

is a pubescent tuft like that of *A. abnormalis*. The outer one of the 3-5 spines is small and pointed and is separated from the horn by a tooth-shaped projection of the style; the remainder have rounded ends but are not spatulate. Lower part of expanded end of style bare. Coxite broad in middle.

Wing-length: 3.8-4.3 mm.

Larva and pupa: unknown.

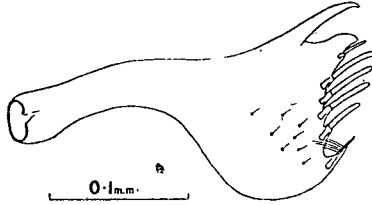


FIG. 1.—*Aedes eritreae* sp. n., style of male.

ERITREA: Acchele Guzai, Debre Axum (near pool 20.3 km. from Saganeiti along Dessie road), c. 6500 ft., 11 ♀ and 4 ♂, 27.iv.42 (including types) and 30.iv.42; females biting at mid-day, males on rocks. The types will be sent to the British Museum (Natural History).

The species is allied to *A. abnormalis* Theobald, 1910, from which it differs principally in having narrow scales on the vertex and a knee spot on the hind femur of the ♀, and in the form of the ♂ style. In the key given by Edwards (1941, *Mosquitoes of the Ethiopian Region* 3: 159) it would run to couplet 34. The following sentence would indicate the species: "Head with decumbent scales in ♀ almost all pale and in ♂ all pale: abdominal tergites with complete pale bands."

NOTES ON THE GENUS *PSEUDOLASIUS* EMERY WITH THE DESCRIPTION OF *PSEUDOLASIUS KARAWAJEWI* SP. N. (HYM., FORMICIDAE)

By HORACE DONISTHORPE, F.Z.S., F.R.E.S.

Pseudolasius karawajewi sp. n.

♀. Yellow, mandibles reddish-yellow, teeth of mandibles and eyes black, clothed with yellow outstanding hairs, some of which spring from small raised points, and sparse fine pubescence. Practically impunctate, more or less smooth and shining. Head subquadrate, slightly broader than long, broadest behind, sides of head slightly rounded, posterior angles distinct, posterior border almost straight; *mandibles* long, powerful, marked with faintly raised longitudinal ridges and shallow obscure punctures, masticatory border armed with 5 sharp teeth, the 3rd being the smallest; *clypeus* transverse, narrowly margined, very convex on disc with no sign of a keel or carina, anterior border almost straight, obliquely cut off on each side, anterior angles distinct, posterior border sinuate in middle, *clypeal* and *antennal foveae* not confluent; *frontal area* ill defined; *frontal carinae* short, almost straight and parallel, a short sharp distinct longitudinal raised ridge or carina is present in centre

of front, between the frontal carinae; *eyes* moderate, round, situated a little behind centre of head; *antennae* long, 12-jointed, *scape* extending beyond posterior border of head by more than half its length, *funiculus* gradually thickened to apex, all the joints longer than broad, first joint shorter than second, last joint as long as the two preceding taken together; *maxillary palpi* 3-jointed; *labial palpi* 4-jointed. *Thorax* longer than broad, broadest a little behind centre of pronotum, narrower than head; *pronotum* transverse, convex, sides and anterior border rounded and margined; *mesonotum* oval, convex, slightly narrowed behind, nearly as long as pronotum; *metanotum* narrow, transverse, *spiracles* situated on each side of disc; *epinotum* very convex, broader than mesonotum, epinotal angle gradually rounded, declivity longer than dorsal surface, *spiracles* large, round; *scale of petiole* thick, upper surface narrow, slightly excised in middle, *spiracles* small, round, situated at the sides a little below upper surface. *Gaster* short, oval, convex. *Legs* long, *claws* long and narrow.

Long. 5.5–6.5 mm.

♂. Dirty light brownish-yellow, posterior part of head darker, mandibles, antennae and legs light yellow. Clothed with sparse outstanding yellow hairs which are longer and more numerous on the gaster, sparsely pubescent, and very finely shagreened.

