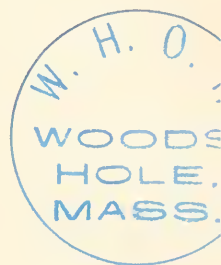


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- 13.—*On Some New Species and others of Fossorial Hymenoptera in the South African Museum.**—By ROWLAND E. TURNER, F.Z.S., F.E.S.

FAMILY SCOLIIDAE.

SUBFAMILY ELIDINAE.

BRAUNSOMERIA PÉRINGUEYI, sp. n.

♂. Niger, mandibulis, clypeo basi nigro, tuberculis antennalibus, macula frontali sub ocello antico, macula parva inter ocellos posticos, vertice linea transversa mediana, orbitis internis externisque oculorum fasciis ad verticem continuatis, pronoto macula utrinque antice, fasciaque continua postice, mesonoto macula mediana, scutello fascia interrupta, mesopleuris antice linea verticali, postscutello, tergitis 2-6, sternitisque 2-6 fascia lata apicali macula nigro utrinque includente, segmento primo dorsali fascia lata apicali, segmento ventrali septimo, femoribus subtus et apice, tibiis anticis intermediisque, tibiis posticis basi tarsisque basi flavis; flagello articulis 8 apicalibus brunneo-ferrugineis; alis hyalinis, stigmatibus venisque ferrugineis.

Long. 10 mm.

♂. Antennae nearly as long as the thorax and abdomen combined; first joint of the flagellum almost hidden in the apex of the scape; the third about half as long again as the second; the antennal tubercles prominent. Head subquadrate; deeply punctured; eyes oval, separated from the hind margin of the head by a distance equal to their own breadth, not emarginate. Posterior ocelli much further from the hind margin of the head than from each other. Clypeus short, subconcave, the anterior margin broadly truncate. Thorax rather strongly punctured; pronotum as long as the mesonotum, a little narrowed anteriorly, the anterior margin straight. Median segment closely punctured, the sides of the segment clothed sparsely with white hairs. Abdomen smooth and shining; first segment with a very short petiole, obliquely truncate anteriorly above the petiole, the dorsal surface behind the truncation shorter than the second segment and slightly constricted at the apex; the abdomen slightly narrowed from the middle to the extremities. Aculeus of the hypopygium recurved and fairly long, the emargination of the seventh tergite narrow and fairly deep. Radial

* The types of the new species are in the South African Museum.

cell very short, the costal margin beyond the stigma no longer than the first abscissa of the radius. Only two cubital cells; the second long on the cubitus but very short on the radius, the second abscissa of the radius equal to the first. Second cubital cell receiving the first recurrent nervure just before one-third from the base, the second at the extreme apex.

Hab. O'okiep, Namaqualand, November, 1885 (*L. Péringuey*).

This is a much larger species than *B. quadraticeps* Turn., the only other known male of the genus. It differs also in only having two cubital cells, the second transverse cubital nervure having become obsolete. It is possible that this may be the male of *B. mutilloides* Turn.

BRAUNSOMERIA COGNATA, sp. n.

♂. Closely resembles *B. peringueyi* described above, but differs in the shorter antennae, which are scarcely longer than the abdomen, the third joint of the flagellum being distinctly less than half as long again as the second; the radial cell is shorter, its length on the costa being much less than the length of the first abscissa of the radius, extending on the costa very little beyond the stigma; the second abscissa of the radius is also very short—much shorter than the first; the yellow colour on the head and pronotum is more extensive and the legs are almost entirely yellow. The stigma is very pale yellow.

Long. 8 mm.

Hab. Junction of Marico and Crocodile Rivers, Transvaal. (*R. W. E. Tucker.*)

SUBFAMILY ANTHOBOSCINAE.

GENUS ANTHOBOSCA Grier.

ANTHOBOSCA FLAGELLARIA, sp. n.

♂. Niger; clypeo, mandibulis macula basali, orbitis internis anguste dimidio inferiore, vertice macula parva supra oculos, pronoto fascia interrupta postice, tegulis basi, femoribus apice extremo, tibiis supra tarsisque pallidissime flavis; tegulis apice testaceis; alis hyalinis, venis nigris.

Long. 9 mm.

♂. Clypeus small, very sparsely punctured, the apical margin with a sparse fringe of long whitish hairs; head finely and very closely punctured; antennae short and very stout, shorter than the thorax and median segment combined, the two basal joints of the flagellum very short, much broader than long, joints 3–8 nearly as broad as long, the

four apical joints tapering, distinctly longer than broad. Thorax and median segment finely and closely punctured; abdomen finely shagreened; first tergite scarcely longer than its apical breadth; second tergite almost as long as the first, as broad at the apex as long; seventh tergite small, coarsely punctured; hypopygium rounded at the apex. Second abscissa of the radius shorter than the first, less than one-third the length of the third; first transverse cubital nervure strongly oblique, sharply elbowed near the cubitus; second and third transverse cubital nervures straight, almost at right angles with the cubitus. First recurrent nervure received just before two-thirds from the base of the second cubital cell, second a little beyond one-third from the base of the third cubital cell. Hind tibiae distinctly serrate.

