NOTE

AN ABERRANT FEMALE AND POSSIBLE NEW HOST RECORD FOR *DASYMUTILLA OCCIDENTALIS* (HYMENOPTERA: MUTILLIDAE)

ABSTRACT

A female *Dasymutilla occidentalis occidentalis* (Linnaeus) was collected which differed in color from typical females of this species. The female appeared to be freshly emerged, and was collected exiting a burrow of *Sphex ichneumoneus ichneumoneus* (Linnaeus). This would appear to be a new host record for this species.

Key Words: *Dasymutilla o. occidentalis, Sphex i. ichneumoneus,* velvet ant, cow killer, new host record.

J. Entomol. Sci. 21(4): 367 (October 1986)

On June 30, 1981, a female of *Dasymutilla occidentalis occidentalis* (Linnaeus) which appeared to be freshly emerged was collected in Florence, SC, by Stephanie S. Manley as it emerged from a burrow in the ground. The burrow was determined to be that of a sphecid wasp, *Sphex ichneumoneus ichneumoneus* (Linnaeus), which was also collected from the burrow.

This specimen has the dorsum entirely scarlet pubescent. The black emarginations of the second tergite and the black pubescence of the third tergite are lacking. It is identified as *D. o. occidentalis* using Mickel's key (1928, U. S. Nat. Mus. Bull. 143: 1-351), and in all other respects is identical to other specimens of this species. I have looked through numerous other collections, including the U. S. National Museum Collection, and have not observed any other specimens having this aberrant color pattern. This specimen is in the collection of the author.

Dasymutilla occidentalis is one of the most common of eastern species and, although early descriptions are somewhat vague, females typically fit the description given by Blake (1886, Trans. Amer. Entomol. Soc. 13: 179-286). Of primary significance here is the description of the dorsum of the abdomen. The second abdominal tergite has a broad band of scarlet pubescence, emarginate at both the basal and apical margins with black pubescence, so as to almost form two large, ovate, scarlet spots. The pubescence of the third tergite is entirely black, with the remaining tergites being entirely scarlet.

The host relationships of velvet ants are not very well known. It is known, however, that *Dasymutilla occidentalis* is parasitic upon a bumblebee, *Bombus fraternus* Smith (Fattig, 1943, Emory Univ. Mus. Bull. 1: 1-24). It is suspected of being a parasite of other species in the same genus as well, including *B. fervidus* Fabricius and *B. perplexus* Cresson.

While *D. occidentalis* has not been implicated before as a host of *Sphex,* at least one mutillid, *Dasylabris maura* (Linnaeus), is known to be a parasite of a member of this genus, *S. occitanica* Lepeletier. In the present situation, burrows and specimens of *S. ichneumoneus* were numerous at the time this female of *D. occidentalis* was collected. No burrows of any other large Hymenoptera, including *Bombus* were present in the area. This, the fact that the female appeared to be freshly emerged, and that she was taken exiting a burrow of *S. ichneumoneus* would tend to implicate, though not confirm, it as a parasite of this species. — Donald G. Manley, Department of Entomology, Clemson University, Pee Dee Research and Education Center, Route 1, Box 531, Florence, SC 29501-9603. Technical contribution No. 2376 of the South Carolina Agricultural Experiment Station, Clemson University. (Accepted for publication September 14, 1986)