Central America. Another fossil species, *P. antiquus*, shows evidence of affinity to *P. rufomedius* and a related undescribed species, both taxonomic oddities known only from Mexico and Guatemala. These data, together with Wilson's (1985b) finding of a Dominican amber army ant, *Neivamyrmex ectopus*, with apparent relatives in northern Central America, suggest an historical link between the ant faunas of the Greater Antilles and mainland Mesoamerica, a biogeographic pattern seen in other Caribbean insects (Liebherr, 1988). Such distribution patterns and relationships support the assertion that during the middle Tertiary Hispaniola was part of, or adjacent to, a larger (continental) land mass (Wilson, 1988).

2) Faunal turnover and decline

The relatively small amount of material available for study reveals nevertheless a remarkably species-rich *Pseudomyrmex* fauna in Dominican amber: eleven species among 29 individuals (excluding the Cotui specimen in copal) compared with five species on Hispaniola today (see above and Table 1). This points to a 50% loss in species diversity since the Oligocene/Miocene. This is probably a conservative estimate. Among the five contemporary species, only one (*P. haytianus*) appears to be widespread, based on the amount of material in collections. Thus one could expect a random sample of twenty-nine resin-trapped *Pseudomyrmex* specimens from the Dominican Republic today to typically include no more than two or three species, perhaps only one (this assertion can be field-tested). Note that the eleven fossil species are represented by the following numbers of individuals each (w = worker, q = queen, m = male): 7w + 1q, 4w, 3w, 3w, 3w, 2w, 1w + 1m, 1w, 1w, 1w, 1w. This suggests a diverse fauna and the likelihood that additional fossil taxa remain to be discovered. Hence the reduction in species richness could well be closer to an order of magnitude. Nevertheless it should be acknowledged that the Dominican amber samples are probably not all of equal age (even leaving aside the Cotui specimen) and this will tend to inflate the number of fossil species.

The existence of a depauperate *Pseudomyrmex* fauna on Hispaniola today is paralleled by a low diversity of other arboreal ants.