### RESULTS OF THE ARCHBOLD EXPEDITIONS

# NEW SPECIES OF STAPHYLINIDAE (COL.) FROM , NEW GUINEA AND MISOOL

by

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[The present collection was made by members of the Third Archbold Expedition to the Snow Mountain region in New Guinea, 1938-1939, and comprises all specimens collected during that trip. For the general itinerary of the expedition, a list of the localities visited and the position of the camps, reference should be made to L. J. TOXOPEUS's short paper published in this journal (*Treubia* 17, 1940, p. 273-279, and route map). Mr CAMERON has included the descriptions of a few additional new species collected by members of the Swedish-Indonesian expedition to West New Guinea and the island of Misool, in 1948.

The types of the new species are in the Leiden Museum, paratypes and duplicate specimens have been deposited in the collections of the Museum Zoologicum Bogoriense at Bogor (Java), and in the author's collection. — ED.]

### Eleusis toxopei sp.n.

Shining; head, thorax and abdomen black, elytra yellowish red, the base rather broadly, the reflexed sides and apex more narrowly, black. Antennae and legs reddish, the femora black. Length 7.5 mm.

Differs from *papuana* CAM. in the colour, much longer antennae and subquadrate head. Head slightly transverse (5.5:5), the sides very slightly divergent towards the base, the eyes very small, the intra-ocular sulcus extending to the base, the puncturation fine, only moderately close, the ground sculpture fine, longitudinally striate. Antennae long, 2nd segment shorter than 3rd, 4th to 10th all longer than broad, decreasing in length, the penultimate only slightly so, 11th longer than 10th. Thorax transverse (6:4), cupuliform, sides before base with a small emargination, the posterior angles obtuse, the sculpture as on the head. Elytra longer than the thorax (6:4), as long as broad, the sculpture as on the fore-parts.

Abdomen more finely and sparingly punctured, the ground sculpture transverse.

Moss Fcrest Camp, 2600 m, 5.xi.38, L. J. TOXOPEUS. Two examples.

### Priochirus (Catacamptus) monticola sp.n.

Very near *cilifrons* HELLER but slightly smaller (length 13 mm), the antennae much shorter, the 4th to 10th segments transverse, the anterior angles of the head obtusely rounded, the frontal horns stouter, blunter and slightly convergent without external denticle visible from above but only by lateral view, the anterior margin of the frontal impression without trace of teeth. Thorax transverse, convex, finely sulcate, sometimes with bipunctate disc, sides with rather coarse scattered punctures as in *cilifrons*. Elytra distinctly shorter, very slightly broader than long, a little shorter and narrower than the thorax. Abdomen with biserially punctured tergites as in *cilifrons*.

Moss Forest Camp, 2600-2800 m, 5.xi.38 (Type); Top Camp, 2100 m, 22.i.39, L. J. TOXOPEUS. 18 specimens.

Immature examples have reddish yellow legs, reddish brown head and thorax and red elytra, they differ however from *bicolor* CAM. in the convergent frontal cornua, much broader frontal impression and shorter elytra.

#### Priochirus (Catacamptus) associatus sp.n.

Very near *monticola* and only differs from it in the smaller size (length 8-9 mm) and narrower build, parallel frontal cornua slightly thickened at the inner side of base, smaller eyes, more finely punctured sides of thorax and the longer elytra, much longer than the thorax.

With the preceding and Top Camp, 2100 m, 22.i.39, L. J. TOXOPEUS. Eight specimens.

### Priochirus (Plastus) bicornutus sp.n.

Differs from *heurni* CAM. in the smaller size (length 13 mm) and depressed build, the flatter thorax with practically parallel sides, the frontal horns equal and parallel, contiguous throughout and not at all divergent, the sides of the thorax more closely and uniformly punctured, the antennae shorter. From *taurus* FAUV. it differs in the smaller size and depressed build, parallel frontal horns. The 1st segment of the antennae is not sulcate, the 4th to 6th moniliform, the 7th to 10th transverse, the sides of thorax closely and uniformly punctured.

Bernhard Camp, vii-xi.1938, J. OLTHOF.

### Priochirus (Plastus) longipennis sp.n.

In size and build of fore parts similar to *cavifrons* FAUV. but with longer antennae, the penultimate segments less transverse, the 1st segment not sulcate, the central teeth of the frontal margin much larger and less close, the lateral cornua more slender and longer; the denticle before apex not visible from above, all the processes about equidistant. Disc of thorax with'a very fine coriaceous ground sculpture, not extending to the anterior margin sides or posterior margin and sometimes with a pair of large punctures near middle; the punctures at the sides less numerous, about 5 or 6 only. Elytra a third longer than the thorax, not longitudinally impressed; abdomen irregularly but not so closely punctured as in *cavifrons*. Differs from *opacicollis* FAUV. in the smaller size, broader head, larger teeth, the 1st segment of antenna not sulcate and more punctured abdomen. Length 9 mm.