Head triangular, broadest behind, posterior angles rounded; *mandibles* long, masticatory border unarmed, curved and projecting before the long sharp apical tooth, outer border rounded; *clypeus* transverse, convex, anterior border straight in centre, obliquely cut off at sides; *frontal area* obsolete; *front* with a raised longitudinal carina or ridge as in the ♀; *eyes* very large, convex, round, projecting, situated at sides of head; *ocelli* very large, situated on upper surface at back of head; *antennae* long, 13-jointed, *scape*, when extended back, reaching centre of mesonotum; *funiculus* nearly double as long as scape, all the joints longer than broad, 1st joint shorter than second, last joint equal to the two preceding taken together; *maxillary palpi* 3-jointed; *labial palpi* 4-jointed. *Thorax* longer than broad, narrowed to base, convex, anterior angles rounded, broadest before insertion of fore-wings, not broader than head including eyes; *mesonotum* large, convex; no *mayrian furrows* present; *praescutellum* very narrow in centre; *scutellum* transverse, very convex; *metanotum* narrow, transverse; *sutures* between mesonotum and metanotum, and metanotum and epinotum deep; *epinotum* evenly rounded without angle between dorsal surface and declivity.

Scale of petiole thick, dorsal surface narrow, excised in middle and with blunt but distinct angles at sides; *gaster* oval, narrowest at apex; no *cerci* present; *genitalia* exerted, *stipes* long, oval, flattened on each side, longer than volsellae and sagittae, fringed with long hairs, *lacinae* and *volsellae* present; edges of *sagittae* not serrate. *Legs* long, with long curved *claws*. *Wings* infusate and pubescent, *veins* and *pterostigma* light brown, no *discoidal cell*, one long *cubital cell*, and closed *radial cell* present.

Long. 5.5 mm.

N. DUTCH NEW GUINEA: Waigeu, Camp Nok (*Miss L. E. Cheesman*), 2500 ft., March, April and May, 1938; 18 workers by "casual collecting."

N. DUTCH NEW GUINEA: Waigeu Island (*Miss L. E. Cheesman*), 2500 ft., May, 1938, 1 male.

Type (♀), and ♂ type in British Museum (Natural History).

This species comes nearest to *P. carinatus* Karawajew from Aru. The latter species has a distinct keel or carina on the clypeus, nor is a carina on the front mentioned in the description, the eyes are slightly more forward, and the teeth of the mandibles are thicker and blunter; etc. It is also not quite so long. The male differs from the male of *breviceps* in not having the masticatory border of the mandibles armed with teeth; the head is not quite so long and a little less narrow; the thorax and gaster are slightly stouter; the funiculus is slightly shorter; the hairs on the stipites are slightly shorter and

less numerous, and the external and internal paramera are slightly shorter. The colour is a little darker.

Emery (1925) gave the distribution of *Pseudolasius* as follows:—Ceylon, Indochina, Malaysia to New Guinea, Australia, Tropical Africa. Wheeler (1915) described a species from the Baltic Amber. Emery (1887) erected the genus *Pseudolasius* for the reception of three species—*Formica familiaris* Smith (1860: 68 nec p. 96), *P. pheidolinus* Emery (1887), and *P. breviceps* Emery (1887). He gave a few rather vague characters which are mostly in common with the genus *Lasius* Fabricius. He did not cite the type, but this was designated by Bingham (1903) as *Formica familiaris* Smith. In 1925 he characterised the genus more fully. Some of these characters are incorrect, and others require modification, as exhibited in his own species *breviceps*. They are:—“♀. Eyes small, very small or nearly absent, placed on the dorsal face of the head in front of the middle.” In *breviceps*, *carinatus* and *karawajewi*, and also in *familiaris*, they can hardly be called small in the large workers. Also in the two last-mentioned species (and also in Wheeler's *P. boreus* from the Baltic Amber) they are not placed in front of the middle of the head. “Maxillary and labial palpi 3-jointed.” In *breviceps* ♀, ♀, and ♂ the maxillary palpi are 3-jointed, but the labial palpi are 4-jointed. In *karawajewi* ♀ and ♂, it is the same; and in the ♀ and ♀ in *binghami* Emery. This is quite certain from dissections by myself, and slides kindly made for me by Drs. Hinton and van Emden, and Mr. Nixon. I quite expect that this will prove to be the case in all the species of the genus, or at any rate in the larger species. “Scape not reaching posterior border of head, or extending very little beyond it.” In *carinatus* and *karawajewi* it extends considerably beyond the posterior border of the head, as is also the case in the smaller ♀ of *breviceps*. “♂. In the small species there is only the apical tooth of the mandibles present.” This is the case with *karawajewi*, which is quite a large species.