Hab. M'fongosi, Zululand (*W. E. Jones*), May, 1917.

Very near *A. rufocaudata* Turn., but differs in the much stouter antennae, in the greater proportionate length of the basal tergites compared with their breadth, and in the much greater extent of the yellow colour on the legs.

FAMILY PSAMMOCHARIDAE.

GENUS BATOZONUS Ashm.

BATOZONUS MUTATUS, sp. n.

♀. Nigra; flagello aurantiaco, articulis tribus apicalibus infuscatis; scapo, tarsis articulo basali, femoribus apice extremo, tibiisque ferrugineis, mandibulis basi, fronte clypeoque fusco-ferrugineis; alis fusco-violaceis, venis nigris.

Long. 15 mm.

♀. Clypeus almost transverse at the apex, the angles broadly rounded. Antennae tapering to the apex, the second joint of the flagellum much longer than the third; eyes separated on the vertex by a distance distinctly less than the length of the second joint of the flagellum; the posterior pair rather nearer to the eyes than to each other. Scutellum rather strongly convex; median segment opaque, with a very distinct, but shallow, longitudinal groove in the middle. Comb of the fore tarsi well developed, with three spines on the basal joint; inner spine of hind calcaria more than half as long as the hind metatarsus; ungues of the fore tarsi bifid, of the others unidentate. Third abscissa of the radius a little more than half as long as the second, a little shorter than the second transverse cubital nervure; second recurrent nervure received beyond two-thirds from the base of

the third cubital cell. Cubitus of the hind wing originating very shortly before the transverse median nervure.

Hab. Durban, Natal (*W. Heygarth*), April, 1913.

This is very near *B. gowdeyi* Turn., from Uganda, but differs in the colour of the legs and antennae and in the presence of a distinct sulcus on the median segment. The second cubital cell is very much longer than in *capensis* Dahlb. (*vindex* Sm.), and the position of the second recurrent nervure is different.

GENUS ANOPLIUS Lepell.

ANOPLIUS INSIDIOSUS, Sm.

Pompilus insidiosus Sm., Descr. new spec. Hymen. p. 143, 1879, ♀.

Anoplus rhodesianus Bisch., Arch. f. Naturges. A 3, p. 60, 1913, ♀ ♂.

GENUS HEMIPEPSIS Dahlb.

HEMIPEPSIS TAMISIERI, Guér.

Pompilus tamisieri Guérin, Lefebure: Voy. Abyssinie, vi, p. 356, 1848.

Mygimnia distanti Saussure, Distant: Natural. Transvaal, p. 220, 1892, ♀.

I have no doubt that *distanti* is a synonym, though I have not seen the species from as far south as Pretoria. It occurs in South Rhodesia and throughout East Africa.

SUPERFAMILY SPHECOIDEA.

SUBFAMILY STIZINAE.

GENUS STIZUS, Latr.

STIZUS FRANZI, Turn.

Stizus neavei Kohl, Rev. Zool. African. iii, p. 208, 1913 (*nec* Turner, 1912).

Stizus franzi Turn., Ann. & Mag. Nat. Hist. (8) xvii, p. 443, 1916.

Stizus congoensis Mant., Ann. Mus. Civ. Stor. Nat. Genova, 3^a, vii, p. 376, 1917.

A specimen in the South African Museum has the fore wings flavo-hyaline from the base to the basal nervure, thence fusco-hyaline to the apex of the third cubital cell, the extreme apical margin almost hyaline. The front is entirely black except the inner orbits and the base of the clypeus is also black. There do not seem to be any structural differences in the single female specimen in the collection, so I treat it as merely a colour variety.

Hab. Stellenbosch (*L. Péringuey*), January, 1888.

SUBFAMILY ARPACTINAE.

GENUS AMMATOMUS Cost.

AMMATOMUS ELONGATULUS, sp. n.

♂. Niger; clypeo, scapo subtus, fronte sub antennis, pronoto margine postico angustissime, postscutello linea transversa, segmento dorsali primo macula apicali utrinque, segmentis dorsalibus 2-4 fascia angusta apicali in medio angustissime interrupta, tarsisque posticis, articulis apice extremo nigris, pallide flavis; tegulis, callis humeralibus, trochanteribus, femoribus subtus, tibiis tarsisque posticis et intermediis brunneo-testaceis; alis hyalinis, venis nigris.

