

We urgently need to have a much clearer picture of the range and variation of *C. herculeanus* in central Asia and Siberia. The European *herculeanus* usually have all-red alitrunks, and when, as in the southern montane populations ("var. *nadigi*"), the alitrunk turns black, it does so in a rather even way, through increased melanization of the entire tagma. The American and Japanese samples, on the other hand, show more progressive melanization from front to rear; e.g., the propodeum alone may remain red, while the promesonotum is entirely black. Do both these tendencies exist in eastern Siberian populations, and if so, what happens where they merge or meet?

Another question surrounds the identity of the "*C. herculeanus eudokiae*" of Ruzsky, even the description of which remains unavailable to use. And then we have a nest series (MCZ) from Pskem, in the western Tien Shan, at an altitude of about 1000 m., with all-red alitrunk and other general features of *herculeanus*, but with the appressed gastric pubescence longer than usual, surpassing the posterior borders of the segments. Elsewhere, pubescence of similar, and even more extreme, development is found in the southern *herculeanus* populations of western North America ("race *modoc*"). We hope these problems have attracted or will attract the attention of Russian ant specialists.

### B. *C. obscuripes* and *hemichlaena*

We described *hemichlaena* in 1951 as a provisional southern race of *C. obscuripes*, but additional information now available leads us to separate these two as good species, so that the former now is considered as *Camponotus hemichlaena* Yasumatsu et Brown (NEW STATUS). *C. hemichlaena* has a characteristic black prothorax, contrasting sharply with reddish color of the rest of the alitrunk. The species is widely distributed in Kyushu, Shikoku and southern Honshu. Many collections and observations made in these areas now agree in showing that *obscuripes* and *hemichlaena* frequently occur in the same or closely adjacent localities, but without producing intergrades.

We had already reported in 1951 that *obscuripes* occurs rarely at high altitudes in Kyushu. Now we find that both species occur in the same districts of eastern Shikoku. Generally speaking, *obscuripes* tends to occupy the higher altitudes, but altitudinal separation is not complete. Samples from Honshu indicate that the situation is much the same there in the southern part of the island; no intermediates are yet known from any of these areas. All colony series so far seen are "pure," either *obscuripes* or *hemichlaena*, never both. There are some indications of direct struggle between the two in eastern Shikoku, but their bionomics and competitive status have not yet been studied in any detail.