

DISCOVERY OF MACROPTERY IN *PSEUDOMETAPTERUS UMBROSUS* (HETEROPTERA: REDUVIIDAE)

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Pseudometapterus umbrosus (Blatchley) was described (as *Metapterus umbrosus*) in 1926 from Florida, apparently based on a single nonmacropterous male adult. It subsequently was transferred to the new genus *Pseudometapterus* by Wygodzinsky (1966) in his landmark revision of the emesine reduviids. He reported he had obtained information from R. Hussey who had examined the type and several additional specimens, apparently all from Florida [Wygodzinsky listed the species' distribution as "Southern United States (Florida)"]. Hussey expanded Blatchley's description but apparently did not mention wing form. Although Wygodzinsky did not mention wing form specifically in his discussion of the species, he used "micropterous or apterous" as a diagnostic character in his key to separate four

species, including *P. umbrosus*, from *P. obtusus* (Piza), which he called "winged."

McPherson (1991) reported the presence of *P. umbrosus* in southern Illinois based on two male adults collected on 27 July 1972 from the LaRue-Pine Hills Ecological Area (now LaRue-Pine Hills Natural Research Area) and housed in the Southern Illinois University Entomology Collection (SIUEC); both specimens are micropterous. Subsequently, Hagerty and McPherson (1999) reported that this species apparently is univoltine in southern Illinois and overwinters as adults. Further, it occurs on spider webs and plants (*Heuchera parviflora* Bartling) on sandstone bluffs and on spider webs on limestone bluffs. This information was based on 43 adults collected in Jackson and Union counties from April to November, 1996-1998, all of which are micropterous and also housed in the SIUEC.

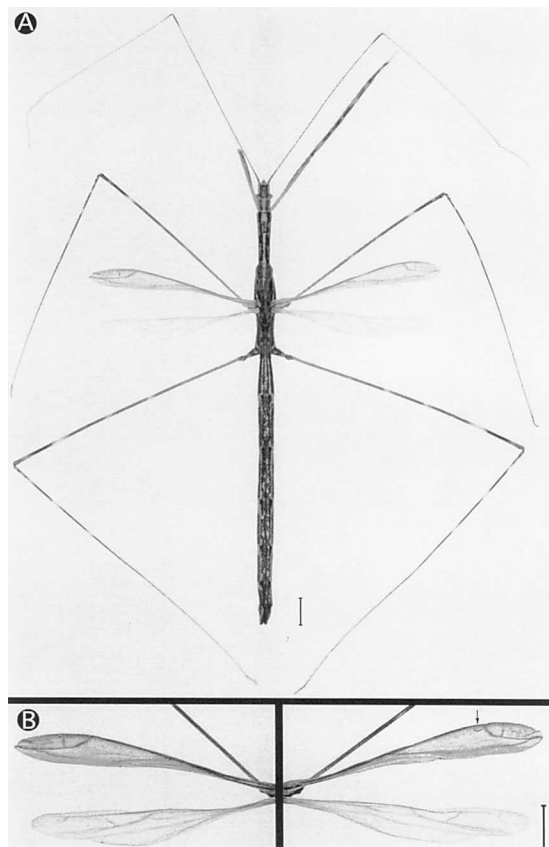


Fig. 1. *Pseudometapterus umbrosus*. A, Macropterous female. B, Closeup of wings (note extra vein [arrow] in right hemelytron). Scale bar equals 1.0 mm.

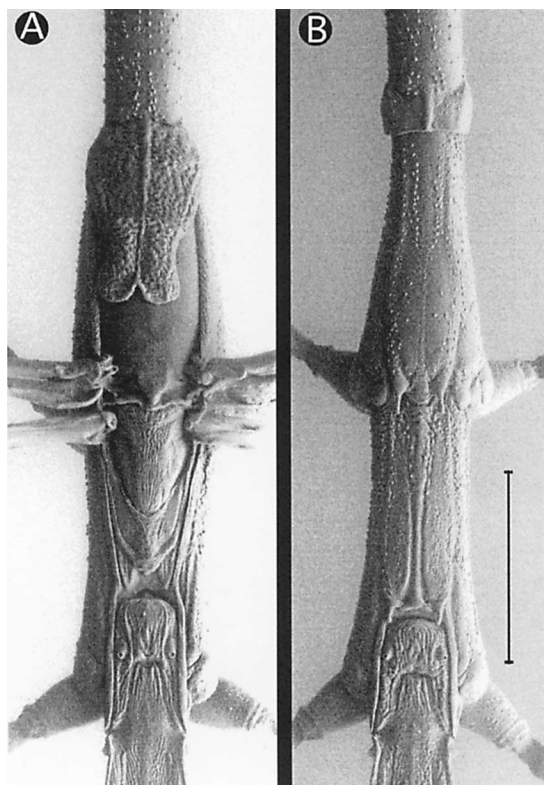


Fig. 2. *Pseudometapterus umbrosus*, pterothorax. A, Macropterous female. B, Micropterous female. Scale bar equals 1.0 mm.

From February 1999 to November 2000, a more detailed study of the biology of this emesine was conducted at Little Grand Canyon, Jackson County, including life history, laboratory rearing, and descriptions of the immature stages. The study site involved two small areas (14×2.4 m, 20×2.4 m) separated by approximately 140 m. Thirty-nine adults were collected, all of which are micropterous. An additional 790 observations were made on adults that were not collected. Even though some of these observations undoubtedly involved the same individuals because the study site is small, it is significant that, with only one exception, none of the adults is macropterous.

The exception, a macropterous female, was collected on 12 August 2000 (Fig. 1A and B). It was perched on the rock face amidst several other specimens. Interestingly, its pterothorax (Fig. 2A) shows more development than that of the typical micropterous specimen (Fig. 2B). In addition, there is a slight difference in the venation between the forewings; the right hemelytron has what appears to be an extra vein (Fig. 1B). The specimen is housed in the SIUEC.

SUMMARY

Macroptery in *Pseudometapterus umbrosus* is reported for the first time, based on a female specimen collected in southern Illinois.

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