30 K. EGUCHI

Variation Majors from Poring and Sayap Kinabalu have, in general, a deeper emargination on posterior margin of head (Fig. 4B) than those from other localities in Borneo, although intermediate conditions occur when we observe all the available Bornean specimens.

Recognition This relatively large-sized species, with 3-segmented antennal club, is recognisable among Indo-Malayan congeners by having minor's head with occipital carina forming a well-developed frange. The most similar species is the sympatric *P. cariniceps* sp. nov., but in the latter antennal scrobe of the major is margined below by a marked carina; propodeal spine of the major has broad base (Fig. 10C); prominence on posterior declivity of promesonotum, and dorsum of propodeum bears a pair of standing hairs in the minor (Fig. 10F). I could examine one syntype (minor) of *P. longicornis* Emery, 1888: 532. Morphological similarity between the minor of *P. aglae* and that of *P. longicornis* strongly suggests their conspecificity. However, I could not confirm it, since major(s) which should be included in the type material of *P. longicornis* according to Emery's original description could not be examined.

Distribution Southern Malay Peninsula, Singapore, Borneo, Sumatra, Java and New Guinea (Fig. 55). **Bionomics** This species inhabits well-developed forests (including primary and well-recovered secondary forests) from lowlands to hill areas. It nests in rotting wood blocks and logs on the forest floor. I have never encountered colonies which include more than one dealate queen.

3. Pheidole angulicollis sp. nov. (Fig. 5)

Holotype Major, Eg00-BOR-100, Mahua Waterfall area (ca. 1000 m alt.), Crocker Range National Park, Sabah, E. Malaysia (Borneo), K. Eguchi leg., 2000, deposited in UMS.

Paratypes 5 majors (one of them is teneral), 22 minors and 1 queen from the same colony to which the holotype belongs, deposited in BMNH, MCZ, MSNM, NHMW and UMS.

Other specimens examined BORNEO. Sarawak, Malaysia: Lambir Hills N. P., 9 minors (GC), SKY, 1997 / 4 majors, 5 minors and 1 queen (bottle code: 97-01), SKY, 1997.

Measurements and indices (n=9): TL 2.6-3.6 mm, HL 1.26-1.93 mm, HW 1.11-1.66 mm, Major SL 0.58-0.76 mm, FL 0.72-1.05 mm, CI 84-88, SI 46-54, FI 63-66. Head broadest at around 1/2-3/5 distance of head (as measured from the mid-point of a transverse line spanning the anteriormost and posteriormost projecting points, respectively (cf. Fig. 2A)) (Fig. 5A), in profile not impressed on vertex (Fig. 5B). Hypostoma bearing three distinct median processes, of which medianmost one is stout (Fig. 5C). Clypeus without a median longitudinal carina, with anterior margin weakly concave medially. Eye situated just in front of 1/3 distance of head; distance between mandibular insertion and anterior margin of eye 2.1-2.6 times as long as maximal diameter of eye. Frontal carina inconspicuous. extending backward to 1/3-2/3 distance of head. Antennal scrobe present only around antennal insertion. Antenna with 3-segmented club; scape extending backward to 1/2-3/5 distance of head; terminal segment 1.0-1.1 times as long as preceding two segments together. Masticatory margin of mandible with apical and preapical teeth, and a denticle in front of basal angle. Promesonotum forming a high dome, with a small or inconspicuous prominence on its posterior declivity (Fig. 5E); the prominence in anterior view not concave medially; each dorsolateral portion of the dome produced as a stout horn directing dorsolaterally on each side (Fig. 5D, E). Mesopleuron without a distinct transverse impression. Propodeal spine horn-like, 3.0-4.5 times as long as diameter of propodeal spiracle. Petiole 1.2-1.3 times as long as postpetiole (excluding helcium); petiolar node high, in posterior view not emarginate at apex. Postpetiole 2.3-2.8 times as broad as petiolar node.

Frons and gena longitudinally rugose; vertex, and dorsal and lateral faces of occipital lobe