Lower Mist Camp, 1800 m, 28.i.39, L. J. TOXOPEUS. Two specimens.

### Priochirus (Plastus) toxopei sp.n.

Very near *cavifrons* FAUV. and only differing from it in the following respects: the central teeth of the front are further apart and nearer the frontal processes, the punctures at the sides of the thorax are smaller and the abdominal puncturation is much more sparing. Length 8 mm.

Hollandia, sea-level, vii.1938, L. J. TOXOPEUS. Two examples.

#### Priochirus (Plastus) olthofi sp.n.

Differs from *subinequalis* CAM. in the much smaller median teeth on the frontal margin and which are further apart with broader and shallower emargination between, the left tooth very small; the eyes larger; thorax distinctly more convex, the abdomen more finely punctured at the bases of the tergites. Frontal horn with very small tooth below not visible from above. First segment of antennae more or less sulcate; side of thorax with two rows of punctures, an upper of five and lower of four. Length 8-9 mm.

Bernhard Camp, 50 m, vii-xi.1938, L. J. TOXOPEUS (Type); Idenburg River, 400 m, 15.vii.-15.xii.38, J. OLTHOF.

#### Phloeonomus (s.str.) coriaceus sp.n.

Black, the fore-parts dull, strongly coriaceous, the abdomen moderately shining; sides of thorax in the posterior half narrowly reddish; elytra at the shoulders reddish, sometimes extensively only the sides and postero-external angles; abdomen with the lateral margins and 6th tergite

reddish. Antennae reddish, the last three or four segments black. Palpi and legs reddish yellow. Length 2-2.75 mm.

Of robust subparallel build. Eyes large, temples very short, densely coriaceous and impunctate. Antennae extending to the posterior angles of the thorax, the first seven segments all longer than broad, the 2nd shorter than the 1st, 3rd a little longer than 2nd, 4th to 7th all decreasing in length, 8th to 10th stouter, slightly transverse and increasing in width. Thorax transverse (2.5:1.3), convex, the sides rounded in front, straighter and retracted behind, slightly impressed at the posterior angles, the sculpture as on the head. Elytra a little broader than long (3.5:3), broader than the thorax, finely superficially and moderately closely punctured, the ground sculpture as on the thorax. Scutellum impunctate, coriaceous. Abdomen slightly narrowed at the base, more strongly at apex, the ground sculpture much finer than on the fore-parts and with fine scattered punctures.

Sigi Camp, 1500 m, 26.ii.39, L. J. TOXOPEUS. Three specimens.

#### Oxytelus (Tanycraerus) validus sp.n.

Black, shining. Antennae reddish. Legs reddish yellow. Length 5 mm. In size and build much like *lucens* BERNH. but with larger eyes and entirely different sculpture. Head slightly broader than long, scarcely narrower than the thorax, distinctly widened behind, the temples rounded with the base, shorter than the eyes, the anterior border of the head slightly emarginate in the middle, the angles a little prominent, transversely impressed between the antennal tubercles, the anterior part rather finely, closely punctured, elsewhere less finely more closely striate-punctate, on each side before the base with a larger puncture. Antennae with the 2nd segment a little shorter than the 3rd, 4th a little longer than broad, 5th slightly, 6th to 10th gradually more transverse, 11th a little longer than the 10th. Thorax transverse (4.75:3), the sides straight and parallel for the anterior fourth, then straightly retracted to just before the obtuse posterior angles where there is a small emargination; along the anterior half of the middle with a rather broad shallow impression, behind at the middle of base with a rather large fossa, the sides at the middle with rather broad superficial impression. Elytra longer than the thorax (4.5:3) broader than long (6:4.5) as closely but more coarsely punctured. Abdomen sparingly punctured, finely coriaceous.

 $\mathcal{A}$ : 7th sternite produced in the middle as a small rectangular plate slightly broader than long.

Sigi Camp, 1500 m, 17.ii.39 (Type); Rattan Camp, 1200 m, ii-iii. 1939, L. J. TOXOPEUS.

# Oxytelus (Anotylus) toxopei sp.n.

Robust, shining black, the elytra reddish brown. Antennae, palpi and legs black. Length 5-6.5 mm.

