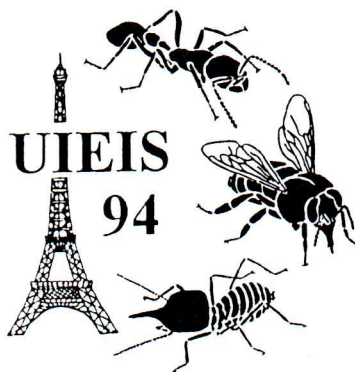


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POLYDOMOUS SOCIETIES OF THE TREE-DWELLING ANT *POLYRHACHIS LABORIOSA* (F. SMITH)

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Polyrhachis laboriosa is a sub-dominant, tree-dwelling ant of the African equatorial forest. Its nests are found along the forest edge, in bushes or small (2-10 meters high) trees, under or between the narrowly-spaced leaves of the upper branches. Workers collect vegetal fragments on the ground or in the trees and weave them together with saliva and spider's web. Each nest contains 100 to 1,500 workers, brood and, possibly, alates. A study of the distribution of *Polyrhachis laboriosa* was conducted in a mango grove of the Agronomic Research Institute of Cameroon, near Yaoundé. Preliminary studies conducted by Dejean *et al.* (1994) showed that intraspecific aggressivity in the species is very strong; it permitted to think that grouped nests belong to the same polydomous society. A second study, designed to investigate intraspecific aggressivity, was also conducted both in the laboratory and in the field. Sixty dyadic encounters (6 cm long) were set up between workers collected from the mango grove and belonging to three different nests, one of which was at a distance of 150 meters from the others. Intraspecific aggressivity was non-existent between the two neighbouring nests and very strong between those two and the distant nest. A test of intraspecific aggressivity was conducted in the field in order to control whether or not ants installed on neighbouring trees belong to the same society. Workers taken from two different trees were introduced into a small box. The results of the tests enabled us to determine the territory of each society. *Polyrhachis laboriosa* was thought to be a species which lives in small societies, since each nest was seen as a complete society; however, the two studies showed that *Polyrhachis laboriosa* can live in large, polydomous societies whose nests are distributed among several trees over a surface area of 100 to 3,000 s. m.; one tree can be occupied by 1-6 nests belonging to the same society.

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