(Noona Dan Papers No. 93)

Carabidae (Col.) collected by the Noona Dan Expedition in the Bismarck Islands.

By C. J. Louwerens, Hilversum.

This is the third part of the results of the Noona Dan Expedition (Petersen, 1966) dealing with the Carabidae. The first and second parts, dealing with Philippine material, have been published by Straneo and Louwerens in Entomologiske Meddelelser 35, 1967, subentitled Noona Dan Papers No. 45 and No. 47, respectively.

I am glad to say that I have received help and assistance from different sides, but first of all I wish to mention the kind helpfulness of Prof. P. J. Darlington Jr. of Harvard University, who was always willing to give me his valuable advices in difficult cases. He also compared a number of species with his type specimens and other material of New Guinea. Thanks too, to Dr. Arnost Jedlicka (Praha) and Mr R. D. Pope (British Museum), who kindly examined a small number of species.

With regard to the accompanying illustrations, the drawings of the two new species of *Scopodes* have been made by an artist of the Rijksmuseum van Natuurlijke Historie at Leiden, under the supervision of Dr M. A. Lieftinck and Dr J. T. Wiebes. The other drawings are pencil camera lucida-sketches by myself and inked by Mr J. C. Krijnen (Rijswijk). To all of them I express my sincere thank.

The majority of the genera has a world-wide distribution or is Oriental of origin, but such genera as *Dicrochile*, *Diaphoromerus*, *Stricklandia* and *Scopodes* are clearly Australian or New Guinean, *Dicrochile* also reaches Eastern Indonesia (Halmaheira Isl., Moluccas) and one species of *Scopodes* has been collected in the mountains of Java.

The species are partly Oriental, partly Australian.

All specimens were collected in 1962, most of them at Mercury light or in Malaise insect traps.

Subfam. Ozaeninae

Pseudozaena orientalis Klug 1834, Jahrb. Ins., p. 81, var. tricostata Montrousier 1855, Ann. Soc. Agr. Lyon (2) 7, p. 8.

MUSSAU: Talumalaus, 2 sp., 5-9 Feb.

Distribution: New Britain, Mussau, the Solomons and the Moluccas (Amboina Isl.), where it is a common insect. I have also seen a specimen from W. Celebes, named by H. E. Andrewes.

Subfam. Scaritinae

Clivina fessa Darlington 1962, Bull. Mus. Comp. Zool. 126, No. 3, p. 388.

MUSSAU: Talumalaus, 1 sp., 19 Jan.

Distribution: New Guinea, Bismarck and Solomon Isls.

Clivina ? wallacei Putzeys 1863, Mem. Soc. R. Sci. Liege 18, p. 35, var. *philippinensis* Kult 1951, Acta Soc. Ent. Cechosl., 47, p. 27.

MUSSAU: Taletasi Lake, 1 sp., 4 June.

Distribution: Philippines and Formosa.

I am not absolutely sure of the identification. The specimen belongs to the *helferi*-group: labrum 6-setose; median part of clypeus distinctly separated from wings; pronotum with front transverse impression present and the third interval of elytra 4-punctate. Typical *wallacei* is reddish in color and depressed dorsally. Here the color is black, and the specimen is a little larger and of normal convexity, not depressed.

Subfam. Bembidiinae

Tachys fasciatus Motschulski 1851, Bull. Soc. Nat. Moscou 24, part 2, no. 4, p. 506.

MUSSAU: Talumalaus, 1 sp., 20. Jan.

Distribution: from southern Asia to Japan in the North and through the islands South and East to the Bismarck and Solomon Isls., New Caledonia and Australia. Also in parts of Africa.

The size of the black fascia on the elytra is variable. I saw a series from New Britain, Cape Cloucester, collected by Dr P. J. Darlington Jr., with almost black elytra.

Tachys nitens Andrewes 1925, Ann. Mus. Civ. Genova 51, p. 412. NEW BRITAIN: Yalom, 1000 m, 1 sp., 16 May. Also in New Guinea.

352

Tachys umbrosus Motschulski 1851, Bull. Soc. Nat. Moscou 24, part 2, no. 4, p. 507.

MUSSAU: Talumalaus, 1 sp., 9 Feb.

Distribution: from southern Asia including Ceylon through the Malay Archipelago and the Philippines to New Guinea, the **Bismarck and Solomon Isls.**

Tachys acuticollis Putzeys 1875, Ann. Mus. Civ. Genova 7, p. 740. LAVONGAI: Banatam, 14 sp., 24 March.

Distribution: Aru Isl., the Moluccas, the Bismarck Isls. and New Guinea.

Tachys singularis Andrews 1925, Ann. Mus. Civ. Genova 11, p. 393.

