

Seychelles. The Seychelles share 71.4 % of their ant genera with the Caribbean Islands, the latter 58.8 % with the Seychelles. Although Jaffe & Lattke (1994) could not determine 45 of the 88 species to species level, the Caribbean ant fauna shares 8 species with that of the Seychelles (*Monomorium destructor*, *M. floricola*, *Pheidole megacephala*, *Quadristruma emmae*, *Tetramorium bicarinatum*, *T. simillimum*, *Tapinoma melanocephalum* and *Paratrechina longicornis*).

Scott (1932) found that endemic species were "nearly all from the mountain forests". Ward (1990) reported the same fact from Mauritius. But today many of the non-endemic forms have invaded this habitat up to the highest parts and show marked tendencies of speciation on the Seychelles, which in most cases is still at or below the subspecies level. According to my own observations the same happens in the islands of Southeast Asia. Of the 14 species of the endemic Malagasy fauna recent studies only mention *Anochetus madagascariensis*, *Prionopelta descarpentrii*, *Technomyrmex mayri* and *Plagiolepis madecassa*. In addition, I found *Crematogaster rasoherinae* on the very top of Morne Blanc (Mahé). At present eight of these endemic species are exclusively recorded from one island, six from two islands, one from three islands and solely *Plagiolepis madecassa* could establish itself on eight different islands, with a strong population at least on Aride. Further investigations are necessary to allow statements on the present situation of the endemic fauna. According to my observations on Mahé, Praslin and some nearby smaller islands, the original ant fauna seems to be strongly reduced and mainly restricted to the mountain areas, as Scott (1932) already pointed out. The present state of investigations does not allow direct comparison of the different islands, for too few collections have been made and recent collections are missing. Nevertheless it is obvious that those islands

with big differences of altitude and with a big set of different habitats including more or less undisturbed original ones (e. g. Mahé, Praslin and Silhouette), show the greatest diversity of ants and inhabit most of the native species.

The protection of the native fauna is very difficult. Specific control programs seem to work only for a few introduced species, e. g. *Anoplolepis longipes*, that is: large species with large colonies, at the start of the colonization of new areas. Control (biological or chemical) of already established populations is nearly impossible due to the hidden nests and the enormous toxic tolerance of many ant species. Also the specificity of the agents can never be fully investigated and therefore can have fatal influences on other parts of the fauna. From my point of view, two things should be done: 1. Protection and systematic promotion of the native plant communities. 2. Research on the ecology of the ant species (native and introduced ones) to determine how they react to the abiotic and biotic aspects of their environment. In this respect the programs for protection of the native flora by the Seychelles government are very promising. Entomological research programs should be added to evaluate whether the protection of the plant communities is sufficient for the preservation of the fauna, or additional management activities are recommendable.

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