

Indeed entire genera and species groups such as *Azteca*, *Dolichoderus* (including *Dolichoderus* s.s., *Hypoclinea*, and *Monacis*), *Leptothorax* (*Nesomyrmex*), and *Paraponera* have gone extinct on the island since the Oligocene/Miocene (Wilson, 1985d) and almost no new genera have replaced them in the arboreal niche (*Myrmelachista* is one exception). Thus the stability of the Hispaniolan ant fauna, as seen by a comparable number of fossil and extant genera or subgenera (Wilson, 1985d), is rather deceptive. Most of the apparent new arrivals are ground-dwelling taxa, including in the very recent past a few tramp species of Old World origin. For ants nesting or foraging in arboreal habitats (arguably the group best represented in fossil amber) the genus-level comparisons of Wilson (1985d) already suggest a decline in diversity, and this is reinforced by the findings presented here on *Pseudomyrmex*.

The factors responsible for this change are not known, but the loss of arboreal species suggests that there has been a reduction or degradation of mesic forest habitats on Hispaniola within the last 20–40 million years, perhaps due to increasing insularization together with periods of cooler or drier climate. Study of material in the much younger Cotui amber/copal might help to resolve the question of when such changes occurred.

CONCLUSIONS

The present-day *Pseudomyrmex* fauna of the West Indies presents a youthful aspect. Most of the 13 species found in the Greater Antilles (of which 5 occur in Hispaniola) are also widespread in Central and/or South America, and they belong to species groups whose diversity is greatest in equatorial regions of South America. Some of these species groups may well have arrived in Central America and the Greater Antilles relatively recently, at about the time of formation of the Panamanian land bridge in the late Miocene or Pliocene. A rather different *Pseudomyrmex* assemblage is seen in the Dominican amber of Oligocene/early Miocene age. The eleven species, newly described here from 28 pieces of amber, cannot be placed in any of the modern species groups. (In contrast, a single *Pseudomyrmex* specimen examined in Cotui amber/copal belongs to a living species, present in the Antilles today.) Indeed the taxonomic affinities of most of the Dominican amber