

For example, thirteen species of *Pseudomyrmex* were observed foraging on the fig tree and adjacent vegetation, where the type specimens of *Pseudomyrmex spiculus* were collected.

Such close habitation is not typical of those *Pseudomyrmex* species which live in plant domatia. Colonies of these species seldom overlap in foraging space; yet there may be several species in a given locality. In the Tarapoto region of northern Peru, *Triplaris* plants are occupied by four related species in the *P. viduus* group; similar numbers of species co-occur on swollen thorn *Acacia* in parts of Central America. rom.

The discrimination and identification of *Pseudomyrmex* species, which is generally feasible for sympatric collections, is made more difficult on a large geographical scale by the considerable variation which occurs within many taxa. This is hardly a novel situation – examples of polytypy are common in ants (Ward, 1989) – but the situation is aggravated in some *Pseudomyrmex* where the discriminatory value of characters varies from one region to another. Thus in Costa Rica, workers of *P. elongatus* and *P. caeciliae* are consistently separable on head sculpture, but in Guatemala and southern Mexico one encounters some individuals exhibiting intermediate conditions of this character. In western Mexico, where there appears to be a single taxon, which I take to be *P. elongatus*, individuals also tend to be shifted towards an intermediate condition. Similar situations occur in other species complexes. Whether the taxa concerned are truly discrete (but their identities obscured by character shifts in allopatry) or are in fact reproductively isolated in some regions but not others, cannot be determined without further population-level studies.

#### ACKNOWLEDGMENTS

I am grateful to the following persons for loans of material or access to museum collections: B. Bolton (BMNH); M. A. Tenorio (CASC); M. Wasbauer (CDAE); I. Zenner-Polania (CELM); J. Denis (CNCC); J. Liebherr (CUIC); R. Ayala (EBCC); D. Quintero Arias (GBFM); E. Mellini (IEGG); J. A. Rafael and A. Y. Harada (INPA); J. Latke (IZAV); R. Snelling (LACM); also very old loans to D. H. Janzen from CASC, CISC, CUIC, GCWC, ICCM, INHS, KSUC, MCZC, SEMC, TAMU, UCDC, UCRC, USNM, and UWEM, acquired by LACM along with Janzen's collection; these loans have now been returned to their respective institutions); R. Poggi (MCSN); W. L. Brown, M. Moffett, and C. Vogt (MCZC); C. Besuchet (MHNG); J. C. Weulersse (MNHN); C. R. F. Brandão (MZSP); C. Baroni Urbani and M. Brancucci (NHMB); M. Fisher (NHMV); B. Gustafsson (NHRS); D. C. Darling (OSUO); F. Fernández (UNCB); D. Smith (USNM); F. Koch (ZMHB); O. Lumholdt (ZMUC); D. R. Abraham (ZMUH); and E. Diller (ZSMC). Additional useful material was received from John Brandbyge, Diane Davidson, Alain Dejean, Jacques Delabie, Xavier Espadaler, Fernando Fernández, Doug Gill, Henry Hespeneheide, Klaus Jaffé, Charles Kugler, Jack Longino, Bill MacKay, G. H.