

A NEW STUDY OF *MESOXENA MISTURA* SMITH

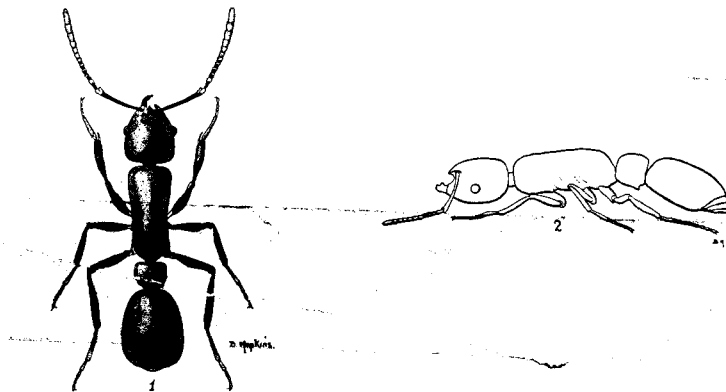
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*Mesoxena mistura* Smith, 1866, *J. Proc. linn. Soc. (Zool.)*, 4 (Suppl.): 107 (pl. 1, fig. 10); 1865, Mayr, *Novara Reise*, : 10; Dalla Torre, 1893, *Cat. Hym.*, 7 : 27; Emery, 1911, *Ann. Soc. ent. Belg.*, 55 : 219; 1925, *Gen. Ins.*, 183 : 212; Donisthorpe, 1932, *Ann. Mag. nat. Hist.*, (10) 10 : 462.

I HAVE drawn up the following more elaborate description to supplement the original description of this ant :—

Black, extreme apex of scapes and funiculus of antennae, eyes, apex of teeth of mandibles, last three visible segments of gaster and legs yellow-brown, apex of funiculus, articulations of the joints, and tarsi lighter. Whole body finely coriaceous and covered with a very sparse grey pubescence; head and thorax with some small scattered punctures. *Head* slightly longer than broad, narrowed in front, sides and base rounded, joined to thorax by a distinct neck; *eyes* round, very prominent; *mandibles* strong, curved, terminal border furnished with five teeth (the three apical ones sharp, subequal, the two basal ones shorter and blunter), not meeting in the same plane as the rest of the mandibles, but at an angle



FIGS. 1-2.—*M. mistura* Smith.

beneath; *frontal carinae* furnished with a lobe; *antennae* long, 12-jointed; *scape* when bent back reaching beyond posterior corners of the head, shorter than funiculus, *funiculus* increasing in breadth to apex, 1st joint long, 2-8 subequal in length, 9 and 10 longer, last joint the longest. *Thorax* long, cylindrical, over twice as long as broad, at the greatest width, which is at apex, slightly contracted a little below the middle, with no sign of divisions into segments when seen from above (when seen from the side some very faint traces of such may be seen), truncate at apex with anterior angles rounded, rounded at base (the *epinotum*), the declivity of which is also rounded. *Petiole* massive, broader than long, as long as high, furnished with a blunt tooth near apex beneath, sides rounded, base subtruncate, apex rounded, the basal and apical declivities flat. *Gaster* longer than broad, narrowed at base, broadest at apex of first segment which is very long, nearly covering the succeeding segments when seen from above. *Cloacal orifice* round, terminal, surrounded by a fringe of hairs. *Legs* long, the intermediate and posterior tibiae furnished at apex with two small, inconspicuous spurs, the inner one being considerably the thicker.

*Long.* 4.7 mm.

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The specimen has lost one mandible, the head is cracked, the clypeus broken, and I can find no trace of either maxillary or labial palpi.

Smith stated that he was unable to trace the labial palpi, but described the maxillary palpi as 6-jointed (a condition very seldom found in the PONERINAE) and made no mention of the loss of one mandible, nor that the head was cracked both above and below. One wonders if the injuries were caused when he was investigating the palpi, or at some subsequent date. When the specimen was cleaned with spirit the crack became much more obvious.

Smith placed his genus in the PONERINAE and stated: "It will be seen that *Mesoxena* partakes of the characters of two very distinct families, the PONERIDAE and the CRYPTOCERIDAE; of the former in the character, or form of head, thorax and peduncular node; and of the latter, in the enlargement of the basal segment of the abdomen." Smith included the Formicine genus *Echinopla* in his CRYPTOCERIDAE. As will be seen, however, by the formation of the cloacal orifice, *Mesoxena* belongs to the FORMICINAE.

Mayr placed it in his subfamily FORMICINAE, but Dalla Torre returned it to the PONERINAE, placing it between *Ectatomma* and *Platythyrea*.

Emery considered it to be a "Camponotine" and very closely allied to the genus *Echinopla* Smith. In the *Genera Insectorum* he placed it in the FORMICINAE after *Echinopla*.

This interesting ant certainly comes near to some species of *Echinopla* in its prominent eyes, and sutureless thorax with rounded shoulders, but there the resemblance ceases, and I should not consider it very closely allied to that genus, though it certainly belongs to the tribe Camponotini.

I must thank Professor Hale Carpenter for lending me Smith's type to study.

#### BOOK NOTICE.

D. P. MURRAY, *South African Butterflies. A Monograph of the family Lycaenidae.* pp. viii + 195, 18 pls. (col.). 8vo. London, 1935 [i.e. 1936]. John Bale, Sons & Danielsson, Ltd., 25s. 0d.

This book has on its dust wrapper the title "South African Butterflies" and a figure of *Amauris dominicanus* Trim.; it is, however, devoted entirely to the LYCAENIDAE of South Africa.

A large part of the book is devoted to the early stages, and many illustrations from originals in black and white and colour are given.

It should be noted that, although the title page is dated "1935," the publishers give as the date of publication "January 14, 1936."

Care must be exercised when the time comes to rebind the book, since many of the illustrations are printed right up to the edge of the plates.

The book gives the first details to be published of the life-history of many South African Lycaenids, but it is unfortunate that the author does not appear to follow the rules of the International Code of Zoological Nomenclature in all particulars.