

island of Vanikoro. On Rennell Island it apparently occurs mostly in open situations. The Danish Expedition collected it in coconut groves, grassy areas near Lake Tenggano, in cultivated areas, and in small (3-m.-high) secondary forest.

P. relucens shows marked geographic variation in size, body form (especially spine form), pilosity, and coloration. In the present study I have been able to examine series from New Guinea, Australia, Solomon Islands, and Santa Cruz Islands. In all characters the Rennell samples most closely resemble those from Santa Cruz and Vanikoro, and in several characters they depart notably from the Solomons samples (Santa Isabel, Ugi). This affinity between the Rennell and Santa Cruz populations is unexpected in view of the much greater geographic proximity of the Solomons proper to Rennell.

GENERAL REMARKS ON THE RENNELL FAUNA

A total of 25 species of ants, representing 17 genera, are now known from Rennell Island. The number undoubtedly represents a large percentage, perhaps a majority, of the species actually present, but it is almost certainly still incomplete. In evidence is the fact that no small ponerines or cryptobiotic myrmicines have yet been collected, although judging from the faunas of better-known islands of similar size and isolation, several species can be expected to occur there. Also, three arboricolous genera, *Dilobocondyla*, *Turneria*, and *Camponotus* (*Colobopsis*), are represented in collections by a few winged specimens taken at light, leaving the impression that this ecological segment of the fauna has only been touched lightly, as also stated by WOLFF (1955b, p. 36).

Of the 25 species, 4 (in *Cerapachys*, *Dilobocondyla*, and *Colobopsis*) are indeterminate to species. They belong to genera with high degrees of specific endemism (precinctiveness) in Melanesia and hence are very likely native or perhaps even endemic to Rennell, but their status can be decided only by the examination of more material than is now available. The remaining 21 species have been determined and can be analyzed zoogeographically. Of the 21, 3 (*Monomorium destructor*, *Tapinoma melanocephalum*, *Anoplolepis longipes*) have been introduced into the Solomons by man. Ten or eleven of the species (*Trachymesopus stigma*, *Odontomachus simillimus*, probably *O. malignus*, *Tetramorium pacificum*, *Vollenhovia oblonga*, *Pheidole oceanica*, *P. umbonata*, *Iridomyrmex cordatus*, *Paratrechina minutula*, and *Camponotus reticulatus*) are among the most widespread ant species native to the Indo-Australian Region; each ranges from tropical Asia to at least as far as outer Melanesia. Three or four species (*Cerapachys inconspicua*, *Paratrechina vaga*, *Polyrhachis relucens*, probably *Leptogenys foreli*) are limited to Melanesia but widespread from New Guinea at least to the Solomons and Santa Cruz Groups. Two species (*Tetramorium tonganum*, *Turneria dahli*) are confined to the islands east of New Guinea, but are still relatively widespread, occurring from New Britain to the New Hebrides or beyond. Another species (*Polyrhachis annae*) is known only from the Solomons and Santa Cruz Groups. Not a single one of the known Rennell ants is endemic (precinctive) to the island.