DYAUL: Sumuna, 6 sp., 4 March.

Also in Celebes and the Philippines.

This species is very close to *Tachys yunnax* Darlington of New Guinea, which is originally described from the Dominican Republic, Sánchez, West Indies.

Subfam, Pterostichinae

Morion humeratum Chaudoir 1880, Bull. Soc. Nat. Moscou 55, part 1, No. 2, p. 352.

LAVONGAI: Banatam, 1 sp., 9 March.

Distribution: New Guinea, the Bismarck and Solomon Isls.

All eastern members of Morion, which I have seen, are more or less toothed at shoulders, but in humeratum the teeth are rather large. The pronotum bears a distinct transverse impression just in front of base.

Morion longipenne Putzeys 1875, Ann. Mus. Civ. Genova 7, p. 727.

NEW BRITAIN: Yalom, 1000 m, 1 sp., 12 May.

Distribution: Aru Isl., New Guinea, the Bismarck Arch. and tropical Australia.

Brachidius crassicornis Chaudoir 1852, Bull. Soc. Nat. Moscou 25, part 1, No. 1, p. 78.

NEW BRITAIN: Valoka, 1 sp., 10 July.

Distribution: from India and Andaman Isls. through the Malay Archipelago and the Philippines to New Guinea, New Britain and the Solomons. An oldona is to here a classe when our solution

Ent Medd. 37

23

Subfam. Anchomeninae

Violagonum (Colpodes) violaceum Chaudoir 1859, Ann. Soc. Ent. France (3) 7, p. 351.

MUSSAU: Talumalaus, 7 sp., 18—22 Jan.; LAVONGAI: Banatam, 1 sp., 18 March; NEW BRITAIN: Bita Paka, 15 km SE of Kokopo, 1 sp., 10 July; DYAUL: Sumuna, 1 sp., 5 March.

Distribution: Amboina, Aru and Kei Isls., New Guinea, Bismarck and and Solomon Isls.

Colpodes habilis Sloane 1907, Deutsche Ent. Zeits., p. 179.

MANUS: Lorengau, 1 sp., 19 June.

Distribution: New Guinea, Bismarck and Solomon Isls. and Santa Cruz Isl. It also occurs in the Moluccas (Buru and Amboina Isl.).

Colpodes caudoimpressum new species. (Fig. 1).

Color piceous or black; elytra dark green; side margins of pronotum and narrowly of elytra, palpi, antennae, legs and underside more or less reddish brown; tarsi brown. Shiny. Hind wings fully developed.

Length 6,5—8 mm; width 2,5—3 mm.

Head convex with large, prominent eyes; width over the eyes about 0.70 times largest width of pronotum; antennae reaching basal third of elytra; hind supra-orbital setae between posterior edges of eyes; genae very short; surface smooth. Pronotum convex, transverse; width/length is about 1.60 and base/apex about 1.40; side margins moderately explanate, widening out behind; from widest point, a little before middle, gently rounded to the little distinct rather strongly rounded anterior angles, in an almost straight line contracted to posterior angles, which are obtuse and a little rounded, not or only weakly subsinuate before the angles; at widest point the margins are round or subangulate; the hind lateral pore on the border and on the angle, the front lateral pore a little before widest point on the explanate part; the median line and transverse lines finely impressed; base and apex nearly straight, the former with somewhat oblique sides; basal foveae moderately large and moderately deep with only a very few scattered punctures, for the rest the surface is smooth. Elytra convex; length/width is about 1.50 and width of elytra/width of pronotum is about 1.62; basal border entire; the sides nearly parallel at middle, rounded or subangu-

Entomologiske Meddelelser 37 (1969)

late at shoulders, rather strongly contracted behind, moderately sinuate before apex, which is obliquely concave over a distance of 3 inner intervals taken together, the apices blunt or subdenticulate; striae for the greater part very superficially impressed, merely indicated by small punctures at places, moderately deep apically; intervals flat without any punctures; the third interval 3-punctate, the front pore on the third, the two other pores on the second stria; disc in some specimens distinctly depressed behind middle. Microsculpture of sides and front of head very finely, moderately transverse at places; the sides of pronotum here and there with vague transverse meshes; on the elytra the meshes are moderately transverse and much more impressed than on head and especially on pronotum. Underside smooth, not



Fig. 1. Colpodes caudoimpressum, n. sp., holotype § from Lemkamin; (A) left half of head and pronotum, (B) apex of left elytron. public p

NEW IRELAND: Lemkamin, 900 m, holotype \bigcirc , 17 April 1962, and 1 paratype 5 April. Additional material: Kandan, allotype \bigcirc , 3 paratypes, 1 Jan. 1960, and from Schleinitz Mts., Lelet Plateau, 7 paratypes, october 1959 (all W. W. Brandt), Bishop Museum, Honolulu.

