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Dr. H. Brauns

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and its lateral margins nearly straight, not widened towards clypeus; the fuscous spot to wings sometimes absent.

Synonymical Note.

Genus *TAMBUSANA*.

Tambusa, Dist. Insect. Transvaal. p. 216 (1908), nom. præocc.

Tambusana, n. nom.

LXXII.—*Two new Species of Palarus from S. Africa.*

By Dr. H. BRAUNS.

THE following two *Palarus* species form amongst the known South-African species, and together with *P. comberi*, Turner, a distinct group.

Mr. Turner, in "Notes on Fossorial Hymenoptera.—IV.," Ann. & Mag. Nat. Hist. ser. 8, vol. vii., May 1911, divides the species of *Palarus* known to him with certainty into five groups, according to the apical abdominal segment of the males. *P. pentheri* he assumes to form a sixth group.

With the better knowledge of the females I think it will be possible to form more natural groups than such preliminarily based on males only.

The affinities of the South-African species are, taking both sexes into consideration:—

1. *Palarus o'neili*, Br., and *Palarus pentheri*, Br.
2. *Palarus latifrons*, Kohl.
3. *Palarus handlirschi*, Br., and *Palarus turneri*, Br.

Group 3 is nearest related to *P. latifrons*, Kohl. The main characters of this group are:—

♂.—Seventh tergite broadly subtruncate or rounded at apex and without spines.

♀.—First tergite *not* sharply edged on the sides, without sharp dentiform tubercle. Eyes on the vertex very narrowly separated in both sexes. Abdomen hardly constricted, not at all in the females. Cellula radialis of the fore wings without appendix, the apex triangularly pointed or subtruncate. Habitus, especially the female, of *Tachytes*.

♀ *P. handlirschi*, m.—Pygidium very sharply pointed; surface of the pygidial area finely and nearly regularly

carinated. Distance of the eyes on vertex about the length of the pedicellus of the antennæ.

♀ *P. turneri*, m.—Pygidium less sharply pointed; surface of the pygidial area irregularly rugose-carinated. Distance of eyes on vertex at least double the length of the pedicellus of the antennæ.

Palarus handlirschi, ♀ ♂, sp. n.

Type: ♂. Niger, clypeo, macula mandibularum, macula faciei inferioris, maculis duabus punctiformibus supra antennis, tegulis, fasciisque tergitorum 1–5 eburneis; pedibus flavido-variegatis, alis hyalinis. Pygidium inerme. Tergita vix constricta. Latera pygidii ad basin rotundato-lobata, postea ad apicem gradatim coarctata, apice rotundato. Latera tergiti sexti longitudinaliter breviter et subtiliter carinata. Sternitum secundum toro magno transverso ornatum. Oculi in vertice longitudine pedicelli antennarum separati.

Long. 8–12 mm.

♂.—Clypeus smooth, shining, rounded at apex. Inter-antennal space not carinated; front with a thin smooth line, not quite reaching the anterior ocellus. Mandibles acuminate, simple. Antennæ thickened towards apex, the second joint of flagellum about a third longer than the following. Anterior ocellus large, round, the posterior smaller, oval, touching the eyes. Eyes separated on the vertex by a distance about equal to the length of the pedicellus of the antennæ. Face covered by a whitish pile, dull, not shining, minutely but densely punctured. Thorax, scutellum, and metanotum above minutely but less densely punctured, shining, sparsely covered by a whitish pubescence. Area cordata deepened, nearly semicircular, finely shagreened. First tergite concave in the middle, the edges of the concavity not sharp nor carinated. Sixth tergite with a very small longitudinal carina on the sides. Pygidial segment roundly dilated-lobate at the sides towards the base, then gradually constricted towards the apex, the latter rounded. Pygidial area indistinctly defined, rugulose. The sides and apex of the pygidial segment smooth and shining. The tergites are not constricted on the sides, very little above, shining, very finely punctured, gradually narrowed towards the apex. The second sternite is smooth and very shining, the apical half transformed into a broad transverse elevation, the basal upper edge of which is rounded, the apical semi-abrupt, but not sharply edged. The following segments are flat, punctured, the middle depressed, the seventh conical, rounded at the apex. Radial

cell triangular at apex, with hardly any trace of an appendix. Second cubital cell sessile, triangular. Recurrent nervures interstitial. Third cubital cell nearly rectangular.

Black ; yellow are the clypeus, a spot on the upper side of the mandibles near the base, the margin of the face adjoining the clypeus, broadly between eyes and clypeus, two small spots above the antennæ, the tegulæ and the transverse bands of the tergites 1-5, of which the first and last two or three are more or less broadly interrupted, the fifth sometimes largely reduced in size. The extension of the bands varies probably within certain limits. The colour of the bands is paler than clypeus &c. The greater part of the mandibles, scapulæ, pygidial segment, and the ventral surface are ferruginous, the tergites except the bands darkish brown, the base more blackish. Legs light brown. Tibiæ ii. and femora i. and ii. yellow underneath. Median segment and abdominal base thickly clothed with long white pubescence. Wings hyaline, with nervures testaceous. Flagellum of the antennæ brown.

