

presence in the Old World is high ($X^2 = 10.16$ with $p = 0.0014$). Due to the small figures involved, individual 2×2 tables for each pair of variables have been analysed by means of the FISHER's exact probability test (two-tailed). Excluding from the calculations the absence of female wings which is known in two genera only, there is only one statistically significant difference between the number of extant ant genera present in the Old World (20 = 40%) and those extinct (4 = 8%). The difference between these two quantities is highly significant with $p = 0.0031$. This result confirms one of those obtained by WILSON (1985 c).

5. The hypothesis tested. The result confirmed here under 4. indicates, however, that genera now extinct on Hispaniola are statistically less represented in the Old World than those still alive on the island. The biogeographical meaning of this result is not very clear: the only significance one can extrapolate from it is that ant genera which have undergone extinction on Hispaniola since amber times had narrower distributions than those still present on the island today. WILSON's extrapolation that dispersal took place only or mainly after amber times is illegitimate. The reason for this is that the statistics compared extinct versus non-extinct genera, i. e. the second category contains extant and fossil genera together and, as such, it comprises genera which may have undergone dispersal before, during, or after amber times.

To test the hypothesis that dispersal was posterior to amber times or that it increased in time, one should compare the presence/absence of the two following categories in the Hispaniolan ant genera present in the Old World: fossil only and extant only, as arranged here in Table 2.

Tab. 2. Presence or absence of Hispaniolan ants in the Old World tabulated to test dispersal among fossil and extant genera.

Ant genera	Status on Hispaniola			Status in the Old World	Count
	fossil only	fossil and extant	extant only		
<i>Discothyrea</i> , <i>Dolichoderus</i> , <i>Leptomymex</i> , <i>Prionopelta</i> , <i>Proceratium</i>	•			present	5
<i>Acanthognathus</i> , <i>Acanthostichus</i> , <i>Apterostigma</i> , <i>Azteca</i> , <i>Cylindromymex</i> , <i>Dendromymex</i> , <i>Erebomymex</i> , <i>Ilemomymex</i> , new genus A, new genus B, <i>Neivamymex</i> , <i>Octostruma</i> , <i>Oxyidris</i> , <i>Paraponera</i> , <i>Pogonomymex</i>	•			absent	15
<i>Acropyga</i> , <i>Leptogenys</i> , <i>Monomorium</i>			•	present	3
<i>Ephebomymex</i> , <i>Mycocarpurus</i>			•	absent	2
<i>Anochetus</i> , <i>Aphaenogaster</i> , <i>Camponotus</i> , <i>Crematogaster</i> , <i>Diplorhoptrum</i> , <i>Eurhopalothrix</i> , <i>Gnamptogenys</i> , <i>Hypoponera</i> , <i>Leptothorax</i> , <i>Pachycondyla</i> , <i>Pheidole</i> , <i>Platythyrea</i> , <i>Prenolepis</i> , <i>Odontomachus</i> , <i>Solenopsis</i> , <i>Strumigenys</i> , <i>Tapinoma</i>		•		present	17
<i>Brachymymex</i> , <i>Cyphomymex</i> , <i>Linepithema</i> ⁽¹⁾ , <i>Myrmelachista</i> , <i>Pseudomymex</i> , <i>Trachymymex</i> , <i>Wasmannia</i> ⁽¹⁾ , <i>Zacryptocerus</i>		•		absent	8

(¹) Old World records due to human introduction not considered.