

view not emarginate at apex; its posterior face usually margined dorsally and laterally. Postpetiole 1.8-2.2 times as broad as petiolar node.

Clypeus smooth and shining with several rugulae, or very weakly rugose and weakly shining; remainder of head reticulate; alitrunk largely reticulate, but area between promesonotal spines smooth and shining; lateral faces of petiole and postpetiole weakly punctured; dorsa of petiole and postpetiole, and gaster smooth and shining. Body sparsely bearing standing hairs. Body brown, reddish-brown or dark brown; antennae and legs a little lighter than alitrunk.

Recognition *P. quadrensis* is closely related to *P. lokitae* Forel, *P. quadricuspis* Emery, *P. sperata* Forel, *P. acantha* sp. nov. and *P. spinicornis* sp. nov., and several undescribed species, and they are recognisable among Indo-Chinese and Indo-Malayan congeners by a combination of the characteristics noted under *P. lokitae*. They are, according to Emery (1921), related to Austro-Malayan "*P. quadrispinosa* Fr. Smith group" and "*P. cervicornis* Emery group". *P. quadrensis* is well distinguished from the Bornean relatives by the characters given in the key.

Distribution Borneo and Sumatra.

Bionomics This species inhabits well-developed forests in lowlands. It nests in rotting twigs and wood blocks on the forest floor, and stores up a number of tiny seeds in its nest (Eg97-BOR-471, 535). I have never encountered colonies which include more than one dealate queen.

38. *Pheidole quadricuspis* Emery (Figs. 39, 61)

Pheidole quadricuspis Emery, 1900: 683, major and minor (MCSN). Type locality: Sumatra. Three syntypes (1 major and 2 minors) were examined.

P. (Pheidolacanthinus) quadricuspis: Emery, 1921: 83.

Pheidole quadricuspis: Bolton, 1995b: 328.

Specimens examined BORNEO. Sabah, Malaysia: Deramakot Forest Reserve, 1 minor, CB, 1998-1999; Gunong Rara, 28 majors, 49 minors and 3 queens (Eg96-BOR-315, 319, 320, 343A, 343B, 353, 370, 372; Eg97-BOR-530, 557, 558); Poring, 800 m alt. (East Ridge), 1 minor (code BW-1), CB, 1995; Sepilok forest, 1 major and 1 minor (Eg97-BOR-495). Brunei: Belalong Forest Section, 2 majors, 5 minors and 1 queen (Eg99-BOR-222); Merimbun Heritage Park, 13 majors, 18 minors, 7 queens and 24 males (Eg99-BOR-039, 111, 112, 522, 585). E. Kalimantan, Indonesia: Kutai N. P., 3 majors and 3 minors (GC), SKY, 1993. MALAY PENINSULA. Malaysia: Ulu Gombak, 11 majors, 27 minors and 2 queens (FI96- 604, 605; FI98-113, 114, 130, 188, 197). SUMATRA, Indonesia: Lubuk Gadang, W. Sumatra, 2 majors and 11 minors, SNS.

Major Measurements and indices (n=10): TL 4.1-5.1 mm, HL 1.83-2.07 mm, HW 1.90-2.28 mm, SL 0.99-1.08 mm, FL 1.32-1.47 mm, CI 103-110, SI 47-53, FI 71-64. Head broadest at about 2/3 distance of head (as measured from the mid-point of a transverse line spanning the anteriormost and posteriormost projecting points, respectively (cf. Fig. 2A)); posterior margin of head in full-face view almost flat, but slightly emarginate medially (Fig. 39A); head in profile not impressed on vertex (Fig. 39B). Hypostoma with a pair of stout median processes. Clypeus with a median longitudinal carina, with anterior margin in full-face view emarginate medially. Eye situated at about 1/3 distance of head; distance between mandibular insertion and anterior margin of eye 1.7-2.0 times as long as maximal diameter of eye. Frontal carina inconspicuous, extending backward to about midlength of head. Antennal scrobe present only around antennal insertion. Antenna with 3-segmented club; scape extending backward to about 2/3-3/4 distance of head; terminal segment 0.9-1.0 times as long as preceding two segments together. Masticatory margin of mandible with apical and preapical teeth, and