♀.—As in the male, but mostly without the yellow spots above the antennæ. Abdominal segments not constricted on the sides and above, less narrowed towards the apex. The yellow fasciæ are broader and more complete. Legs all ferruginous, the femora 1 and 2 yellow beneath.

Sternites without tubercles, the second sparsely punctured. Pygidial segment long, pointed at the apex, the sides raised and carinate. Pygidial area sharply defined, raised, finely and regularly carinate on the surface (about 8-10 longitudinal carinulæ). The space between area and edges of the segment smooth and shining. The sixth sternite long, pointed at apex, compressed in the middle.

The distance of the eyes on the vertex is in both sexes very nearly the same. The female seems to be somewhat smaller than the male.

Hab. Willowmore, Cape Colony ; nesting in the sand of dry river-beds, November-January.

The prey of this species comprised *Nomia*, *Halictus*, *Elis*, &c., in one case a Dipteron ; the latter probably a mistake !

Mr. Turner, to whom I sent the species, informs me that the British Museum has a pair of this species from the Zambesi and S. Nyasaland, in which all ferruginous colour is replaced by black ; but otherwise they agree perfectly with the southern specimens. He further points out a close relationship with the Indian *Palarus comberi*, Turner.

Palarus turneri, ♀, m., sp. n.

Type: ♀. Niger, clypeo, macula mandibularum, macula faciei inferioris, maculis duabus obliquis supra antennis, tegulis, margine pronoti superiore, macula magna mesopleurarum, scutelli parte posteriore, metanoto toto, fasciis latissimis tergitorum 1-3, tergitis 4-6 totis eburneis. Pedes, coxis et trochanteribus inclusis, ferruginei, subtus albicantes. Tergita nec constricta. Oculi in vertice duplo longitudine pedicelli antennarum distantes. Pygidium acutum, area pygidialis irregulariter longitudinaliter rugosa. Metanoti medium leniter incisum.

Long. 10 mm.

♀.—Clypeus smooth, shining, broadly rounded at apex. Interantennal space not carinate, front with a fine smooth line not quite reaching the anterior ocellus. Vertex between the eyes finely longitudinally raised. Mandibles acuminate, simple. Antennae thickened towards the apex. Eyes separated at the vertex by a distance about equal to double the length of the pedicellus of the antennae. Face dull, not shining, minutely punctured. Mesonotum shining, disc sparsely, margins densely and finely punctured; scutellum shining, with scattered punctures. Metanotum smooth, in the middle distinctly incised. Area cordata deepened, in the middle finely shagreened, dull. First tergite concave in the middle, edges of the concavity rounded, smooth. Tergites minutely and densely punctured. Pygidial segment long, pointed, the sides carinate, the pygidial area longitudinally rugulose, dull. Space between the area and the sides of the segment smooth above, diagonally rugose towards the apex. Pubescence much sparser than in *P. handlirschi*.

Radial cell triangular at apex, with hardly any trace of appendix. Second cubital cell sessile, triangular, recurrent nervures not quite interstitial, near to the apex.

Black, with the markings as stated in the diagnosis. The ivory-coloured bands cover the greatest part of the upper side of the abdomen. Only the base of the first tergite is black; the pale bands of the second and third tergites are broad, and leave only small margins of the segments ferruginous. Fourth and fifth tergites are nearly covered by the bands. The pygidial area and the sides and apex of the pygidial segment as well as the venter are ferruginous. Scapulae brown.

This species is of the same habitus as *P. handlirschi*, but broader and thicker. It has all the characteristics of the group. The different distance of the eyes at the vertex separates it sufficiently from *P. handlirschi*.

I have great pleasure in naming the species in honour of Mr. Rowland E. Turner, of the British Museum.

Willowmore, Cape Colony ; January ; 1 ♀. Type in my collection.

Both species have no appendix to the radial cell, and agree in this respect, as well as in the absence of the lateral keels of the first tergites, with *P. latifrons*, Kohl ; but in that species the radial cell is subtruncate, almost rounded at apex, while in the two species described above it is triangularly pointed.

LXXIII.—*New Species of Heterocera from Costa Rica*.—XVI. By W. SCHAUS, F.Z.S.

Pyralidæ.

Subfamily *EPIPASCHINÆ*.

Pococera albimedium, sp. n.

♀. Palpi black, shaded with white. Frons fuscous brown, irrorated with white. Vertex white. Collar and thorax white, shaded with brownish buff, and with a few scattered black scales. Abdomen above white, with broad transverse black lines, partly suffusing. Fore wings: base broadly dark olive, irrorated with black, and crossed by a broad white line, outbent on inner margin, inwardly edged with black and outwardly expanding between cell and submedian, and also edged with black except below submedian ; medial space to outer line white, with a black point at end of cell, dark spots on costa, and some pale brown and black irrorations postmedially ; outer line fine, black, inbent at vein 4, outwardly finely edged with white ; terminal space black from costa to vein 5, the termen slightly irrorated with white ; below vein 5 a mottled olive and reddish subterminal shade ; terminal black spots. Hind wings dirty white ; a post-medial fuscous line marked with black on vein 2 ; a marginal fuscous shade widest at apex ; a terminal black line.

Expanse 22 mm.

Hab. Juan Vinas.

Near *P. albimedialis*, Hmps.