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TWO NEW SPECIES OF *PRISTOMYRMEX* MAYR (HYM.  
FORMICIDAE), WITH SOME NOTES ON THE GENUS

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*Pristomyrmex castor* sp. n.

♀. Orange yellow, shining, furnished with sparse outstanding yellow hairs, eyes and teeth of mandibles black.

*Head* without mandibles transverse, massive, broader than thorax, posterior angles rounded, posterior border slightly excised in middle, cheeks straight; *mandibles* powerful, triangular, rather widely and strongly longitudinally striate, with a few punctures in the interstices, armed with four strong blunt teeth, the posterior three being shorter and blunter; *clypeus* transverse, anterior border crenulate, rather flat posteriorly with a narrow raised central carina; *frontal area* ill defined with a narrow central carina and fine longitudinal striae on each side; *frontal furrow* narrow, shallow, extending half-way to median ocellus; *frontal carinae* diverging behind, embracing a rather broad flat space which is punctured with a few rather large shallow umbilicate punctures, a few faint not close longitudinal striae are present between eyes and antennal foveae; *antennal foveae* large, deep, round, and margined with a number of narrow, low, circular ridges; *ocelli* small, not prominent, situated on posterior part of top of head; *eyes* large, not very convex, slightly longer than broad, furnished with numerous facets; *antennae* 11-jointed, stout; *scape* curved, considerably widened to apex, not reaching as far as posterior border of head, *funiculus* with stout joints increasing in breadth to apex, first joint about as long as broad, the rest getting gradually longer than broad, last joint bluntly pointed, slightly longer than the two preceding taken together. *Thorax* short, convex, narrowed in front and behind, broadest at insertion of wings; *pronotum* transverse, very narrow anteriorly, embracing mesonotum at sides, sides punctured with wide apart shallow umbilicate punctures; *mesonotum* very convex on disc, anterior border narrowly margined, punctured with wide-apart rather large shallow punctures, suture between mesonotum and praescutellum narrow but deep; *praescutellum* very narrow in centre, rather wide at sides, with a few shallow round punctures; *scutellum* transverse, convex, punctured with a few scattered, large, shallow, umbilicate punctures; *metanotum* transverse, very narrow, slightly convex; *epinotum* armed with two short pointed teeth, *dorsal surface* convex, transverse, with three shallow punctures on disc situated one above the other, the lowest being the broadest, a transverse furrow is present before excised ridge separating the declivity, *declivity* very smooth and shining, considerably hollowed out, with raised side margins. *Petiole* long with long peduncle, sides of peduncle almost straight to just before base where a short projection is present on each side, node high, broader than peduncle, convex and rounded above, sides almost straight, apical border truncate; *post petiole* convex and rounded above, broader than node of petiole, broadest just before apex, with a very small, short tooth beneath. *Gaster* convex, round oval, narrowed behind, very smooth and shining. *Legs* stout, moderate, *claws* rather long and narrow. *Wings* as in the ♂, but more ample. *Long.* 8 mm.

Described from two winged females taken by Miss L. E. Cheesman, Papua, Kokoda, 1200 ft., one in April, the other in October, 1933.

Type in the British Museum (N.H.).

This is probably the largest species in the genus. It comes nearest to *P. parampunctatus* Emery from New Guinea, which has been taken by Mr. G. E.

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Bryant also at Penang. *P. castor* is a little larger, lighter in colour, and the wings are considerably darker. In *parampunctatus* the puncturation is much more marked; being closer, stronger and coarser.

♂. Head, thorax, petiole, post petiole, antennae except scape, first joint of funiculus, and extreme tip of last joint, black; gaster yellow, legs, scape, first joint of antennae and extreme tip of last joint reddish-yellow; clothed with longer and shorter more or less outstanding black hairs.