Closely allied to melas FAUV. Very similar in build but the fore-parts less finely and more closely punctured, the elytra with more distinct ground sculpture. ct: head almost as broad as the thorax, strongly widened behind, the temples and posterior angles rounded, the eyes small much shorter; antennal tubercles large and prominent, the clypeus depressed, very finely and sparingly punctured, the anterior border rounded; vertex a little depressed and with a short and very fine sulcus, finely, moderately closely punctured, more sparingly at the sides, near base of antennal tubercle with a larger puncture. Antennae with 2nd and 3rd segments of equal length, 4th as long as broad, 5th to 10th transverse increasing in width, the penultimate about twice as broad as long, 11th short. Thorax strongly transverse (6:3.5), the sides and angles rounded, along the middle with very fine impressed line, lateral sulci scarcely indicated, the sides feebly impressed, the puncturation in front very like that of the head, closer and less fine behind. Elytra longer than the thorax (5:3.5), broader than long, slightly widened behind, simply punctured much like the posterior part of the thorax, the ground sculpture feeble. Abdomen practically impunctate, finely coriaceous. Q: head much smaller, less widened behind, the antennal tubercles less developed, thorax with lateral sulci more evident.

 $\sigma$ : 7th sternite slightly produced in the middle of the posterior margin with rounded apex.

Scree Valley Camp, 3800 m, 27.ix.38, L. J. TOXOPEUS. Two specimens, radsignal q.

### Stenus (s.str.) toxopei sp.n.

Rather shining greenish-blue. Antennae and legs dark, the basal half of the femora reddish yellow. Palpi reddish yellow. Length 5 mm.

Head slightly elevated along the middle, coarsely and closely punctured. Antennae slender, extending to the base of the thorax, the last three segments forming a club, the 9th and 10th about as long as broad. Thorax longer than broad, the sides feebly rounded equally retracted in front and behind, coarsely and closely punctured, along the middle transversely rugulose. Elytra longer than the thorax (5:4), closely rather more coarsely punctured than the thorax with similar transverse rugae. Abdomen gradually narrowed to apex, rather closely but much more finely punctured than the fore-parts and with an extremely fine ground sculpture.

Rattan Camp, 1150 m, ii-iii.39 (Type); Top Camp, 2100 m, 19.i.39, L. J. TOXOPEUS.

#### Pinophilus (s.str.) brevicornis sp.n.

Rather shining, robust, black, the posterior margins of the tergites reddish. Antennae red. Legs and palpi reddish yellow. Length 11 mm.

Head with large eyes, the temples rounded with the base, the posterior half closely covered with larger and smaller punctures, the front and vertex sparingly punctured. Antennae short and stout, extending to about the middle of the thorax, the 4th segment about as long as broad, 5th to 10th transverse, increasing in width, 11th narrower and scarcely as long as the 10th. Thorax transverse (8:7), convex, the sides gently rounded in front, straight and retracted behind, the posterior angles obtusely rounded, along the posterior half of middle with a fine raised line, elsewhere closely and coarsely punctured. Elytra longer than the thorax, parallel, longer than broad (10:8.5), the puncturation very similar. Abdomen much more finely, closely somewhat asperately punctured. Pubescence scanty on head and thorax, longer and closer on the elytra and abdomen.

 $_{C}^{*}$ : 6th sternite with moderately deep triangular emargination with rounded apex.

Araucaria Camp, 800 m, iii.1939 (Type); Rattan Camp, 1200 m, ii-iii.39, L. J. TOXOPEUS.

#### Palaminus bivittatus var. obliteratus nov.

Only differs from the type in the absence of the humeral marking. Rattan Camp, 1150 m, ii-iii.39, L. J. TOXOPEUS. Two specimens.

### Palaminus varipennis sp.n.

Shining, head and thorax dark reddish-brown or black, the elytra black variously marked with reddish yellow, or reddish yellow mottled with black; abdomen black or dark reddish brown, the 5th and 6th tergites black. Antennae reddish yellow, the middle segments more or less infuscate. Legs reddish yellow. Length 4-5 mm.