Readily recognizable by the shiny dark green elytra and the almost obliterated elytral striae.

Altagonum flavicornis new species. (Fig. 2).

Mouth parts and antennae flavous; head almost black; pronotum brown with paler margins; elytra dark brown with sides and sutural intervals lighter; underside brown, reddish at places; legs brown. Shiny, very faintly iridescent, when viewed in strong light. Hind wings fully developed.

Length about 7 mm; width about 2.75 mm.

Head measured over the moderately large and moderately prominent eyes about 0.73 times largest width of pronotum; antennae reaching basal third of elytra; labrum truncate in front; two supra-orbital setae on each side, the hind seta a little behind or at level of hind-eye; frontal impressions large and deep; surface smooth. Pronotum little convex; width/length about 1.42, widest at about middle; sides very finely bordered, gently rounded, more contracted in front than behind, so that base is about 1.36 times apex, which is slightly emarginate; base a little rounded with slightly oblique sides; anterior angles rounded, little advanced; hind angles obtusely rounded; the single lateral pore just before hind angle on the margin, which is moderately broad, widened out behind; median and transverse lines finely impressed; the basal foveae large and deep; surface smooth, only a very few small punctures in the foveae. Elytra convex: length/width about 1.80, and width about 1.60 times largest width of pronotum; basal border entire; sides nearly parallel, obtusely angulate at shoulders, very slightly emarginate before apex, which is nearly truncate; extreme apex indistinctly denticulate; the impunctate striae moderately deep, a little deeper behind, $\frac{3}{4}$ and $\frac{5}{6}$ unite before apex; intervals little convex,

356

Entomologiske Meddelelser 37 (1969)

smooth, the third interval 3-punctate, the front pore on edge of stria 3, the two other ones on edge of stria 2. Microsculpture of head consisting of small meshes, which are a little wider than long, less distinct at sides; on pronotum the narrow meshes are finely impressed, moderately to strongly transverse, only clearly visible at places; elytra with strongly transverse meshes, wider and more distinctly impressed than on head and pronotum. Underside: side pieces of metasternum a little longer than wide in front; last ventral segment bisetose at apex; legs long and slender; first segment of hind tarsi indistinctly grooved along outer edges; fourth tarsal segment a little emarginate; claw segment glabrous at sides.

NEW BRITAIN: Komgi, 1000 m, holotype O, 14 May 1962.



Fig. 2. Altagonum flavicornis n. sp. holotype \Im from Komgi; (A) left half of head and pronotum, (B) apex of right elytron.

In build much like *Dicranoncus* but the tarsal claws are simple. At once recognizable by the yellow antennae.

Subfam. Licinae

Dicrochile alternans Darlington, 1968, Bull. Mus. Comp. Zool. 137, no. 1, p. 17.

NEW BRITAIN: Yalom, 1000 m, 1 sp., 16 May.

Also known from New Guinea.

Omestes torta Andrewes 1933, Treubia 14, p. 276.

NEW BRITAIN: Yalom, 1000 m, 1 sp., 16 May. Head and apex of the left elytron are shown i Fig. 3.

Distribution: also Sangi and Talaud Isls., Celebes, the Philippines, the Moluccas and New Guinea.

Subfam. Chlaeniinae

Chlaenius flaviguttatus Macleay 1825, Annulosa Javanica, p. 14. NEW BRITAIN: Valoka, 1 sp. 4. July.

Distribution: Malay Archipelago, Philippines, Moluccas, Bismarck and Solomon Isls., New Guinea, New Hebrides, Fiji, Samoa, New Caledonia and Australia.

This species is very variable as regards the yellow markings on the elytra, sometimes the spots are wanting all together.



Fig. 3. Omestes torta Andrewes from Yalom; head and apex of left elytron.

Chlaenius manus new species. (Fig. 4).

Upper- and underside black; head and pronotum with an extremely faint greenish tinge; palpi, antennae except segments 1 and 3, both darker with lighter tips, and tarsi reddish brown. Moderately shiny. Body winged.

Length about 12,50 mm.

