

Fig. 59. Distribution of P. aristotelis Forel.

originally described under Aphaenogaster by Wheeler (1927a), then transferred to Pheidole by Brown (1967). The group is characterised by a 4-segmented antennal club, but its monophyly has not yet been established. It is Indo-Chinese and Indo-Malayan in distribution, but interestingly no species occurs in Borneo. Examinations of available specimens, including type materials, of the abovementioned forms, excluding P. emmae (of which the type material has apparently been lost), suggest that P. bluntschlii is an atypical member in the group and characterised by a combination of the following characteristics: anterior margin of clypeus of the minor emarginate medially in full-face view; hypostoma of the major unarmed medially; low subpetiolar process present in the major; radial cell of the male wing completely closed. P. bluntschlii is very similar to species of the P. quinata group in its general features, except in the segmentation of antennal club and the condition of processes on hypostoma of the major. The male of P. sabahna, belonging to the P. quinata group, also has a completely closed radial cell (cf. Eguchi, 2000), a condition not common in Asian species of Pheidole as far as I know. Thus there is a possibility that the P. quinata group is phylogenetically closest to P. bluntschlii, and is the Bornean representative (Fig. 58) of the P. smythiesii group in a wide sense. Anyway, a careful phylogenetic reconstruction is required for members of the P. smythiesii group and P. quinata group (and also P. granulata group, namely, "espèces Américaines" of "Ceratopheidole" (Emery, 1922)) prior to detailed biogeographical analysis.

4) Inhabitants of Indo-Malayan rainforests

4.1) Indo-Malayan (represented by *P. aristotelis* (Fig. 59), *P. butteli*, *P. clypeocornis* sp. nov., *P. deltea* sp. nov., *P. elisae*, *P. hortensis*, *P. sarawakana* and *P. sauberi*)

These species occur in the southern Malay Peninsula (with the exception of *P. deltea* sp. nov.), Borneo, Sumatra, Java, and in one case the Philippines (*P. sauberi*). They inhabit well-developed forests from lowlands to hill areas.