*Head* not including eyes a little longer than broad, sides of head behind eyes rounded to posterior angles, posterior border slightly rounded; *cheeks* short, rounded beneath, slightly narrowed from eyes to base of clypeus; *mandibles* very short, small, triangular, sharply pointed, space between very wide; *clypeus* transverse, narrow, convex in middle, anterior border almost straight, with a finely raised narrow margin; *frontal carinae* short, low, rather wide apart, divergent behind; *eyes* large, convex, longer than broad, situated at sides of head; *ocelli* moderate; *antennae* long, 12-jointed, *scape* short, smooth, shining, rather stout, not as long as the first two joints of the funiculus taken together, *funiculus* with first joint smooth and shining, very short, about as long as broad, the rest of the joints pubescent and hairy, considerably longer than broad, last joint about as long as the two preceding taken together, slightly broader and pointed at apex. The puncturation of the head consists of fairly large shallow pits, surrounded by a network of raised borders, widely transversely striate between base of scape and eyes, spaces between the striae smooth and shining; a smooth shining space is present on vertex of head. *Thorax*, short, convex, narrowed in front and behind, broadest before insertion of wings. The puncturation is similar to that of head, but somewhat coarser, the pits being slightly larger; *pronotum* transverse and narrow, separated from mesonotum by a narrow shining slightly raised border; *mesonotum* convex, narrowed in front, broadest before base, slightly overlapping the pronotum, a smooth shining space, considerably narrower behind, extends from anterior border to beyond middle; *mayrian furrows* very broad and shallow, with widely separated oblique striae; *parapsidal furrows* short, broad, but narrower than mayrian furrows, consisting of rather large shallow pits; *praescutellum* transverse, flat, anterior border straight, with seven raised ridges extending to anterior border of scutellum, spaces between smooth and shining; *scutellum* transverse, convex, projecting, narrowed to, and rounded at, base, broadest before middle, punctured with round, shallow, fairly large pits; *metanotum* transverse, narrow, smooth; *epinotum* armed with two short pointed but not sharp teeth, the space between circularly excised, *dorsal surface* convex, with a number of longitudinal raised ridges, spaces between smooth and shining, the central pair diverging to base of teeth, a transverse ridge extends from one to the other before base, *declivity* concave, hollowed out, smooth and shining, slightly longer than dorsal surface. *Petiole* long, with peduncle narrower, but about as long as node, smooth, shining and flat above, sides narrowly bordered, node oblong, convex but not high, smooth and shining above, sides slightly rounded, punctured with small shallow pits; *post petiole* slightly longer than broad, about as broad as petiole, smooth and shining above, sides slightly rounded, anterior border slightly excised, beneath a small tooth projecting forwards is present at base; *gaster* long, oval, sides rounded and narrowed to base, smooth and shining. Stipites somewhat broad, bluntly pointed. *Legs* long. *Wings* blackish, hairy, *pterostigma* and *veins* dark brown, one *cubital cell* present, *radial cell* open. *Long.* 6.5 mm.

Described from a single male taken by Miss L. E. Cheesman, Papua, Kokoda, 1200 ft., August 1933.

Type in the British Museum (N.H.).

Although not actually taken with the two females described above, I have little doubt that it is the male of *castor*.

***Pristomyrmex pollux* sp. n.**

♂. Black, shining, legs and antennae brown, apex of scape, first joint of funiculus and articulations of legs lighter, clothed with abundant long outstanding black hair. Head and thorax closely punctured with larger and smaller shallow punctures.

*Head* without eyes rather narrow and longer than broad, rather high in profile, posterior angles bluntly angled, posterior border with a narrow raised border, slightly excised in middle; *mandibles* very short, small, pointed, widely distant; *clypeus* small, convex, strongly arched in middle, anterior border projecting in centre; *frontal carinae* short, low, rather close together, slightly divergent behind, a small oval longitudinal smooth space is present on top of head before ocelli; *ocelli* fairly large, prominent, situated on top of crown of head; *eyes* very large, oval, prominent, situated on each side of the head; *antennae*: right antenna abnormal, 11-jointed, last joint thickened and curved, left antenna normal, 12-jointed, scape and first joint of funiculus smooth and shining, rest of joints pubescent, *scape* cylindrical, longer than broad, as long as the two first joints of the funiculus taken together; *funiculus* with first joint short, as long as broad, all the rest longer than broad, last joint as long as the two preceding taken together. *Thorax* short, narrowed in front and behind, broadest at insertion of wings; *pronotum* transverse, narrow in front with a short neck, sides triangular, rather long and wide, projecting slightly over pronotum; *mesonotum* ample, convex at apex, rather flat at base; *mayrian furrows* wide and strongly marked, consisting of rather large deep punctures separated by narrow ridges; *praescutellum* rather broad at sides, some eight narrow longitudinal ridges connect it with scutellum; *scutellum* transverse, not higher than mesonotum, base rounded, extending above metanotum, a rather deep transverse furrow, which is longitudinally striate, is present on each side at base; *metanotum* transverse, narrow, smooth and shining; *epinotum* armed with two fairly long triangular teeth, rather broad at base, *dorsal surface* slightly concave, margined on each side with two longitudinal ridges, a narrow transverse ridge connects them before space between teeth, and two similar ridges are present between teeth, *declivity* considerably hollowed out, smooth and shining. *Petiole* long, node broader than peduncle but neither broad nor high, smooth and shining on disc, considerably punctured at sides, posterior border truncate; *post petiole* a little longer than broad, about as broad as node, smooth and shining on disc, punctured at apex and sides, a blunt short tooth projecting downwards is present beneath at base; *gaster* smooth and shining, long, oval, narrowed at apex, truncate at base. *Stipites* not broad, bluntly pointed. *Legs* moderately long and slender. *Wings* brown, hairy, *pterostigma* and *veins* dark brown, one large cubital cell, and radial cell open, present. *Long.* 5.3 mm.