Long. 8 mm.

♂. Eyes strongly convergent towards the clypeus, at the base of which they are separated by a distance not quite equal to the length of the scape. Antennae strongly clavate, the five apical joints at least as broad as long; second joint of the flagellum a little longer than the third and fourth combined. Posterior ocelli fully three times as far from each other as from the eyes. Front and vertex subopaque, sparsely, but rather strongly punctured; thorax coarsely, but not very closely punctured; the punctures on the dorsal surface and sides of the median segment smaller and more scattered: the triangular dorsal area of the median segment bounded by rather indistinct furrows. Abdomen more sparsely and finely punctured than the thorax, more finely and much more sparsely on the two basal tergites than elsewhere; first tergite very narrow, forming a petiole, not broadened to the apex, the sides almost parallel, longer than the second tergite, which is about six times as broad at the apex as the first; tergites 3-5 with a very sparse apical fringe of very short stiff hairs. Seventh tergite opaque, almost smooth. Hind tarsi very long and slender. Second abscissa of the radius nearly twice as long as the first, more than half as long as the third, and distinctly longer than the distance between the recurrent nervures on the cubitus.

Hab. M'fongosi, Zululand (*W. E. Jones*), February, 1917. Another specimen from Insiza, S. Rhodesia. Easily distinguished from *spiniferus* Buyss. and *africanus* Turn. by the very slender petiole, and by the coarser sculpture of the thorax. *A. spiniferus* and *africanus* are very close to each other, and in 1915 (*Ann. and Mag. Nat. Hist.* 8, xvi, p. 287) I sank *africanus* as a synonym. But Du Buysson states that the second tergite is only half as broad again at the apex as the first, whereas in *africanus* it is three times as broad, so that the two can scarcely be identical.

GENUS ARPACTUS Turn.

ARPACTUS (EUSPONGUS) JONESI, sp. n.

♂. Ferrugineus; capite, mesonoto in medio, scutello, postscutello, segmentoque mediano area basali nigris; mandibulis basi, clypeo, fronte sub antennis, orbitis internis dimidio inferiore, scapo subtus, pronoto margine postico, callis humeralibus, scutello linea transversa apicali, postscutello linea transversa, segmentis dorsalibus duobus basalibus fascia angusta apicali, quarto apice, quinto sextoque, femoribus anticis intermediisque subtus, tarsisque anticis intermediisque supra flavis; capite, pleuris, segmentisque dorsalibus 3-5 flavo-brunneo pubescentibus; alis hyalinis, venis nigris, stigmatе testaceo.

Long. 9 mm.

♂. Eyes rather strongly convergent towards the clypeus, separated at the base of the clypeus by a distance equal to rather less than twice the length of the scape. Antennae short and rather stout, shorter than the thorax and median segment combined, not clavate; the second joint of the flagellum equal to the third. Posterior ocelli further from each other than from the eyes. Mesonotum microscopically punctured, with four short delicate impressed lines from the anterior margin not reaching the middle; a deep, transverse, strongly crenulated groove at the base of the scutellum. Median segment rugulose; the triangular basal area large, well defined, very coarsely longitudinally striated. Abdomen almost smooth; the first tergite very slender, twice as broad at the apex as at the base, longer than the second tergite, the latter fully three times as broad at the apex as the first; seventh tergite almost smooth. Second abscissa of the radius equal to the first or a little shorter, the third nearly four times as long as the second. Cubitus of the hind wing originating a little before the transverse median nervure. Fore tarsi without spines, hind tibiae unarmed.

Hab. M'fongosi, Zululand (W. E. Jones), February, 1917.

This is nearly allied in structure to the European *A. dissectus* Panz., but has a longer and narrower petiole. I consider that the name *Arpactus* Jurine should be used instead of *Gorytes*. No other species of the subgenus *Euspongius* has been recorded from South Africa.

Type in South African Museum. Co-type in B.M.

ARPACTUS (LESTIPHORUS) KRAEPELINI, Brauns.

Gorytes kraepelini Brauns, Ann. Naturh. Hofmus. Wien. xiii. p. 421, 1898, ♂ ♀.

One female in the South African Museum.

Hab. Dunbrody, March, 1912.

SUBFAMILY NYSSONINAE.

GENUS NYSSON Latr.

NYSSON LUDOVICI, sp. n.

♂. Niger; mandibulis basi, clypeo dimidio apicali obscure, antennis, pronoto margine postico, callis humeralibus, tegulis, pedibusque, coxis exceptis, ferrugineis; vertice puncto utrinque, segmenti mediani spinis apicalibus, tergito primo macula magna utrinque; tergitisque 2-5 fascia apicali flavis; segmentis sexto septimoque ferrugineis; alis fusco-hyalinis, venis nigris.