Very near *bivittatus* CAM. but with shorter stouter and more or less infuscate antennae, broader thorax and more finely punctured elytra. In the specimens with dark elytra the elytral pattern differs on the right and left. Head as broad as thorax, impunctate in front, elsewhere with

rather large close punctures. Antennae extending a little beyond the base of the thorax, the segments all-longer than broad, the 9th and 10th very slightly. Thorax transverse (3:2.5), the sides gently rounded and retracted to the rounded posterior angles, the sculpture coarse and close as on the head. Elytra much longer than the thorax (5:2.5), longer than broad (5:4), closely but much less coarsely punctured, these in one example with the right marked with a curved reddish yellow fascia from about the middle of the side to the suture near apex, the postero-external angle also reddish yellow; the left with two small spots placed obliquely on the middle of the disc (type): another specimen has the right elytron with an irregular reddish yellow marking behind the middle and extending to the suture, the left with a spot at the suture before the middle, another just behind the middle of the elytron, yet another small and transverse immediately behind it and almost on the posterior margin with a round one; in another specimen the elytra are reddish yellow irregularly mottled with black. Abdomen with the usual imbricate sculpture.

Lake Habbema, 3250-3300 m, ult. vii.-ult. viii. 1938, L. J. TOXOPEUS. Three specimens.

#### Paederus morosus sp.n.

Head, thorax and abdomen black, shining, the posterior margin of the 5th and whole of the 6th tergites red: elytra black, dull, narrow at base, widened behind. Antennae black, the first two and last four segments reddish yellow. Palpi reddish yellow. Legs black, the basal third of the femora and tarsal segments of middle and posterior more or less reddish yellow. Length 10 mm.

Head longer than broad, trapezoidal, broader than the thorax and elytra, strongly narrowed behind the eyes, transversely sulcate between the antennal tubercles, the sulcus with a row of five or six small punctures, towards the base with a few others, ground sculpture very fine, coriaceous. Antennae very long, extending to the posterior margin of the elytra, all the segments except the 2nd very long. Thorax narrow, oval, much longer than broad (6:4), on each side of middle with a row of 6 or 7 fine punctures and a few others equally fine and irregularly placed near the sides. Elytra as long as the thorax, narrow at base and considerably widened behind, where they are as broad as the thorax; apterous, strongly coriaceous, scarcely visibly punctured and with long black setae. Abdomen very sparingly punctured, finely transversely striate.

 $\sigma$ : 6th sternite with deep parallel sided excision with rounded apex.

Rattan Camp, 1150 m, ii-iii.1939 (Type); Araucaria Camp, 800 m, iii.1939, L. J. TOXOPEUS.

### Astenus persimilis sp.n.

Colour pattern of *cheesmani* CAM. but darker, more robust, thorax broader, the sculpture and that of the head coarser, that of the elytra as in *cheesmani*. Length 6 mm.

Lake Habbema, 3250-3300 m, vii-viii.1938, L. J. TOXOPEUS.

#### Philonthus toxopeanus sp.n.

Shining; head, elytra and abdomen black, the latter slightly iridescent. Antennae black, the first three segments red, the last three reddish yellow. Palpi reddish. Legs reddish-yellow. Thorax 5-punctate. Length 6 mm.

Head subquadrate, slightly transverse, narrower than the thorax, very slightly retracted towards the base, the posterior angles rounded with the base, the eyes not prominent and about as long as the temples; median inter-ocular punctures widely separated; temples with four or five black setae; behind the eye with a group of three or four punctures and before the base with four others; ground sculpture extremely fine, transverse. Antennae with 3rd segment a little longer than 2nd, 4th to 8th slightly longer than broad, decreasing in length, 9th and 10th about as long as broad. Thorax slightly transverse (5:4.5), the sides slightly retracted towards the front, posteriorly broadly rounded with the base; dorsal row of usually five punctures but occasionally only four, at the sides with two others and four or five black setae. Scutellum closely and moderately finely punctured. Elytra a little longer and distinctly broader than the thorax, finely and moderately closely punctured and with rather long pubescence and three or four black lateral setae. Abdomen finely and moderately closely punctured, finely pubescent and with numerous black setae. The ground sculpture of the head and thorax extremely fine, less • fine on the abdomen. First segment of the posterior tarsus a little longer than the second.

Rattan Camp, 1150 m, ii-iii.1939 (Type); Lower Mist Camp, 1560 m, 17.i.1939, L. J. TOXOPEUS. Two specimens.

#### Philonthus capito sp.n.

Shining black, the elytra reddish yellow. Thorax with dorsal row of six punctures. Antennae black, the last two segments reddish-yellow. Femora and palpi dark, tibiae and tarsi reddish-yellow. Length 6 mm.

