

Known Castes of the Various Species of New Guinea *Aphaenogaster*

X = caste known O = caste unknown,

Species	Worker	Female	Male
<i>Aph. (Deromyrma) dromedarius</i> (Emery)	X	O	X
<i>Aph. (Planimyрма) lorlai</i> (Emery)	X	X	X
<i>Aph. (Planimyрма) quadrispina</i> Emery	X	O	X
<i>Aph. (Planimyрма) perplexus</i> n. name, n. status	X	O	O
<i>Aph. (Subgenus?) projectens</i> Donisthorpe	O	O	X
<i>Aph. (Subgenus?) lustrans</i> , n. sp.	X	O	O
<i>Aph. (Nystalomyrma) pythia</i> Forel	X	X	X

## Material Studied

Although I have made every effort to secure New Guinea specimens from museums, institutions, and private collectors the total number of individuals studied for this paper has been less than 200. I have been fortunate though in having available for study cotypes of all known New Guinea *Aphaenogaster* except those of *pythia* Forel and the holotype of *lorlai* var. *atra* Stitz. The forms of which I have seen types are as follows: *dromedarius* (Emery), and its vars. *fusca* (Emery) and *nigra* Donisthorpe, *lorlai* (Emery), *quadrispina* (Emery), *perplexus* n. name and n. status for *quadrispina wheeleri* Donisthorpe, and *projectens* Donisthorpe. Apparently my description is the first of a pterergate of *dromedarius*.

Besides types, 171 additional specimens have been studied, these being divided among the forms as follows: *dromedarius*-50 workers, 1 pterergate, 3 males; *lorlai*-72 workers, 1 female, 4 males; *perplexus*-12 workers; *pythia*-19 workers, 3 females, 6 males.

## Methods of Study

The ants were studied under a small electric light with a binocular microscope at a magnification of 61.2 times. Measurements were as follows: (1) Length of body is the total of the greatest lengths of the head, thorax, petiole, postpetiole and gaster, each measured separately; (2) head length exclusive of body length is the distance measured through the longitudinal axis of the head from the anterior border of the clypeus to the flange or rim of the occipital collar or neck; (3) length of the occipital neck is the distance measured along the longitudinal axis of the head from the point where the occipital neck begins to form to its termination at the flange or rim of the occipital neck; (4) greatest breadth of head is the greatest distance from the external border of one eye to that of the other measured across the head at a right angle to the longitudinal axis of the head; (5) greatest diameter of eye is the greatest length of the eye; (6) length of thoracic spine is the shortest distance from its base to its apex regardless of the curvature of the spine; (7) length from