Head over the large, prominent eyes about 0.66 times largest width of pronotum; both clypeus and labrum truncate; antennae not very long, reaching about basal fourth of elytra; antennal segments 3 and 4 of nearly the same length; frontal impressions small and shallow, almost parallel; genae short; neck not constricted behind; surface, with exception of neck, rather densely punctate, the punctures small, of different size and shape, some of them confluent. Pronotum convex; transverse; largest width, at about middle, 1.50 times length along the median line; the sides finely bordered, narrowly explanate, nearly evenly rounded from apex to base, very slightly sinuate just before the hind angles, which are obtusely rounded, anterior angles indistinct, base a little wider than apex, ratio about 1.10; both marginal setae apparently wanting. I can not detect any pores because of the rather rough surface of the margins, the setae, if any, abraded; median line and front transverse impressions very fine, the former a little deeper on apical half; the basal foveae large and



Fig. 4. Chlaenius manus n. sp., holotype \mathcal{Q} from Lorengau; left half of head and pronotum.

deep, somewhat irregular; surface sparsely punctate, the punctures as a whole much larger and deeper than those on head, but there are much smaller punctures amongst the large ones; disc almost smooth with only a few small punctures at places; a few fine hairs at sides. Elytra convex; a little less than twice as long as largest width, which is 1.20 times largest width of pronotum; sides almost parallel, though a little wider behind middle; basal border entire; shoulders rounded; apex faintly sinuate; basal striole long; striae moderately impressed; intervals little convex, with 3 to 4 rows of hair-bearing punctures. Microsculpture: none on head; traces of small, moderately transverse meshes here and there visible at sides of pronotum; elytra with more distinct, small, nearly isodiametric meshes.

Underside: emargination of mentum not toothed; ventral segments without any puncturation; meso- and metasternum sparsely and finely punctate; metepisterna as long as wide in front, punctate; prosternal process with a fine border; claw segment setulose at sides.

MANUS: Lorengau, holotype \mathcal{Q} , 19 June 1962.

Smaller than *Chlaenius drescheri* Louwerens of SE Borneo. *Drescheri* is wholly piceous; less shiny; relatively narrower; the pronotum subcordate; the intervals of the elytra with very minute V-shaped tubercles from the top of which arise moderately long hairs, etc. *Chlaenius wegneri* Louwerens of Flores Isl., also black, is a much bigger species, 19 mm, with pronotum subcordate; tooth in the emargination of mentum bifid, etc.

Subfam. Harpalinae

Gnathaphanus licinoides Hope 1842, Ann. Mag. Nat. Hist. 9, p. 427.

MUSSAU: Talumalaus, 2 sp., 5-9 Feb.

Distribution: Moluccas (Amboina Isl.), New Guinea, Bismarck and Solomon Isls., New Hebrides, New Caledonia and Australia.

Gnathaphanus philippensis Chevrolet 1841, Revue Zool., p. 221. LAVONGAI: Banatam, 1 sp., 26 March.

Distribution: from SE Asia to the Philippines and Australia.

Diaphoromerus papuensis Macleay 1876, Proc. Linnean Soc. New South Wales 1, p. 168.

LAVONGAI: Banatam, 3 sp., 21-23 March. and the second states

Distribution: Moluccas (Amboina Isl., described as Gnathaphanus basilewskyi Louwerens), New Britain and New Guinea.

Trichotichnus (Carbanus) straneoi Louwerens 1962, Tijdschr. Ent. 105, p. 142.

NEW IRELAND: Lemkamin, 900 m, 1 sp., 12 April.

Distribution: Moluccas (Amboina Isl.), New Guinea, New Britain and New Ireland.

Trichotichnus nigricans Schauberger 1935, Ent. Anzeiger 15, p. 34.

NEW IRELAND: Lemkamin, 900 m, 2 sp., 17-21 April.

Also in New Guinea and Solomon Isls. (Rennell).

Trichotichnus brandti Darlington 1968, Bull. Mus. Comp. Zool. 137, 1, p. 57.

MANUS: Lorengau, 1 sp., 24 June.

Also in New Guinea.

Trichotichnus guttala Darlington 1968, Bull. Mus. Comp. Zool. 137, 1, p. 57.

NEW IRELAND: Lemkamin, 900 m, 3 sp., 12-17 April.

Also in New Guinea and New Britain.

Trichotichnus semirugosus Darlington 1968, Bull. Mus. Comp. Zool. 137, 1, p. 58.

NEW IRELAND: Lemkamin, 900 m, 2 sp. 12-21 April.

Also in New Guinea.

Very close to *Trichotichnus (Lampetes) isabellinus* Louwerens of the Moluccas (Amboina Isl.). It seems, that *isabellinus* is a little smaller and more shiny.

Harpaloxenus mas Darlington 1968, Bull. Mus. Comp. Zool. 137, 1, p. 61.

LAVONGAI: Banatam, 1 sp., 23 March. — NEW IRELAND: Lemkamin, 900 m, 1 sp. 17 April.

Also in New Guinea.

Harpaloxenus celebensis Schauberger 1935, Ent. Anzeiger 13, p. 157.

NEW BRITAIN: Valoka, 2 sp., 9-10 July.