Colour of inquinatus STEPH. but larger and more robust, head much larger, antennae much shorter and stouter, abdomen much less closely punctured. Head large, subquadrate, in the  $\mathcal{J}$  as broad, in the  $\mathcal{Q}$  a little narrower than the thorax, very slightly retracted behind the eyes, the posterior angles rounded, eyes as long as the temples; interocular punctures widely separated, behind them with another pair of smaller but equally distant ones: at the postero-internal margin of the eye with a group of two or three others; front with a small impression; ground sculpture fine, striate and transverse. Antennae short and stout, the 3rd segment a little longer than 2nd, 4th to 10th transverse, about twice as broad as long and scarcely differing. Thorax scarcely longer than broad, the sides very slightly rounded, practically parallel, dorsal row of 6 moderate punctures and 2 or 3 others externally; ground sculpture as on the head. Elytra longer (5.5:4.5) than the thorax and broader, with small moderately close superficial punctures and fine yellow pubescence. Abdomen moderately closely punctured, the 5th tergite much more sparingly, finely and rather sparingly punctured. First segment of posterior tarsus only a little longer than second.

Mist Camp, 1800 m, i.1939, L. J. TOXOPEUS. Two examples.

### Hesperus viridipennis sp.n.

Shining; head, thorax and abdomen black with slight greenish reflex, the abdomen with the posterior margins of the first five tergites narrowly but distinctly reddish yellow: elytra bright green. Antennae with the first four segments red, the last three, four or rarely only two reddish yellow. Palpi and legs reddish yellow. Length 15 mm.

In size and build much like *beccarii* FAUV. but differs in the colour, much more punctured head, more numerous and irregularly punctured thorax and more finely punctured elytra. Head transversely suborbicular, slightly narrower than the thorax ( $\sigma$  and  $\varphi$ ), the post-ocular region gently rounded with the base and about as long as the eyes, along the middle impunctate except for 3 or 4 small punctures in front, elsewhere coarsely and closely punctured and with a very fine striate ground sculpture. Antennae extending to the base of thorax, 3rd segment longer than 2 nd. 4th to 7th a little longer than broad, 8th to 10th as long as broad. Thorax longer than broad (13:11), slightly narrowed towards the front, the sides straight, the posterior angles broadly rounded with the base, impunctate along the middle, at the sides with larger and smaller punctures irregularly distributed, the ground sculpture as on head; scutellum black, closely and finely punctured, finely yellow pubescent; elytra a little longer and broader than the thorax, finely moderately closely punctured, at the base less finely and more closely, pubescence long and yellow, ground sculpture absent. Abdomen at the sides with close aciculate punctures, almost impunctate along the middle, the ground sculpture extremely fine and striate, pubescence yellow with a few longer black setae.

 $\sigma$  : 6th sternite with rather broad and deep arcuate excision at the middle of the posterior margin.  $\varphi$ : 6th sternite with broad feebly bisinuate posterior margin, in the middle with a long slender spine with bifid apex.

Misool Island, 8.ix.-20.x.1948, M. A. LIEFTINCK. 15 specimens.

#### Hesperus excellens sp. n.

Shining; head, thorax and abdomen black, the latter with slight bluish reflex, the thorax more or less sericeous; scutellum black; elytra green with golden red reflex in certain lights. Antennae with the first three segments red, the last three yellow. Palpi and legs reddish yellow. Length 12-14 mm.

At once distinguished from *viridipennis* CAM. by the entirely black abdomen, the shorter, broader, more transverse, subquadrate and much less punctured head, the thorax broader in front than behind, less finely punctured elytra, the abdomen less finely and more closely punctured. Head in  $\sigma$  short and broad, broader than the thorax, between the antennal tubercles slightly impressed and sulcate, the eye shorter than the postocular region, the sides with several punctures of varying size, in the  $\mathcal{Q}$  of similar shape but only as broad as the thorax, the eyes larger, longer than the post-ocular area; in other respects similar and in both sexes with a very fine striate ground sculpture. The antennae are more slender than in *viridipennis* but very similar in structure. Thorax slightly longer than broad, the sides straight, slightly retracted to the rounded posterior angles, with an irregular row of 6 or 7 small punctures on each side of middle and 4 or 5 others on the sides in front. Scutellum closely punctured; elytra broader and slightly longer than the thorax, rather finely, closely and subasperately punctured and with long, close, yellow pubescence. Abdomen rather closely acculately punctured, the pubescence long and dark.

 $\mathcal{A}$ : mandibles very long and prominent; 6th sternite with much narrower and smaller subtriangular excision than in *viridipennis*, with rounded apex.  $\mathcal{Q}$ : 6th sternite broadly and gently rounded.

Misool Island, Fakal, 8.ix.-20.x.1948, M. A. LIEFTINCK. Seven specimens.

