

tation did not satisfy me. Pressure of other problems forced me to set this one aside for deeper study at a later date.

A solution to the main problem here came in stages from an unexpected quarter. Prof. Carl W. Rettenmeyer and his student at the time, Peter L. Kazan, were studying the biology of *Eciton rapax* at Limoncocha in Amazonian Ecuador during the late 1960's and early 1970's. This army ant gains a significant amount of its prey by raiding the nests of ponerine ants, among them various species of *Odontomachus*. Thus Limoncocha collections came to contain an array of sympatrically-occurring *Odontomachus* species in good sample sizes. The sorting of these forms was done by Kazan and by Ms. Lois Morales, then Dr. Rettenmeyer's technical assistant, and samples were eventually submitted to me for determination. I recognized among them all of the forms I had accumulated from Amazonia during my own travels there, and from other collections, and these included not only such species as *haematodus*, *bauri*, *minutus*, *caelatus* n. sp., and *biumbonatus* n. sp., but also some small-sized forms similar in some ways to *haematodus*, but with important features of *O. brunneus*. Although these large sympatric samples helped to clear up the situation, it remained for Lois Morales' discovery of a key character to fix the species limits of *O. haematodus* against similar species. She found that one population at Limoncocha consistently combined typically *haematodus* characters (medium-sized slender body, long antennal scapes, yellow legs, particular form of petiole — as in fig. 20 — and shagreened, pubescent gastric dorsum) with the development of paired, slender, acute sternal spines from the transverse ridge just in front of the metathoracic coxae. This character is readily seen (in clean specimens already point-mounted) upon the removal of one of the hind legs with its coxa, and can often be viewed in unencumbered intact specimens from obliquely in front, or even from behind. The sternal spines are attenuated and lie very closely together, and are often unequal in length (fig. 7). Examination of numerous samples from tropical America and elsewhere in the world show that *haematodus* has the longest, most acute metasternal teeth; these are not quite as long in samples from Argentina (Raco, Tucumán) as those from farther north, but the difference between these and other neotropical species is still distinct. Among the species related to *O. haematodus*, only the species here identified as *O. troglodytes*, from