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## A REVISION OF THE FORMS OF *STIGMATOMMA PALLIPES*

✓ new forms

By WM. S. CREIGHTON Cr 82A

Although the habits of *Stigmatomma pallipes* have been repeatedly studied none of these publications have been of much service to those who wish to deal with the taxonomy of this interesting species. This paper is an attempt to bring together and evaluate the scattered taxonomic publications which deal with *S. pallipes* and its variants. Although references to this insect have repeatedly appeared in articles of a descriptive character there seems to be no adequate description of the typical form. The ease with which this insect may be recognized and the fact that it is our only species have fostered the notion that a thorough description is not necessary. At one time this may have been true, but the subsequent recognition of several geographical races has made it imperative that the characteristics of the typical form be more clearly defined.

The status of the several North American variants of *Stigmatomma* is by no means easy to determine. Unlike most other ponerines which occur in this country *Stigmatomma* does not increase in abundance as one goes southward. It is difficult to find in the Gulf States, where other ponerines occur in abundance. It appears to be absent in southern Florida and the Brownsville area in Texas. There are no representatives known from Mexico or Central America and only a single species, the Cuban *bierigi*, from the West Indies. Other New World species of *Stigmatomma* occur in southern Brazil, northern Argentina and northern Chile. The situation is, therefore, quite unlike that characteristic of most of our ponerines which are properly regarded as northern fringes of Neotropical groups. This discontinuous distribution, which is characteristic of the genus as a whole, is scarcely less striking in the case of

the North American representatives. The range of *oregonensis* is strictly limited to the coastal region of the Pacific Northwest. Its nearest neighbor from a spatial standpoint appears to be the form described in this paper as *subterranea*, which occurs in central Kansas. The Kansas variant is scarcely less isolated from the eastern *pallipes* whose range does not seem to extend west of Michigan. As I shall show in a subsequent paragraph there is some reason to believe that the ranges of the variants are not as widely separated as our present scattered locality data would indicate. Yet it is true that to the present there are only two forms whose ranges are adjacent. The range of the typical *pallipes* borders upon that of the form herein described as *montigena*. Where these two forms come in contact is produced the intergrade which Santschi has called the variety *wheeleri*. Because of this consideration I have treated all the forms of *S. pallipes* as subspecies because I believe that they are geographical races. According to my view the status of this complex is as follows:

- 1.—*S. pallipes* Haldeman (1844)  
= subsp. *arizonensis* Wheeler (1915)  
var. *wheeleri* Santschi (1913) = hybrid  
*pallipes* × *montigena*
- 2.—Subsp. *montigena*, new subsp.
- 3.—Subsp. *oregonensis* Wheeler (1915)
- 4.—Subsp. *subterranea*, new subsp.

Before passing to the descriptions I wish to comment on a peculiarity of the subspecies *subterranea* which may lead to an alteration of our views concerning the ecology and distribution of this group of forms. It has been generally assumed that *pallipes* and its variants are limited in their distribution to areas which are characterized by considerable precipitation and heavy cover. The importance of cover has been stressed by Haskins (Jour.