#### Hesperus tricolor sp. n.

Shining; head and thorax bright blue, elytra green, abdomen black. Antennae black, the last three segments reddish yellow. Legs and mouth parts black. Length 13-17 mm.

In size and build somewhat resembling auroscutatus FAUV, and gridellii <sup>•</sup>CAM., but differs from both in colour, absence of dorsal row of thoracic punctures, much finer puncturation of the elytra etc. Head in both sexes subquadrate, broader than the thorax, in the  $\sigma$  larger and more transverse than in the  $\mathcal{Q}$ , the post-ocular region broadly rounded and a little retracted, much longer than the eye and with a long black seta, the d with frontal impression; inter-ocular punctures widely separated, behind and internal to the eye with an oblique row of 3 or 4 large punctures, elsewhere with a few scattered scarcely visible ones, ground sculpture very fine, striate. Antennae as in auroscutatus FAUV., the 4th to 6th segments a little longer than broad, decreasing in length, 7th and 8th as long as broad, 9th and 10th slightly transverse. Thorax longer than broad, the sides rounded in front, gently arcuately retracted behind to the rounded posterior angles and with a few black setae, along the middle with a fine sulcus, puncturation irregular, about 8 or 10 anterolaterally; ground sculpture as on head, in certain lights somewhat sericeous; scutellum finely and rather closely punctured, finely yellow public pu closely punctured, finely yellow pubescent on the disc and at the sides with a few black setae. Abdomen rather closely, aciculately punctured at the bases of the tergites, pubescence rather long, the sides with longer black setae, ground sculpture fine, striate.

 $\mathcal{J}$ : 6th sternite broadly and not deeply arcuately emarginate.

Moss Forest Camp, 2800 m, 9.x.-5.xi.38, L. J. TOXOPEUS. Four specimens.

#### Hesperus setosus sp. n.

Shining; head, thorax and abdomen black, elytra purple, the abdomen slightly iridescent. Antennae black, the bases of the 2nd and 3rd segments reddish, the last three reddish yellow. Legs and palpi reddish. Length 13 mm.

At once distinguished from all the New Guinea species by the numerous long black erect and semi-erect setae.  $\sigma$ : head transverse, as broad as the thorax, the inter-ocular punctures widely separated, behind and internal to the eye with 3 or 4 punctures, the front slightly impressed, ground sculpture and general puncturation absent, the punctures seti-

ferous. Antennae scarcely extending to the base of the thorax, the 3rd segment only slightly longer than the 2nd, 4th to 7th all longer than broad, decreasing in length, 8th to 10th as long as broad. Thorax as long as broad, the sides behind scarcely sinuate, on each side of the middle with 3 large punctures, externally near the side with 7 or 8 others, before the base with a row of 6, the sides with 5 or 6 long black setae, ground sculpture absent. Scutellum black, finely and rather sparingly punctured. Elytra broader and a good deal longer than the thorax with larger and smaller punctures only moderately close; pubescence fine, and with several long black erect and semi-erect setae, more numerous at the sides. Abdomen sparingly punctured and without ground sculpture and with long black setae especially at the sides.

 $\mathcal{A}$ : 6th sternite broadly superficially emarginate.  $\mathcal{Q}$ : unknown.

Moss Forest Camp, 2800 m, 9.x.-5.xi.1938, L. J. TOXOPEUS. Two specimens.

#### Hesperus abnormalis sp. n.

Shining; head, thorax and abdomen black, elytra green with more or less extensive ill-defined purple reflex on the disc and before the posterior margin, each with a small round patch of yellow hairs. Antennae with the first six and last two segments black, the 7th, 8th and 9th yellow. Legs and palpi black. Length 12 mm.

In size and build much like feae FAUV., but otherwise entirely different. Head practically orbicular, broader than the thorax, the eyes small, much shorter than the post-ocular region and except for a pair of widely separated inter-ocular punctures, a post-ocular setiferous puncture and two or three orbital ones practically impunctate and without ground sculpture. Antennae long and slender, the first nine segments all longer than broad, the 10th and 11th about as long as broad. Thorax longer than broad (8:6), the sides gently rounded in the anterior half, then gently arcuately retracted to the rounded posterior angles, except for four or five lateral setiferous punctures and a few marginal ones practically impunctate and without ground sculpture. Scutellum densely yellow pubescent. Elytra a little longer (9:8) and broader than the thorax, as long as broad, almost impunctate except at the pubescent patches, somewhat uneven, the sides with 3 or 4 long black setae. Abdomen narrowed to apex, very sparingly punctured and with a few long black setae, ground sculpture very fine, transverse. The posterior tarsi are longer and more slender than usual in Hesperus.