♀. Mari simillina, tergitis tertio quartoque fere omnino flavis, secundo margine extremo, quinto lateribus flavis, fascia apicali obsoleta; antennis dimidio apicali infuscatis.

Long. ♂ ♀, 10 mm.

♂. Eyes convergent towards the clypeus, but not quite as strongly so as in *capensis* Handl., separated at the base of the clypeus by a distance slightly exceeding twice the length of the scape; the anterior margin of the clypeus straight. Front and clypeus covered with silvery pubescence, the head rugosely punctured, more coarsely on the front than on the vertex, a median longitudinal carina reaching from the base of the antennae half-way to the anterior ocellus; posterior ocelli nearly twice as far from the eyes as from each other. Hind margin of the pronotum level with the mesonotum, almost transverse. Mesonotum, scutellum, postscutellum and mesopleurae rugose; the basal area of the median segment shining, with eight longitudinal carinae, the sides of the segment reticulate, the spines at the apical angles long and acute. The two basal tergites rather sparsely, but not very finely punctured; tergites 3-6 opaque, microscopically and closely punctured, the sixth tergite with marginal lateral carinae on the apical half; seventh tergite granulate, the lateral margins raised forming carinae, which are prolonged into a short blunt spine at each of the apical angles; the apical margin between the spines transverse, thus differing from *capensis*, in which there is a rounded process between the spines. Sternites 2-5 with a fringe of long pale hairs in the middle of the apical margin.

♀. The second sternite is rounded at the base, not forming an angle. In both sexes the cubitus of the hind wing originates far beyond the transverse median nervure.

Hab. M'fongosi, Zululand (*W. E. Jones*), April, 1916.

Very near *capensis* Handl., but differs in the seventh tergite of the male, and in the somewhat broader face, which is due to the lesser convergence of the eyes. The yellow colour on the tergites is also

somewhat differently distributed, and the frontal carina is more strongly elevated.

SUBFAMILY LARRINAE.

GENUS NOTOGONIA Cost.

NOTOGONIA DENTICULATA, sp. n.

♀. Nigra; palpis brunneis; mandibulis fusco-ferrugineis, apice nigris; femoribus tibiisque ferrugineis; tarsis calcaribusque fuscis; tergitis tribus basalibus fascia obscura apicali albido-sericea; alis subhyalinis, apice late fusco-hyalinis, venis fuscis; unguiculis in medio denticulatis.

Long. 11 mm.

♀. Clypeus and face clothed with short silver pubescence; clypeus short, the anterior margin almost transverse and narrowly depressed. Second joint of flagellum a little longer than the third; eyes separated on the vertex by a distance equal to the length of the second joint of the flagellum. Pronotum not reaching the level of the mesonotum; median segment slightly convex on the dorsal surface, opaque, finely and indistinctly transversely striated, much longer than broad, the posterior truncation almost vertical, with a median longitudinal sulcus, the sides transversely striated, the striae obsolete in the middle and at the apex, the sides of the segment opaque and smooth, with delicate oblique striae in front. Sixth tergite subtriangular, the sides distinctly longer than the base, very narrowly rounded at the apex and clothed with sparse pale fulvous setae; the surface beneath the setae rather deeply punctured. Comb of the anterior tarsi not very long, the metatarsus with four spines. Inner spine of the hind calcaria equal to three-quarters of the length of the hind metatarsus. Tarsal ungues with a small tooth close to the middle. Second abscissa of the radius very short, not half as long as the third; radial cell rather narrowly truncate at the apex.

Hab. Stella Bush, Durban, Natal (*Marley*), November, 1914–January, 1915.

This can be easily distinguished from the numerous Ethiopian species with similar coloration by the tooth on the tarsal ungues. This is doubtless a sexual character in this species as in *N. croesus* Sm. The distance between the recurrent nervures on the cubitus differs individually.

NOTOGONIA CILIATA, Sm.

Larrada ciliata Sm., Cat. Hym. B.M. iv, p. 283, 1856, ♀.

The eyes are far apart on the vertex, separated by a distance exceed-

ing the length of the two basal joints of the flagellum; the spines of the fore tarsi are long and spathulate, the metatarsus with four long spines and a short acute basal one; inner spine of the hind calcaria almost as long as the hind metatarsus. Median segment slightly convex, the transverse striation of the dorsal surface delicate, subobsolete in the middle; sixth tergite broadly rounded at the apex. Second abscissa of the radius very short, the first almost as long as the third. Radial cell short, broadly obliquely truncate at the apex; third cubital cell less than half as long again on the cubitus as on the radius.

Hab. Cape Town (*L. Péringuey*), March, 1915; Spectakel, Namaqualand, November.

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