales, mottled with very indefinite and variable blackish markings, there being always a conspicuous small white spot at about one-third from the base on

interval 4 of the elytra, and sometimes some additional irregular white spots on the apical half; the lower surface thinly clothed with isolated grey scales, which are large and broadly cordiform on the prosternum, but become progressively smaller posteriorly, being small and setiform at the apex of the venter.

Head even, finely shagreened, with very shallow and broadly reticulate punctures throughout; the forehead as broad as the apex of the front femora and with a small median fovea. **Rostrum** rather strongly curved, dilated at the apex and there markedly flattened; rather strongly punctate in the ♂, but with a smooth median area which is broadest at the apex and gradually narrows behind into a point before reaching the base; in the ♀ the punctures are finer, and the impunctate area does not narrow to a point behind. **Antennae** testaceous; the funicle with joint 1 slightly longer than 2, the remainder subequal and a little longer than broad. **Prothorax** widest at the base and rapidly narrowing in front, rounded at the sides, almost semicircular in shape, being very shallowly constricted at the apex; the dorsum convex longitudinally, highest in the middle, and set with strong punctures, each covered by a broad flat scale (leaving the interspaces narrowly exposed), except on a small transverse area in the middle of the disk in which the punctures bear narrower erect blackish scales, and there are similar erect pale scales along the apex and towards the sides; no trace of a median carina. **Scutellum** narrow and much smaller than the cavity in which it lies. **Elytra** short and broad, but not much wider at the shoulders than the base of the prothorax, and broadly rounded at the apex; the dorsal outline convex, rising from the base and highest at about the middle; the narrow striae partly concealed by the dense scaling, and each puncture containing a recumbent scale-like seta; the intervals even and all of the same height, finely rugulose (but the sculpture entirely hidden by the scaling) and without any granules, each bearing a row of erect scale-like black or brown setae, which are very variable in size, some of the black ones in the middle of the disk being extremely broad. **Legs** fairly densely clothed with grey scales; the femora with a complete bare shallow furrow on the lower surface and with two small, widely separated teeth; the dorsal edge of the tibiae conspicuously angulated near the base, especially in the posterior pairs, in which the tibia gradually narrows dorso-ventrally from the angulation to the apex, the dorsal carina (viewed from above) being distinctly sinuous.

Length, 3.6—4 mm.; **breadth**, 2.1—2.2 mm.

Java: Kedoengdjati, VIII. 1922, 2 ♂♂, 1 ♀, bred from *Mangifera indica* (L. G. E. KALSHOVEN-type). **Sumatra**: Fort de Kock, 1924, 1 ♀ (E. JACOBSON).

Among the Oriental forms this species is characterised by its small size, its short compact facies, the completely sulcate and bidentate femora, and the externally angulate tibiae. It most closely resembles a small Japanese species, *C. insidiosus* ROEL., but the latter insect is somewhat larger and more elongate,

the prothorax is parallel-sided in the basal third and has an abbreviated median carina, the elytra bear a row of granules on interval 1, the femora are unidentate, the tibiae not angulate, etc.

Subfamily COSSONINAE.

Pentarthrum musae, sp. n.

♂ ♀. Colour entirely red-brown, or black with the legs and apex of the rostrum piceous brown.

Head shallowly constricted behind the eyes, the vertex glabrous and impunctate, the forehead strongly convex and with small deep separated punctures; the eyes rather small, convex, deepest in the middle. Rostrum nearly as long as the pronotum in ♀, somewhat shorter in ♂, moderately stout, cylindrical and rather strongly curved, set with small separated punctures which become gradually finer towards the apex; the scrobes commencing well beyond the middle and passing straight and obliquely beneath the base of the rostrum; the lower surface with two well-defined longitudinal striae. Prothorax very slightly longer than broad, rounded at the sides, widest at about one-third or one-fourth from the base, and shallowly constricted near the apex, the dorsum shiny and set with comparatively large deep separated punctures, which are continued right up to the apical margin. Scutellum small, circular and impunctate. Elytra oblong, distinctly broader at the shoulders than the base of the prothorax, with broad striae containing closely-set deep punctures, which are about as large as those on the pronotum; the intervals slightly convex, shiny, and each with a row of extremely minute spaced punctures, the lateral intervals being rather sharply carinate in the apical half. Legs stout and sparsely punctate. Underside about as coarsely punctate as the pronotum, but the punctures on the prosternum much closer and subconfluent.

Length, 2 mm.; breadth, 0.6 mm.

Java; (without exact locality).

In its coarse punctation resembles the group of species represented by *P. huttoni* WOLL., and *P. punctatissimum* CHAMP., but differs from these in its markedly longer and more slender rostrum, and in having the elytra broader than the prothorax.

Described from four specimens received from South Africa, where they were found at the roots of bananas imported from Java. With them was a single specimen of *Stenommatius musae* MSHL. (Bull. Ent. Res. XI, p. 277, pl. VII, fig. 7, Dec. 1920), originally described from Honolulu, but probably introduced there from the East.

Dendroctonomorphus gedensis, sp. n.

Colour black, shiny, with the antennae, tarsi and apices of the tibiae red-brown.

Head broad, very convex, and closely and strongly punctate, the punctures being much wider than the intervals between them; often with a punctiform median frontal fovea; the eyes large, flat and subcircular. Rostrum very wide, a little broader than long, gradually narrowed from the base to the middle and then more abruptly so; the punctures smaller and even closer than those on the head, being sometimes longitudinally confluent in the middle or laterally in front of the eyes; the apex somewhat asymmetrical, the right side of the rostrum being a little longer than the left; the epistome rather shorter on the right side than on the left, with five or six recumbent pale setae arising from its base on the right half and only a single isolated one on the left; the two median setae on the submentum much longer than any of those on the genae or trophi. Antennae with the club nearly as long as broad. Prothorax nearly as long as broad, widest close to the base and gradually narrowing in front, being rather abruptly constricted at the apex; the obtuse lateral ridge that runs from the base to the apical constriction is distinctly sinuate in the middle; the dorsum with large shallow punctures which are largest at the base and become gradually smaller anteriorly. Scutellum sunken, small, longer than broad. Elytra cylindrical, about twice as long as the prothorax, broadly rounded at the apex, coarsely crenato-sulcate; the intervals not broader than the sulci, each bearing throughout an irregular row of small spaced punctures, and a row of denticulate granules on the apical half; intervals 1—3 more or less fused and scrobiculate along the basal margin. Legs shiny, with sparse shallow punctures bearing pale recumbent setae.

Length, 4.2—4.8 mm.; breadth, 1.5—1.8 mm.

Java: Mt. Gede, 1500 m., IX. 1923 (L. G. E. KALSHOVEN).

This species is very closely related to *D. muriceus* CHAMP. (1914), which Mr. KALSHOVEN has also found at Preanger, but in the latter species the punctures on the head and rostrum are much finer, being distinctly smaller than the spaces between them; the rostrum is slightly shorter and its dorsal outline rather more convex, and the setae on the submentum are not conspicuously longer than the others; the club of the antennae is distinctly transverse; the punctures on the prothorax are finer, and the lateral ridge is more carinate and is bordered superiorly with an impressed line; and the asperities on the elytra are less conspicuous.