 $\sigma$ : anterior tarsi dilated; 6th sternite with rather deep subtriangular excision of the posterior margin, its apex rounded.

Moss Forest Camp, 2800 m, 9.x.-5.xi.1938, L. J. TOXOPEUS. Two specimens.

#### Hesperus toxopei sp. n.

Shining; head and abdomen black, the latter with scarcely perceptible bluish reflex; thorax bright red; elytra purple, the shoulders, sides, posterior margins and suture greenish blue. Antennae with the 1st segment red, the apices of the 2nd and 3rd black, the last three yellow. Mandibles pitchy. Palpi and legs reddish yellow. Length 10-11 mm.

At once distinguished from all the species of more or less similar coloration by the posterior half of the sides of the elytra being longitudinally superficially impressed and with a distinct keel externally. In size and build much like rufithorax FAUV., but with longer and more slender antennae, more finely and less closely punctured elytra.  $\sigma$ : Head transverse, suborbicular, a little broader than the thorax, with a small impression between the antennal tubercles, the eye shorter than the postocular region, between the eyes with a pair of widely separated punctures and a group of 3 or 4 smaller ones behind and internal to the eye; ground sculpture absent. Mandibles long and prominent. Antennae long and slender, all the segments distinctly longer than broad. Thorax very slightly broader than long (7:6.5), the sides nearly straight and gradually retracted to the rounded posterior angles; on each side of the middle with a row of 3 small punctures, externally with one or two others; ground sculpture absent; scutellum closely punctured and with yellow pubescence; elytra longer and broader than the thorax, a little widened behind, finely moderately closely punctured, yellow pubescent and with some long black setae especially at the sides. Abdomen narrowed to apex, the segments at their bases each with a row of close acicular punctures, here and there with a very few others, the sides with long black setae, ground sculpture extremely fine, transversely striate.

 $\sigma$ : 6th sternite with deep subtriangular excision at the middle of the posterior margin, its apex rounded.

Rattan Camp, 1200 m, ii-iii.1939, L. J. TOXOPEUS. Two specimens.

#### Hesperus longipennis sp. n.

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Shining; head and thorax blue, the latter with purplish reflex; elytra shining, dull green; abdomen black and shining with slight metallic reflex.

Antennae, legs and palpi black, the 9th and 10th segments of the former sometimes reddish yellow. Length 8 mm.  $\cdot$ 

Head quadrate, as long as broad, broader than the thorax, retracted to the rounded posterior angles, post-ocular region much longer than the eye, with a row of 3 moderate punctures on each side of discomore or less transverse, the post-ocular region more finely and rather closely punctured; ground sculpture absent. Antennae long, the 3rd segment longer than the 2nd, 4th shorter than 3rd, 4th to 10th all much longer than broad, decreasing in length, 11th as long as broad. Thorax convex, longer than broad (5:4.5), the sides rounded in front, rather strongly arcuately retracted to the briefly rounded posterior angles, with two or three black setae, on each side of middle with two or three small punctures; ground sculpture absent. Scutellum finely and closely punctured and public p widened behind, broader than long (7.5:7), very finely and closely punctured, here and there transversely striate, finely yellow pubescent and with a few long black setae, the pubescence before the apical margin closer and longer forming a more or less distinct patch. Abdomen narrowed to apex, the tergites each with a few small punctures at the sides, the ground sculpture very fine, transverse, striate.

 $\sigma$ : 5th sternite with feeble arcuate emargination; 6th with rather deep narrow subtriangular excision.

Lower Mist Camp, 1700 m, 17.i.39 (Type); Rattan Camp, 1100 m, ii-iii.39, L. J. TOXOPEUS. Five examples.

#### Hesperus graciliventris sp. n.

Shining; head and thorax red, elytra bright blue, abdomen black. Antennae long, reddish yellow, the 5th to 8th segments infuscate. Legs and palpi reddish yellow. Length 9 mm.

Head orbicular, slightly narrower than the thorax, the eyes large, about as long as the post-ocular region, with a pair of obliquely placed punctures behind and internal to the eye and a row of four very small ones before the base. Antennae long and slender, extending a little beyond the base of the elytra, all the segments much longer than broad, decreasing towards apex. Thorax a little longer than broad (5.75:5), slightly narrowed towards the front, the sides nearly straight, the posterior angles rounded, practically impunctate and like the head without ground sculpture. Scutellum red with a few small punctures. Elytra convex, longer and broader than the thorax, as long as broad, finely and rather sparingly punctured, the pubescence rather long and yellow, ground sculpture absent. Abdomen slender, a good deal narrower than the elytra, narrowed towards apex, closely punctured at the bases of the anterior tergites, very finely and sparingly along the posterior margins, impunctate elsewhere, ground sculpture very fine, transversely striate.