Described from a single male taken by Mr. G. E. Bryant at Penang, 6 November, 1913. I think it is improbable that the above described insect is the male of any known species. It is true that Bryant took the female of *P. parampunctatus* Emery at Penang, but one would expect the male of that species to be larger, and also in part to be yellow in colour.

Type in the British Museum (N.H.).

Only three males of *Pristomyrmex* species have been described heretofore—*P. brevispinosus* Emery 1887, *P. obesus* Mann in 1919 by W. M. Mann from the Solomon Islands, and *P. pungens* Mayr in 1928 by Wheeler. Forel's ♂, 1912, of *P. picteti* Emery appears to be doubtful.

Mayr created the genus *Pristomyrmex* for the reception of *P. pungens* Mayr ♀ 1866. Emery (1922) unfortunately gave the date for *pungens* as 1886, although he had correctly given that of the genus as 1866. Forel redescribed *pungens* under the name of *P. japonicus* ♀, 1900, from Japan. Of course his name sinks as a synonym.

The distribution as given by Emery (1922) is as follows: "Indo-China, Japon, Malaisie jusqu'à la Nouvelle-Guinée, Australie." Since then, however, two species have been described from East Africa, by Arnold and Karawajew respectively. Arnold made no comment on the curious fact that a species of *Pristomyrmex* should be found in Africa. Karawajew, however, who was evidently unaware of Arnold's species, remarks that the discovery of a species in British East Africa is very remarkable and widens our knowledge of the geographical distribution of the genus.

Santschi (1923) writes: "*Pristomyrmex orbiceps* Sants. (1916) = *Xiphomyrmex orbiceps* Sants. (1914). *Pristomyrmex fossulatus* (For.) Sants. (1916) = *Xiphomyrmex fossulatus* For. (1918) (sic!). J'avais déjà signalé cette mutation dans le Bull. Soc. Ent. France p. 51 (1916) mais cela avait échappé à Mr. Emery dans ses 'Myrmicinae' du Genera Insectorum et dans Wheeler dans ses 'Ants of the Belgian Congo.' Le genre *Pristomyrmex* n'était pas encore connu en Afrique."

Forel, of course, described *Xiphomyrmex fossulatus* in 1910. These changes were also missed in the *Zoological Record*.

Emery in the *Genera Insectorum* (1922) lists thirteen species of *Pristomyrmex*, one subspecies, and three varieties. Since that publication the following new forms have been described: *P. africanus* Karawajew, ♀, 1931, British East Africa. *P. quadridens* Emery var. *aruensis* Karawajew, ♀, 1933. Curiously enough he again describes the same variety from the exact same locality in 1935. *P. cribarius* Arnold, ♀, 1926, Portuguese East Africa. *P. mendanai* Mann, ♀, 1919, Solomons. *P. obesus* Mann, ♀♂♂, 1919, Solomons. *P. obesus* Mann, subsp. *melanoticus* Mann, ♀, 1919, Solomons. *P. pegasus* Mann, ♀, 1919, Solomons. (It is rather extraordinary that Emery, in 1922, should have overlooked these last four forms.) *P. taurus* Stitz, ♂, 1925, Philippines. *P. picteti* Emery var. *tingiana* Stitz, ♀, 1925, Philippines. With the two new species described in this paper the list is brought up to twenty-three species (including the two species referred to by Santschi), two subspecies, and five varieties.

Very little is known about the habits of these ants; they are generally found singly, on the trunks of trees, under stones, etc. Mann found a small colony of *obesus* under a stone at Fulakora, Solomons, consisting of less than a dozen workers, a dealated female, and one male.

#### REFERENCES.

- ARNOLD, G., 1926, *Ann. S. Afric. Mus.* **23** : 281.  
 EMERY, C., 1887, *Ann. Mus. Stor. Nat. Genova* **25** : 451.  
 —, 1922, *Gen. Ins. Fasc.* **174 C** : 233-4.  
 FOREL, A., 1900, *Mitt. Schweiz. ent. Ges.* **10** : 268.  
 KARAWAJEW, W., 1931, *Zool. Anz.* **95** : 47.  
 —, 1933, *Konowia* **12** : 270.  
 —, 1935, *Treubia* **15** : 99.  
 MANN, W. M., 1919, *Bull. Mus. Comp. Zool.* **63** : 338-41.  
 MAYR, G., 1866, *Verh. Zool. Bot. Ges. Wien* **16** : 903.  
 SANTSCHI, F., 1923, *Rev. Zool. Af.* **12** : 286.  
 STITZ, H., 1925, *Sitz. Ber. Ges. Naturf. F. Berlin.* **1923** : 120.