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ANTS OF THE DOMINICAN AMBER (HYMENOPTERA: FORMICIDAE) 4. A GIANT PONERINE IN THE GENUS PARAPONERA

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ABSTRACT

The first fossil of the ponerine ant genus Paraponera is described from the amber of the Dominican Republic, a deposit regarded to be no younger than early Miocene in age. The specimen is also the largest ant fossil of any kind discovered to date. Paraponera is today represented by a single species, P. clavata, which ranges through most of Central and South America but is wholly absent from the Dominican Republic and the remainder of the Greater Antilles.

KEY WORDS: Fossil ants, Ponerinae, Dominican amber.

INTRODUCTION

Among the rich ant remains that have recently come to light in the amber of the Dominican Republic (Baroni Urbani, 1980; Baroni Urbani and Saunders, 1982; Wilson, 1985a-d) is a single worker of the ant genus Paraponera. The specimen, transmitted to me by Robert E. Woodruff and since deposited in the Museum of Comparative Zoology, is recorded as "probably" from the Palo Alto mine, located in the mountainous La Cumbre region just northeast of Santiago. The age of the Dominican amber is considered to be no younger than early Miocene (Baroni Urbani and Saunders, 1982). Of the 37 ant genera found so far in the amber, 22 persist today on Hispaniola (Dominican Republic plus Haiti). Three genera (Ilemomyrmex, Oxyidris, and a new genus near Rogeria) became extinct everywhere, and 12 have disappeared from Hispaniola but still live elsewhere in the New World tropics. Twelve other native genera and well-marked subgenera have invaded Hispaniola since amber times, while 3 more have been introduced in recent years through human commerce, restoring the total number of contemporary genera and subgenera to 37 (Wilson, 1985d). Thus the generic turnover since amber times has been approximately one-third.

This article is dedicated to my friend and colleague Jehoshua Kugler on the occasion of his seventieth birthday.

DESCRIPTION OF THE FOSSIL

Paraponera belongs to the large and diverse ponerine tribe Ectatommini (Brown, 1958). It is distinguished from Ectatomma, which it most closely resembles, and other related ectatommine genera by the following traits: