

Sembilan, Pasoh Forest Reserve, in rotten wood on forest floor, 10.iii.1990, FN 27 (K. Rościszewski) (SMNK). Paratypes: 2 workers with same data as holotype (BMNH), 2 workers, 1 queen from same locality, beneath rotten wood on forest floor, 6.iii.1990, FN 15 (K. Rościszewski) (SMNK), 1 male from same locality, colony found on 31.iii.1992 in rotten wood on forest floor, bred in captivity, 23.vi.1992, FN 2430 (K. Rościszewski) (SMNK).

Discussion

The assessment of character state polarities is based on comparisons with the *Myrmica*- and *Tetramorium* genus groups which are considered in most respects to exhibit the ancestral myrmicine condition (Bolton 1987). The following characters from the generic diagnosis of workers are considered as plesiomorphic: 1, 13, 18, 26, the following as apomorphic by reduction: 2, 3, 4, 24, and the characters 7-11 as apomorphic by development. The following characters are plesiomorphic in the Myrmicinae (Bolton 1988): median portion of clypeus broadly inserted between widely separated frontal lobes, and frontal triangle sharply demarcated. The striking clypeal prominence ('rostrum') is developed from the bicarinate *Lordomyrma*-pattern by extreme narrowing of the median portion of the clypeus, fusion of its carinae, and projection of the resulting lamella (Bolton, pers. comm.). Thus the median clypeal carina, which is a plesiomorphic state, is regarded as apomorphic in *Rostromyrmex*. The posterodorsal position of the propodeal spiracle (character 19) is considered as apomorphic. The plesiomorphic location of this spiracle is considered to be anterodorsal (Lattke 1990). In the male the absence of cross-vein r-m and the open radial cell in the fore wing are apomorphic states. The missing stigma and very long 2r (aligned with Rsf4?) are regarded as autapomorphic states.

The assignment of *Rostromyrmex* to any of the established tribes or genus groups is difficult. The characters of the clypeus, sting and wing venation rule out a placement in the *Myrmica*- or *Tetramorium* genus groups. The strongly carinate clypeus and the open radial cell plead against a placement in the *Pheidologeton* genus group (Ettershank 1966, Bolton 1987). According to Bolton (pers. comm.), *Rostromyrmex* is very close to *Lordomyrma* Emery, with which it shares a number of characters: frontal lobes, antennal scrobes, strong sculpturing of the body, conspicuous first gastral tergite, and absence of tibial spurs on middle and hind legs (Wheeler 1919). Also the shape of the clypeus can be derived from the *Lordomyrma* pattern. However, the fore

wing venation in the male differs considerably from that illustrated by Wheeler (1919: 105) for *Lordomyrma* (still, its variability has never been assessed - Bolton, pers. comm.). Other important differences, which however may be interpreted as further transformation of the *Lordomyrma* characters (Ward, pers. comm.), are (in the females) the reduction of frontal carinae, 6- or 7-dentate mandibles, 9-segmented antennae, and a long petiolar peduncle. The antennal scrobes in *Lordomyrma* are bordered with frontal carinae and are differently sculptured from the remainder of the head - which is not the case in *Rostromyrmex*. The sting in *Rostromyrmex* (Figs 10, 11) differs from that of *Lordomyrma* (Kugler 1978): not cuneiform, shaft long, sting base not vertical in profile. The strong basal ridge and well developed furcula with a long dorsal arm, as found in *Rostromyrmex*, are absent in the *Lordomyrma* (= *Promeranoplus*) genus group according to Kugler. The sting and furcula resemble those of some species of the *Solenopsis* genus group (Kugler 1978), but other characters of the sting apparatus are different: spiracular plate with dorsal notch, and oblong plate without noticeable posterior incision. The fore wing venation: cross-vein r-m absent, and radial cell open, except for the reduced stigma, is similar in the *Solenopsis* genus group and *Megalomyrmex* (Ettershank 1966, Bolton 1987). A strong median seta on anterior clypeal margin is characteristic of the *Solenopsis* genus group (also present in some *Rogeria* - Bolton, pers. comm.). A similar but weaker seta is also present in females of *Rostromyrmex* but, considering the peculiar development of clypeus, it is probably not homologous. Further differences from the *Solenopsis* genus group (see Bolton 1987) include mandibles with more than 5 teeth, antennal scrobes, well developed propodeal spines, strong sculpture on promesonotum, and 10-segmented antennae in the males.

Biology

The ants were collected in the litter layer of the forest floor. In one case three specimens were found (1 queen and 2 workers) below a piece of dead wood. Further, 5 workers and 1 queen were found with some brood in a piece of strongly rotten wood. In the third case a similar small colony (6 workers, 1 queen, and some brood) were found in the same microhabitat. The male was bred in captivity. Unfortunately, during a long absence of the author the colony died and the specimens were partly de-