 $\sigma'$ : 6th sternite with narrow, rather deep excision of the posterior margin, its apex rounded.

Araucaria Camp, 800 m, iii.39 (Type) ; Rattan Camp, 1150 m, ii-iii.39, L. J. TOXOPEUS. Two specimens.

### Creophilus imitator sp. n.

Very like *lanio* ER. Size, build and colour similar, but the head much less shining, as finely but more closely punctured and with distinct uniform coriaceous ground sculpture, in *lanio* this is scarcely visible and not uniform, the thorax has a more evident ground sculpture than in *lanio* and it is uniform; the elytra are slightly longer than the thorax, without distinct punctures, coriaceous, the wrinkling of the surface finer and so less rugose than in *lanio*. In the d the 6th sternite is rather less deeply but more broadly arcuately excised. Length 17-23 mm.

Top Camp, 2100 m, 25.i.39 (Type); Mist Camp, 1800 m, 18.i.39, L. J. TOXOPEUS. Five specimens.

#### Quedius (Microsaurus) infimus sp. n.

Black, shining. Antennae reddish brown, the first two segments and legs reddish yellow. Length 5 mm.

Head scarcely broader than long, the eyes flat, as long as the temples. the latter with a setiferous puncture, before the base with two others; ground sculpture fine, striate. Antennae extending to the base of thorax, all the segments longer than broad, decreasing in length, the 10th about twice as long as broad, the 11th longer. Thorax scarcely broader than long, widest behind, the disc bi-punctate, the sides with a setiferous puncture, and a pair near the anterior and posterior borders; ground sculpture as on the head. Scutellum with a few fine punctures. Elytra slightly shorter than the thorax, widest behind, broader than long (4:3), finely and rather closely punctured. Abdomen narrowed to apex, the 1st visible tergite with puncturation much like that of the elytra, becoming gradually finer and less close towards apex, the 5th and 6th tergites sparingly punctured, pubescence rather long.

Scree Valley Camp, 3800 m, ix.38 (Type); Moss Forest Camp, 2800 m, 9.x.38, L. J. TOXOPEUS. Two specimens.

# Atanygnathus toxopei sp. n.

Black, shining, the abdomen slightly iridescent. Antennae long and slender, black, anterior and middle femora reddish, the posterior and middle and posterior tibiae black, all tarsi and mouth parts reddish yellow. Length 6 mm. Very near *robustus* CAM., but with narrower head, longer, darker and more slender antennae and darker legs.

Head oval, longer than broad, much narrower than thorax, except for three setiferous ocular punctures impunctate, the ground sculpture feeble, more distinct posteriorly. Antennae with all the segments longer than broad, the 11th as long as the 10th. Thorax transverse (5:4), convex, widest behind, disc bi-punctate, ground sculpture as on head. Elytra as long as but scarcely broader than the thorax, slightly broader than long, very finely closely subasperately punctured, finely pubescent. Abdomen narrowed to apex, much less finely and closely punctured than the elytra, the pubescence much longer and coarser and with numerous long black setae, finely coriaceous.

Sigi Camp, 1500 m, 18.ii.39 (Type); Mist Camp, 1800 m, i.1939, L. J. TOXOPEUS. Two examples.

### Gyrophaena (s. str.) toxopei sp. n.

Shining black, the elytra coppery. Antennae blackish, the first three segments and legs reddish yellow. Length 2 mm.

In build somewhat like *curticornis* BERNH. but in all other respects different. Head at side with a few small punctures and without ground sculpture. Antennae long and slender, extending nearly to the postero-external angle of the elytra, 4th segment very small, 5th to 10th all distinctly longer than broad, decreasing in length, the 11th longer than the 10th. Thorax transverse, the disc and sides with a few small scattered punctures; ground sculpture absent. Elytra longer (1.5:1) and broader than the thorax, closely, rather finely, uniformly punctured and without ground sculpture. Abdomen except for a few setiferous punctures practically impunctate and with scarcely visible ground sculpture.

 $\sigma$ : 5th tergite with a transverse row of four small tubercles or ridges before the posterior margin; 6th on each side with a long slender inwardly directed spine.

Sigi Camp, 1500 m, 17.ii.39 (Type); Rattan Camp, 1150 m, ii-iii.1939, L. J. TOXOPEUS. Sixteen specimens.