

## RESEARCH NOTES

AN IRREGULAR ORB-LIKE WEB BUILT BY AN ADULT MALE OF *METEPEIRA* SP. A (ARANEAE, ARANEIDAE)

According to Bristowe (1941), Millot (1949) and Foelix (1982) most males of araneid spiders do not build orb webs after their last molt. However, adult males of *Eriophora fuliginea* build orb webs (Robinson et al. 1971; Robinson and Robinson 1981). Laboratory studies corroborated that most males of *Metepeira* sp. A (name suggested by H. W. Levi, *in lit.*) do not build orb webs (Viera and Costa 1985). The objective of this paper is to report an unusual, irregular web built by an adult male of *Metepeira* sp. A.

In the laboratory, 34 adult males were put into individual glass cages (30 × 30 × 9 cm) with a frame and a water container for 48 h. The temperature averaged  $23 \pm 2^\circ\text{C}$ , and the photoperiod was 12 h light/ 12 h dark. A specimen of *Metepeira* sp. A was deposited in the collection of the Museo Nacional de Historia Natural, Montevideo (number 305a).

Only one male built one web within this structure: the web was planar, with a vertical diameter of 22.5 cm, a horizontal diameter of 13 cm, several incomplete

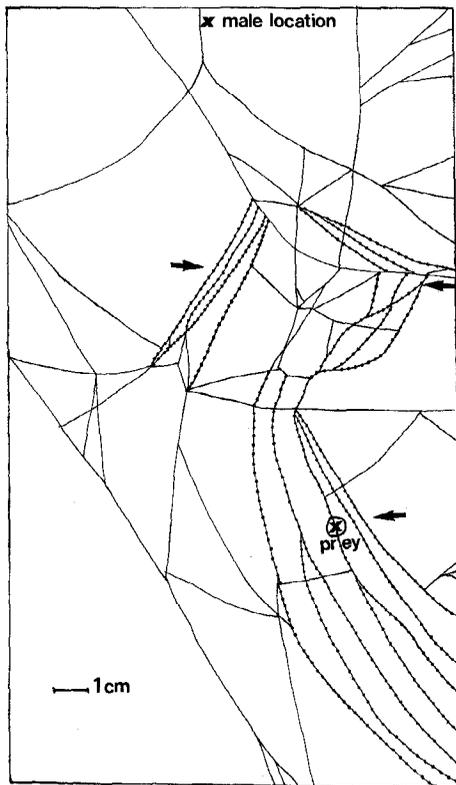


Fig. 1.—Orb-like web of an adult male *Metepeira* sp. A directly drawn from the web. The male built the web in the frame of an experimental cage. Arrows indicate sticky lines. A prey was placed on the sticky lines.

possible radii, and 18 more or less circular sticky lines. Many lines were lax (Fig. 1). One ant (*Acromyrmex* sp.) was placed onto the sticky lines. The prey stuck but the male failed in its capture. However, this male captured another ant in a female web (Viera and Costa 1985) and also mated normally.

This irregular orb-like web resembles webs constructed by young *Zygiella x-notata* (Witt 1956, in Foelix 1982:141) and drugged adult females of *Araneus diadematus* (Witt 1971). Both drugs and sexual maturity in males modify the expression of the innate program of orb web building.

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#### LITERATURE CITED

- Bristowe, W. S. 1941. The Comity of Spiders. II. London: Ray Society.
- Foelix, R. F. 1982. Biology of Spiders. Harvard Univ. Press. 306 pp.
- Millot, J. 1949. Ordre des Aranéides. Pp. 589-738, *In* *Traité de Zoologie*, vol. 6 (P.-P. Grassé ed.), Masson, Paris.
- Robinson, M. H. and B. Robinson. 1981. Ecología y comportamiento de algunas arañas fabricadoras de redes en Panamá: *Argiope argentata*, *A. savignyi*, *Nephila clavipes* y *Eriophora fuliginea* (Araneae, Araneidae). *Acad. Panameña Med. y Cir.*, 6(1):90-117.
- Robinson, M. H., B. Robinson and W. Graney. 1971. The predatory behavior of the nocturnal orb web spider *Eriophora fuliginea* (C. L. Koch) (Araneae: Araneidae). *Rev. Per. Entom.*, 14:304-315.
- Viera, C. and F. G. Costa. 1985. Captura de presas por machos adultos de *Metepeira* sp. A (Araneae, Araneidae). *Actas Jorn. Zool. Uruguay, Montevideo*, pp. 5-7.
- Witt, P. N. 1971. Drugs alter web-building of spiders. A review and evaluation. *Behav. Sci.* 16(1):98-113.

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