

basicerotine ants of the genus *Eurhopalothrix*. We suggest that the paucity of *Basiceros* specimens in collections may in fact be due more to this extreme cryptobiosis than to any genuine rarity in nature. The entire strategy appears to work to the advantage of the colony. With only 50 or so workers in the population at maturity, each colony can ill afford to lose even a single forager. It would seem to be adaptive to be cautious and conservative in behavior under such circumstances (see the theoretical argument by OSTER and WILSON, 1978).

A second notable feature is that *Basiceros manni* has one of the smallest behavior repertoires known in the myrmicine ants. Moreover, its communication system appears to be quite elementary, comparable to that of *Eurhopalothrix* (WILSON and BROWN, 1984). But details differ: adult transport is more common in *Basiceros* (it is nearly absent on *Eurhopalothrix*), whereas only *Eurhopalothrix* (at least larger colonies of *E. heliscata*) appears to recruit to food sources. Whether this simplicity reflects a basically primitive phylogenetic status of *Basiceros* among the Myrmicinae, or a secondary trait that has evolved in connection with its predatory behavior and small mature colony size (about 50 adults), remains to be determined.

The coating of the body of older workers with fine particles of soil is shared by *Stegomyrmex connectans* (Stegomyrmecini) and at least some species of *Eurhopalothrix* and *Octostruma* (Basicerotini) (see HÖLLDOBLER and WILSON, 1986). Otherwise it appears to be rare or absent among the ants. MASUKO (1984) has described two forms of body-smearing behavior in short-mandibulate Dacetini, during which workers acquire coats of water, soil, or insect excrement during foraging. These deposits do not alter the physical appearance of the ants significantly and hence appear not to contribute to the avoidance of visual predators. Masuko suggests that the behavior serves instead to mask the odor of the dacetine workers during stalking. If this is true, the basicerotine and dacetine phenomena are similar in outward form but basically different in function.

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References

- BROWN W.L., 1974. — A supplement to the revision of the ant genus *Basiceros* (Hymenoptera: Formicidae). *J. New York Entomol. Soc.*, 82, 131-140.
BROWN W.L., KEMPF W.W., 1960. — A world revision of the ant tribe Basicerotini. *Studia Entomol.*, 3, 161-250.
FAGEN R.M., GOLDMAN R., 1977. — Behavioural catalogue analysis methods. *Anim. Behav.*, 25, 261-274.