mandibular insertion and anterior margin of eye 0.7-0.8 times as long as maximal diameter of eye. Frontal carina and antennal scrobe present only around antennal insertion. Antenna with 3-segmented club; scape reaching or slightly extending beyond posterior border of head; terminal segment ca. 1.2 times as long as preceding two segments together. Promesonotal dome relatively flat dorsally and with a pair of inconspicuous tubercles dorsolaterally; posterior declivity of the dome very steep or almost vertical, without a prominence (Fig. 52F). Mesopleuron without a transverse impression. Propodeal spine horn-like, straight, 5 times as long as diameter of propodeal spiracle. Petiole 1.8-2.0 times as long as postpetiole (excluding helcium); petiolar node distinct, in posterior view not emarginate at apex. Postpetiole 1.4-1.6 times as broad as petiole.

Dorsal face of head including clypeus and promesonotum weakly reticulate, with enclosures punctured and dull; remainder of head and alitrunk punctured and dull; lateral face of petiole weakly punctured; dorsum of petiole, and postpetiole and gaster smooth and shining. Body brown to dark brown, with lighter gaster; antennae and legs lighter than alitrunk.

Variation Both the subcastes from Eg97-BOR-565 collected at Gunong Rara have short propodeal spines (less than 3 times as long as maximal diameter of propodeal spiracle in the major, and 2-2.5 times in the minor). At present it is difficult to conclude whether relatively short propodeal spine represents a mere variation or any of distinguishing conditions at population level.

Recognition *P. tjibodana* is closely related to *P. nodgii* Forel, *P. magrettii* Emery, *P. retivertex* sp. nov., *P. sayapensis* sp nov. and several undescribed species, and all these are peculiar among Indo-Chinese and Indo-Malayan congeners in the combination of the following characteristics: hypostoma of the major bearing a stout median process (Fig. 52C); frontal carina well developed, horizontal, and extensively overhanging antennal scrobe in the major (Fig. 52A); ventral faces of midcoxa and hindcoxa completely smooth and shining in both the subcastes (contrasted with the condition seen in *P. aristotelis* Forel, and *P. hortensis* Forel and its relatives); head and alitrunk of the minor sculptured. *P. tjibodana* is most closely related to *P. nodgii*, and the diagnostic characters separating the former form the later were noted in Eguchi (2001). *P. tjibodana* is easily distinguished from two Bornean relatives, *P. retivertex* sp. nov. and *P. sayapensis* sp nov., by the characters given in the key.

Distribution Borneo and Java.

Bionomics This species inhabits well-developed lowland and hill forests, and nests in the litter or rotting wood blocks on the ground, and occasionally stores up a number of tiny seeds in its nest (Eg96-BOR-031). I have never encountered colonies which include more than one dealate queen.

52. *Pheidole upeneci* Forel (Fig. 53)

Pheidole (*Elasmopheidole*) *upeneci* Forel, 1913: 43, major and minor (MHNG). Type locality: Cibodas, 4500 feet [ca. 1350 m alt.], Java. Lectotype designation and redescription of type material: Eguchi, 2001.
Pheidole (*Stegopheidole*) *upeneci*: Emery, 1915b: 190.
Pheidole upeneci: Bolton, 1995b: 332.
Specimens examined BORNEO. Sabah, Malaysia: Mahua Waterfall area, 3 majors and 2 minors (Bottle-Eg-A from 15 min. sampling), K. Ogata leg., 2000.

Major Measurements and indices (n=3): TL 2.9-3.3 mm, HL 1.42-1.45 mm, HW 1.20-1.21 mm, SL 0.52-0.55 mm, FL 0.90-0.92, CI 83-85, SI 43-46, FI 74-76. Head broadest just behind midlength of head, broadly concave posteriorly (Fig. 53A); dorsal outline of head in profile steeply sloping from