Distribution: Celebes, Java, Suma, Halmaheira and New Guinea.

Egadroma robusta Sloane 1907, Deutsche Ent. Zeits., p. 469.

LAVONGAI: Banatam, 2 sp., 21—23 March. — DYAUL: Sumuna, 2 sp., 8—9 March.

1444

23, 111

Distribution: New Guinea, Bismarck Arch., the Solomons and Australia. Also in Java.

The four specimens examined bear all a very small posthumeral, yellow marking on the 6th interval.

Egadroma smaragdula Fabricius, 1798. Suppl. Ent. Syst., p. 60. LAVONGAI: Banatam, 1 sp. 18. March.

Distribution: from SE Asia to Australia.

Subfam. Anaulacinae

Anaulacus fasciatus Schmidt-Goebel 1846, Faun. Col. Birmaniae, p. 89.

NEW BRITAIN: Yalom, 1000 m, 1 sp., 18 May.

Distribution: Assam, India, Ceylon, Andaman Isl., Indo China, Sumatra, Java, the Philippines and the Bismarck Arch.

Subfam. Lebiinae

Catascopus aruensis Saunders 1863, Trans. Ent. Soc. London (3) 1, p. 331.

NEW BRITAIN: Yalom, 1000 m, 2 sp., 12. May.

Distribution: Aru Isl., New Britain, New Ireland, New Guinea and Australia.

Dr P. J. Darlington Jr. kindly examined the two specimens of New Britain and found them a little different from typical *aruensis*. The New Britain-specimens are larger, a little differently coloured and with longer, apical spines. However for the time being and with only two examples before me it seems better not to introduce a new species or variety.

Pericalus macrostictus new species. (Fig. 5)

Color of upperside: head and pronotum very shiny green; elytra shiny blackish green, but green at places along suture, sides and apical area, each elytron with two large, yellowish spots of irregular shape, the front spot covering intervals 4 to 8 and the hind one 3 to 8; color of underside of head and pronotum green; venter, meso- and metasternum black with a greenish tinge; of the mouth parts the clypeus is green, the rest of the mouth parts, antennae, legs, coxae and trochanters are yellowish. Hind wings developed.

Length about 7 mm.

Head with very large, strongly prominent eyes; over the eyes 1.40 times largest width of pronotum; labrum notched in the

Entomologiske Meddelelser 37 (1969)

middle of front; genae inconspicous; neck not constricted behind; antennae moderately long, reaching about basal fourth of elytra; surface of head in front and between the eyes with densely placed, almost longitudinal furrows, more or less oblique in front, densely punctate behind the furrows. Pronotum small, subcordiform; width about 1.40 times length, largest width at about one fifth from apex; margins finely bordered, side margins narrowly explanate, gently and evenly rounded from apex to about one third from hind angles, which are sharp and acute; anterior angles rounded and little advanced; apex and base nearly straight and of about the same width; front marginal



Fig. 5. Pericalus macrostictus n. sp., holotype 3 from Yalom; left half.

seta placed at widest point, the hind seta on the border just in front of the angle; median line finely impressed; of the transverse impressions the front transverse impression is superficially developed, the hind one deep; basal foveae small and deep; disc transversely striate, the sides irregularly and finely wrinkled at places; surface with a few, fine scattered punctures. Elytra convex; length about 1.55 times width; width about 1.90 times width of pronotum; widest a little behind middle; basal border entire; shoulders squarely rounded; sides slightly rounded, somewhat compressed before middle; apex rather strongly oblique, weakly emarginate; outer angles strongly toothed or with a short spine, inner angles clearly spined; striae moderately impressed, punctate at places; the impunctate intervals convex, the third interval 3-punctate, the two front pores before middle on edge of stria 3, the hind pore, at about one fifth from apex, on edge of stria 2. Microsculpture: isodiametric on head; none on pronotum; elytra with moderately transverse meshes. Last ventral segment of \bigcirc bisetose, that of \bigcirc quadrisetose at apex; \bigcirc protarsi a little dilated and with two rows of adhesive scales beneath.

NEW BRITAIN: Yalom, 1000 m, holotype \bigcirc and allotype \bigcirc , 21 May 1962.

Closely related to *Pericalus klapperichi* Jedlicka also of New Britain. Of the same color and size; the four spots on the elytra are much larger in the new species, the sutural interval terminating in a short spine, the microsculpture of the elytra moderately transverse. However, a number of small species is much alike as to build, color and the shape and size of the elytral spots. Generally the differences are only small. Accordingly the new species is perhaps not more than a modificated form of *klapperichi*.

Coptodera eluta Andrewes 1923, Trans. Ent. Soc. London, p. 30. NEW BRITAIN: Valoka, 1 sp., 13 July.

