

1929). In the neotropical fauna, Forel (1898) documented a *Dolichoderus* species, usually assigned to the subgenus *Monacis*, living in a compound nest. In that case, *D. debilis* Emery and *Crematogaster parabiatica* Forel (= *C. limata parabiatica* Forel) nest in the same stem galleries keeping their brood separate but moving together in columns towards feeding areas.

Discussion

Variability in nest structure is characteristic of many ants and some species nest both below ground and in trees. For example, *Pheidole dentata* Mayr, *P. moerens* Wheeler and *Aphaenogaster texana carolinensis* Wheeler or *A. carolinensis* Wheeler (see Johnson, 1986) will nest in both sites in northcentral Florida. However, their tree nests, often 2.4 to 3.0 m. (8 to 10 ft.) in height occur in holes or crevices produced by decay. Another ant usually termed arboreal is rather intermediate, namely, *A. lamellidens* Mayr. Its nests are under bark of dead trees, in tree holes of live trees or beneath bark of tree trunks lying on the forest floor, but never underground. Further, those species nesting both in trees and near or below ground do so in the same general habitat; the differences are not geographically correlated. More characteristic arboreals such as *Campopnotus (Colobopsis)* species, *Pseudomyrmex* species, *Solenopsis (Diplorhoptrum) picta* Emery, etc. nest in elongate, tunnel-like cavities within limbs, often living limbs. These cavities are excavated or at least modified in part by the ants, and no ground level nests have been found. Also, the arboreal ants are less common or absent where cold winters impose harsh temperatures about the tree limb habitat. Thus *D. pustulatus* with ground nests in the North and a true arboreal life style in the South is exceptionally flexible in nesting behavior. As noted above, morphological variability also exists between northern and southern populations. Larger series of specimens than presently exist and taken from known nest types along a north-south transect will be needed to explore these differences.

A taxonomic study of North American *Dolichoderus* species is complicated by the fact that no types are in this country and, if still extant, reside in European collections. Creighton's designation of New Jersey by restriction for *D. pustulatus* furthermore leaves no designated type specimen for the taxon having the most interesting variability.

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