

leaves, wood fragments up to  $4 \times 0.1$  mm, and other detritus were attached. One nest wall between the parts of the leaf was built from a translucent thin layer of pure silk. The nest comprised one chamber of  $3 \times 2.5$  cm with a height of 1.5 cm. The leaf surface in the nest was not lined with a silk layer as is the case in many other species of *Polyrhachis*. One side of the nest's leaf wall had a fensterfrass (leaf skeletonized by insects leaving one cuticle intact) of  $6 \times 6$  mm. On the nest leaf there were attached several shiny black fungus hyphae (1.5-2 mm in diameter) which were also partly integrated into the nest. In the nest small larvae were attached in clumps on the leaf surface. The nest contained 50 workers, 29 alate females, 9 males and uncounted pupae in cocoons, larvae and eggs.

The second nest was found 1.80 m above the ground on a leaf of a small tree in primary forest near the Field Studies Centre at Pasoh. The nest was attached to the upper side of a dead leaf ( $17 \times 9$  cm), which was hanging in the tree attached only by some fungus hyphae of the type mentioned above. It can be assumed that this is not the normal position of the nest, but that it had been damaged recently and was now repaired. The nest measured  $6 \times 6$  cm and consisted of a relatively coarsely woven silk net covered with detritus (pieces of leaves up to  $4 \times 3$  mm, pieces of wood up to  $2.5 \times 1.5$  mm). It contained 85 workers, 21 alate females, 8 males, and uncounted pupae in cocoons, and larvae.

*P. boltoni* appears to be diurnal. Workers were observed during the daytime on bushes and low herbaceous vegetation collecting detritus from leaves with insect fensterfrass and from rotting pieces of wood. During the night, when the nest was collected, there was no activity. The ants were sitting regularly distributed on the leaf within the partially built nest.

Some interesting conclusions and questions arise from these findings: the fact that no queen was found in the nests leads to the conclusion that *P. boltoni* is polydomous, as are many other species in *Polyrhachis*. The two nests mentioned above, with their high numbers of alates, were collected at the end of January and the beginning of February. A dealate queen was collected at the end of February. Further studies should investigate whether *P. boltoni* queens forage during colony foundation. Further studies are also necessary to determine whether there is a seasonality in colony foundation with nuptial flights after the rainy season in the first quarter of the year, as appears to be indicated by the above data. The findings of the same type of fungus hyphae in and near both nests could indicate that *P. boltoni* normally nests in the higher parts of trees, possibly in epiphytes or other places, where dead foliage is accumulated and fungi common.

*Polyrhachis (Hemioptica) bugnioni* Forel, 1908  
(fig. 2)

*Polyrhachis (Hemioptica) bugnioni* Forel, 1908: 11, pl. i. Syntype workers, female. Type locality: Sri Lanka (as Ceylan), Puwakpitiya (Bugnion), MHNG (2 workers examined).

Material.— Syntypes, 2 workers (MHNG); Sri Lanka: Gilimale, Primary forest, 7.iii.1977 (U. Maschwitz #WD565 worker, #WD566 dealate ♀); Sri Lanka, Rat. Dist., Induruwa Jungle, Gilimale,  $06^{\circ}46'N$ ,  $80^{\circ}26'E$ , 18-20.vii.1993 (K.V. Krombein & B.B. Norden, 26 workers, dealate ♀).

Worker.— Dimensions (syntypes cited first): TL c. 5.49-5.74, 4.89-5.40; HL 1.43-