Distribution: from SE Asia to the Philippines, New Britain and New Guinea.

The specimen examined has the elytra unspotted.

Stricklandia marginalis new species. (Fig. 7).

Of the same general aspect as *Stricklandia pericalloides* Macleay of Australia and New Guinea but larger and relatively wider than *pericalloides*. Length of the new species 13 mm and width 5 mm. *S. pericalloides* is 10 mm long and 4 mm broad. Width over the eyes is 0.70 times largest width of pronotum; width of pronotum



Fig. 6. Stricklandia pericalloides Macleay from Dobodura, Papua, New Guinea; left half of pronotum. — Fig. 7. Stricklandia marginalis n. sp. holotype \mathcal{Q} from Yalom; left half of pronotum.

is 1.55 times length; base is 1.10 times apex and width of elytra is 1.40 times width of pronotum. In pericalloides width of elytra is 1.56 times width of pronotum. The new species has the sides of pronotum less contracted in front, more behind; from widest point more or less scalloped to anterior angles, which are not so much advanced, though distinct; the emargination is shorter, only 0.3 of the distance between the angles (about 0.5 in pericalloides); explanate margins much wider but not so wide as in Stricklandia lata Darlington of New Guinea. Elvtra with the sides finely servate and finely setulose; striae very finely impressed behind, merely indicated by rows of small punctures, obliterated at places; intervals a little convex; third interval with two setiferous pores, both behind middle, difficult to detect because the intervals have a row of setae-bearing punctures down the middle of each interval; apex with inner and outer angles strongly spined. No visible microsculpture. The accompanying sketches (Figs. 6, 7) show the differences in the shape of the pronotum of *pericalloides* and the new species.

NEW BRITAIN: Yalom, 1000 m, holotype \mathcal{Q} , 21 May 1962.

Celaenephes parallelus Schmidt-Goebel 1846, Faun. Coleop. Birmaniae, p. 77. A constant was a static and stated between

NEW BRITAIN: Valoka, 2 sp., 7-10 July.

Distribution: from Ceylon, NE India and Burma through the

Malay Archipelago, the Philippines, New Guinea, Bismarck Archipelago, the Solomons, Fiji, Samoa and New Caledonia to Australia.

Subfam. Pentagonicinae

Pentagonica ruficollis Schmidt-Goebel 1846, Faun. Col. Birmaniae, p. 48.

LAVONGAI: Banatam, 2 sp., 22-24 March.

Distribution: from SE Asia to Australia.

Pentagonica blanda Andrewes 1929, Tijdschr. Ent. 72, p. 339.

MUSSAU: Talumalaus, 1 sp., 9 Feb.

Distribution: Sumatra, Java, Moluccas (Halmaheira), the Philippines, New Guinea, the Bismarck and Solomon Isls. (Rennell). Isls.).

Scopodes peterseni new species. (Fig. 8).

Color of upperside: head and pronotum bright green or bluish green; elytra dark greenish blue or violet, faintly purplish at places when viewed in strong light (only in the holotype); front of head, clypeus and labrum very dark, almost black; antennae dark brown, except segments 1 to 4, which are paler. Underside black; legs brown with tibiae and tarsi lighter. Very shiny.

Length about 4 mm; width about 1.7 mm.

Head over the enormous eves 1.26 times largest width of pronotum; labrum slightly 6-angulate in front, the 6 setae on the angles, the 2 inner setae much shorter than the outer ones; antennae short, hardly reaching base of pronotum; front of head forming a triangular patch, longitudinally striate or uneven (a little different in the two specimens examined) with two round. small impressions; clypeus longitudinally striate; 7 deep, longitudinal sulci between the eyes, the sulci smaller behind where the surface is more rugose; the surface is too rough to detect any punctures. Pronotum convex, subquadrately cordiform; largest width about 1.14 times length, widest at angulate point at about one third from apex; the bordered sides a little more contracted behind than in front so that base is 0.83 times apex; no emargination between widest point and base; the single lateral pore and seta on the tubercle of the angulation; no distinct anterior and posterior angles; median line moderately impressed; almost the whole surface coarsely rugose and deeply, transversely furrowed. Elvtra convex, length/width is about 1.27 and width/width of

366

pronotum is about 1.90; the sides weakly rounded, widest a little behind middle; shoulders squarely rounded; the narrow, basal border entire; striae finely impressed, but clearly visible (in the holotype) intervals little convex, not punctate; the foveae in the third interval moderately large, not contrasting, 1 near edge of stria 3, the two hind foveae near edge of stria 2. Underside: last ventral segment of Q finely haired, not densely, bisetose at apex; also a few scattered, fine hairs down the middle of venter. Microsculpture: none on head and pronotum; elytra with moderately impressed, isodiametric and moderately transverse meshes; microsculpture of venter more distinct, consisting of moderately to strongly transverse meshes.

