

Europe. Hence the only forms really endemic and characteristic of Cocos Island are the two species of *Camponotus*.

The ants, therefore show the same relation as the diurnal Lepidoptera to the Galapagos fauna of which Williams says⁵: "Only two species of butterflies were taken on Cocos Island, and neither of them occurs in the Galapagos." It is evident that the Cocos ants are decidedly tropical whereas those of the Galapagos are mainly such as belong to subtropical or temperate regions or at any rate to the cooler or subalpine regions in the New World tropics. Williams calls attention to this difference in the climates of the two island regions. It comes out strongly also in the Cocos plants which have been recently studied by Stewart.⁶ This author records 77 species of vascular plants from Cocos Island, 20 of which are ferns. There are only eight endemic species, one of which is a *Cecropia* (*C. pittieri*). Thus only 8.69 percent of the plants are endemic, whereas the percentage of endemicity in the Galapagos is 40.9. There are, however, 27 species common to the two regions, although 11 of them are ferns. Botanists have repeatedly called attention to the great difference between the Cocos and Galapagos plants, but this would be expected as a result of the pronounced climatic differences. The data derived from a study of the ants are too meager to enable me either to accept or to reject Stewart's view that Cocos is a true oceanic island of more recent origin than the Galapagos and that it has received its biota as "flotsam and jetsam" from the Central American mainland.

Family FORMICIDÆ

Subfamily PONERINÆ

1. *Euponera* (*Trachymesopus*) *stigma* (Fabricius)

Formica stigma Fabricius, System. Piez. 1804, p. 400 ♀.

Ponera quadridentata Roger, Berl. Ent. Zeitschr. 4, 1860, p. 285 ♀.

⁵ Williams, F. X. The Butterflies and Hawk-Moths of the Galapagos Islands. Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906, III. Proc. Cal. Acad. Sci. (4) 1, 1911, pp. 289-322, 2 pls.

⁶ Stewart, A. Notes on the Botany of Cocos Island. Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906, V. Proc. Calif. Acad. Sci. (4) 1, 1912, pp. 375-383.