“Palpi as in ♀ (*i.e.* 3-jointed)”; but as I have shown the labial palpi are 4-jointed in the ♂ of *karawajewi* and *breviceps*. The late Russian myrmecologist, Karawajew (1929) redescribed *breviceps* Emery, *mayri* Emery and *phaidolinus* Emery. Of the first-mentioned species he figured the heads of 3 forms of the worker, the female, and 2 forms of male. He showed the first tooth of the mandibles to be bimacronate in the ♀ (which is the case with a specimen taken by Miss Cheesman at Waigeu. She also took a small species, *P. amblyops* Forel, there; but none on Japen Isl.). Karawajew also described 3 new species, including *carinatus* referred to in this paper; I have named the new species in his honour.

Emery (1911) pointed out that the *familiaris* of Bingham (1903) and Forel (1894) is not that of Smith, and he proposed *P. binghami* nom. n.; he also noted that *familiaris* Mayr (1865) and Emery (1887) are not that of Smith, and proposed *P. mayri* nom. n.

Pseudolasius familiaris Smith.

Formica familiaris Smith, 1860, *J. Proc. Linn. Soc. Lond. Zool.* 5: 68.

Professor G. D. Hale Carpenter having kindly lent me Smith's type, I decided to redescribe it. I expect that the maxillary palpi are really 3-jointed and the labial palpi 4-jointed, for though one can see only 2 and 3 joints respectively, it is probable that the first joint in each case is hidden, and of course it would not be right to dissect this venerable specimen. As to the number of teeth to the mandibles, it is undoubtedly eight. Emery (1911) said seven,

possibly eight, and figured a mandible he said Professor Poulton had drawn for him from the type. The right mandible has eight clear teeth, and in the left the first tooth is partly joined to the second.

I have compared the type with a ♀ from Sikhim named *familiaris* by Bingham, and the two insects are quite distinct. Emery's name—*binghami*—therefore will have to stand for the Indian insect.

♀. Reddish-yellow, gaster darker, extreme apex of segments pale yellow, teeth of mandibles black. Clothed with sparse outstanding yellow hairs, and fine silky yellow pubescence.

Head subquadrate, narrower in front than behind, broadest at base, posterior angles rounded, posterior border slightly emarginate; *mandibles* long, shining, sparsely and shallowly punctate, masticatory border armed with 8 teeth, the first being the smallest, the fifth and seventh longer than the sixth, five to eight are sharply pointed, the apical (eighth) tooth being the longest; *maxillary palpi* 3-jointed?; *labial palpi* 4-jointed?; *clypeus* large, transverse, convex on disc, anterior border slightly excised in middle, sinuate on each side; *frontal area* not defined, *frontal carinae* rather widely separate, strongly sinuate behind lobe; *clypeal foveae* not confluent with *antennal foveae*; *eyes* large, round, prominent, situated a little behind centre of head; *ocelli* large, prominent; *antennae* 12-jointed, *scape* extending beyond posterior border of head by about $\frac{1}{2}$ of its length, all joints of *funiculi* longer than broad, first joint longer than second, joints 2-9 subequal, last joint scarcely as long as the two preceding taken together. *Thorax* oval, broadest just before insertion of fore-wing, anterior angles rounded; *pronotum* transverse, widely embracing the mesonotum, anterior border projecting to form a short neck, narrowly margined; *mesonotum* large, convex anteriorly, rather flat on disc, *suture* before praescutellum rather deep; *praescutellum* very narrow in centre; *scutellum* transverse, oval, rather flat; *metanotum* transverse, narrow, slightly raised; *sutures* between scutellum and metanotum, and metanotum and epinotum, rather deep; *epinotum* transverse, rather flat, no angle between dorsal surface and declivity. *Scale of petiole* not thick, about as broad as high, upper surface emarginate, slightly inclined forward. *Gaster* not very voluminous, long, oval, broader in front than behind, slightly overhanging scale. *Legs* rather short. *Wings* yellowish, *veins* and *pterostigma* yellow, no *discoidal cell*, one *cubital* and closed *radial cell* as in *Camponotus*.

Long. 8 mm.

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