NEW BRITAIN: Yalom, 1000 m, holotype , 13 May and 1 paratype 12 May 1962.



Fig. 8. Scopodes peterseni n. sp., holotype Q from Yalom.

Allied to *Scopodes simplex* Darlington of New Guinea, which is aeneous black with bright aeneous clypeus; the elytra estriate; the microsculpture more distinctly impressed.

The paratype has only striae 1 and 2 faintly impressed, traces of the other striae are here and there visible, at places merely indicated by small punctures.

Scopodes viridis new species. (Fig. 9).

In build almost exactly like *S. peterseni*; a little more convex; color of upperside very shiny dark green; clypeus aeneous; triangular patch in front of head with uneven surface, not distinctly longitudinally striate; pronotum with apical part more irregularly,



Fig. 9. Scopodes viridis n. sp., holotype Q from Lemkamin.

Entomologiske Meddelelser 37 (1969)

rugosely wrinkled; the seta-bearing angulation less acute; elytra with the 2 inner striae faintly impressed, the rest here and there traceable by rows of fine punctures; the foveae in the third interval smaller than in *S. peterseni*. Underside and microsculpture are the same. Measurements: Width over the eyes/with pronotum over the angulation is about 1.22; width pronotum/length is about 1.15; base and apex of pronotum of nearly equal width; length elytra/width is about 1.23 and width elytra/width pronotum is about 2.00.

Length about 4.2 mm; width about 1.8 mm.

NEW IRELAND: Lemkamin, 900 m, holotype \mathcal{Q} , 15 April.

Scopodes is predominantly an Australian genus. The two species described here belong to a group of brilliantly colored forms, which are peculiar to New Guinea and the Bismarck Islands (Darlington 1968). One form of the tessalated group, viz. *irregularis* Andrewes has reached Java.

Subfam. Odacanthinae

Dicraspeda (Macrocentra) quadrispinosa Chaudoir 1869, Revue Mag. Zool. (12) 21, p. 206.

DYAUL: Sumuna, 2 sp., 7-8 March. - MANUS: Lorengau, 1 sp., 15. June.

Distribution: Moluccas, New Guinea, Bismarck and Solomon Isls.

Subfam. Dryptinae

Drypta fumigata Putzeys 1875, Ann. Mus. Civ. Genova 7, p. 720. NEW IRELAND: Lemkamin, 900 m, 19 sp., 15-17 April.

Also in New Guinea.

Desera (Dendrocellus) elegans Sloane 1907, Deutsche Ent. Zeits., p. 473.

NEW IRELAND: Lemkamin, 900 m, 1 sp., 15 April.

Also in New Guinea.

Very close to *Desera geniculata* Klug from which it differs only in minor details. Perhaps the two species are one and the same.

Subfam. Helluodinae

Pogonoglossus punctulatus new species. (Fig. 10).

Piceous with side margins of pronotum and elytra a little lighter; antennal segments 1 to 4 piceous, each segment with a light brown apex, remainder of antennae and mouth parts light brown; sur-Ent. Medd. 37 24 face of head with an ill-defined reddish spot; prosternum and sides of venter reddish at places; trochanters, tibiae and tarsi light brown; pubescence of body consisting of light brown hairs. Head and pronotum shiny; elytra rather dull. Hind wings fully developed.

Length about 8 mm; width about 3 mm.

Head convex, square, and broad with moderately large and moderately prominent eyes, a little narrower than pronotum at widest point, ratio about 0.90; a small, setulose tubercle just behind the eyes; genae longer than eyes, abruptly curving round to neck, which is deeply constricted; labrum truncate, 6-toothed, each tooth bearing a seta; the frontal foveae large and deep, almost parallel, rounded behind; antennae moderately long, reaching well beyond base of elytra; surface smooth with a very few, fine punctures here and there. Pronotum rather flat, cordiform, at widest point, at about one third from apex, strongly rounded, width 1.3 times length along the median line; the sides from widest point strongly contracted in front, in an oblique straight line contracted to hind angles, which are almost straight, a little emarginate before posterior angles; apex deeply emarginate, 0.75 times base, which is a little convex with slightly oblique sides; anterior angles strongly triangularly advanced; margins unbordered, bisetose, moderately explanate; median line finely impressed; basal foveae large and deep; surface finely punctate, the punctures rather widely spaced, the foveae and basal area



Fig. 10. Pogonoglossus punctulatus n. sp., holotype \mathcal{Q} from Sumuna; left half of head and pronotum.

