Hokkaido, and the southernmost sample was collected from Cape Sata of Kyushu. Many samples were collected from Kyushu, Shikoku, and Honshu (Fig. 1). The habitat of this species is somewhat different from that of *osimensis*. Most of the nests are found in pebbly ground, in some cases in stone hollow and slits in rocks where the air was somewhat moist. No distinct overlap of habitat has been observed between *osimensis* and *famelica*. The nesting behavior of *famelica* is exhibited commonly by other temperate ant species.

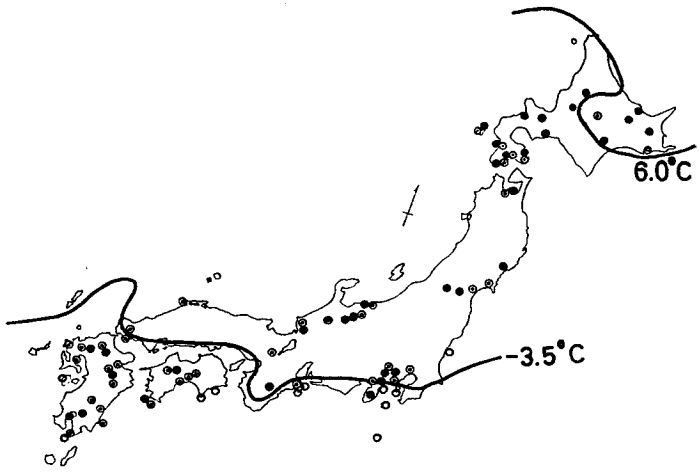

Fig. 1. Horizontal distribution of three Japanese *Aphaenogaster* ants.
○ *A. osimensis*, ⊙ *A. famelica*, ● *A. smythiesi*.
—3.5°C: The —3.5°C isothermal line of the mean minimum temperature of the year known as the northernmost boundary line of the tropical ants. 6.0°C: The 6.0°C isothermal line of the average temperature of the year known as the northernmost boundary line of the temperate ants. *osimensis* is found in rocky places along the coast of the Pacific Ocean more than south of —3.5°C line. *famelica* and *smythiesi* are found all over the Japan from Kyushu to middle of Hokkaido and show the same distribution pattern.

A. smythiesi: The present author was able to get this species at Abashiri as his most northern collections for the genus, and found it often in Honshu, Shikoku and Kyushu. The geographical distribution is pictured in Fig. 1. As far as the horizontal distribution is concerned, the pattern of this species resembles that of *famelica*. On the other hand, a remarkable difference between the two species was found in the vertical distribution (Fig. 2). For example, *smythiesi* is not found in the basal zone in southern Japan, namely, Kyushu, Shikoku, and the southern half of Honshu. In this southern part of the species' range, nests