with deeper punctures, more closely placed. Elytra rather flat, length about 1.65 times width; sides parallel, squarely rounded at shoulders, finely crenulate; basal border entire; apex slightly emarginate, inner and outer angles rounded; basal striole long; striae finely impressed, the intervals flat, densely microscopically punctate, amongst them hair-bearing very small tubercles. Microsculpture little developed, on head and pronotum moderately transverse meshes are visible here and there especially at sides, the basal area of pronotum with small isodiametric meshes at places, no microsculpture on the elytra. Underside: labial palpi with ultimate segments obtuse, penultimate segments 5-setose; the maxillaries have the ultimate segments truncate; an oblong depression just behind metasternum densely closed with golden hairs; metepisterna a little longer than wide in front; the pubescence of the underside much less developed than on upperside, the sterna almost smooth; underside of profemora with a fringe of light brown hairs; claw segment of tarsi haired at sides.

DYAUL: Sumuna, holotype \mathcal{Q} , 9 March 1962.

In the shape of the strongly advanced anterior angles of the pronotum the new species recalls *Pogonoglossus physoides* Andrewes of Java, but the form of the pronotal anterior angles proves to be somewhat inconstant. In all species of Sumatra and Java the elytral striae are deep and the intervals convex. In the new species the striae are much less developed and form in this aspect a transition to *Pogonoglossus glabricollis* van Emden and *unicolor* Macleay both of New Guinea, in which the striae of the elytra are obsolete.

Subfam. Brachininae

Pheropsophus verticalis Dejean 1825, Spécies Général Coléop. 1, p. 302.

MUSSAU: Taletasi Lake, 13 sp., 4 June; Talumalaus, 1 sp. 5 Feb.

Distribution: also in New Guinea, Australia and Rennell I. (Solomons).

Variable as to size and color. The specimens examined have pronotum and elytra unspotted.

Summary

Eight new species are described (in the genera Colpodes, Altagonum, Chlaenius, Pericalus, Stricklandia, Scopodes and Pogonoglossus. In addition 38 species are recorded, 17 for the first time from the Bismarck Islands.

C. J. Louwerens

References

- Andrewes, H. E., 1925: Revision of the Oriental species of the genus Tachys. — Ann. Mus. Civ. Stor. Nat. Genova, 51.
- -, 1930: Catalogue of Indian Insects, part 18, Carabidae. Govern. of India, centr. publ. branch.
- -, 1933: On some new species of Carabidae, chiefly from Java. --Treubia 14, 2.
- —, 1937: On the species of Pogonoglossus found in Java and Sumatra.
 Bull. Soc. ent. France.
- —, 1937: On some new species of Carabidae, chiefly from Java (III).
 —Treubia 16, 1.
- —, 1941: Papers on Oriental Carabidae XXXVII. Ann. Mag. Nat. Hist, (11) vol. 7.
- Darlington Jr, P. J., 1952: The Carabid Beetles of New Guinea II. The Agonini. — Bull. Mus. Comp. Zool. 107, No. 3.
- , 1962: The Carabid Beetles of New Guinea I. Cicindelinae, Carabinae, Harpalinae through Pterostichini. Bull. Mus. Comp. Zool. 126, No. 3.
- —, 1968: The Carabid Beetles of New Guinea III. Harpalinae (continued): Perigonini to Pseudomorphini. Bull. Mus. Comp. Zool. 137, No. 1.
- Emden van, F., 1937: Einige Carabiden von den Solomo und Santa Cruz Inseln, den Neue Hebriden sowie Neu Guinea. — Stett. Ent. Zeits., 98.
- Jedlicka, Arnost, 1963: Monografie der Truncatipennen aus Ostasien. — Ent. Abh. und Ber. Staatl. Mus. für Tierk. Dresden, 28, No. 7.
- Kult, K., 1951: Revision of the genus Clivina Latr. from Oriental Region. Acta Soc. Ent. Cechosl. 48, No. 1.
- L o u w e r e n s, C. J., 1949: Some notes on the Carabidae, collected by Mr P. H. van Doesburg in the Malay Archipelago with descriptions of new species. — Tijdschr. Ent., 90.
- -, 1953: Carabidae (Col.) from the Sunda Islands. Verh. Naturf. Ges. Basel, 64, No. 2.
- --, 1956: On a collection of Carabidae from the northern Moluccas (Col.). -- Treubia 23, part 2.
- -, 1962: New Carabidae from Indonesia, chiefly from Amboina. -Tijdschr. Ent., 105, afl. 5.
- Petersen, Børge, 1966: The Noona Dan Expedition 1961—62. Insects and other land arthropods. — Ent. Meddr. 34.