A NEW SPECIES OF **EBO** FROM NORTH-CENTRAL TEXAS  
(ARANEIDA: PHILODROMIDAE)

During a study of the Thomisidae and Philodromidae of Wichita County, Texas, a new species of *Ebo* was discovered. The new species, *Ebo redneri* is a member of the subgenus *Titanebo*. The description format follows that used in a recent revision of the genus (Sauer, R. J. and N. I. Platnick, 1972. Canadian Ent. 104:35-60). Definitions of anatomical terms and indexes can be found in Sauer and Platnick (1972) and Schick (1965. Bull. Am. Mus. Nat. Hist. 129:1-180). All descriptions and measurements are based upon entire type series. Measurements are given by mean followed by standard deviation, in mm. A special thanks is extended to Dr. B. J. Kaston, who kindly donated the Carpenter material to Midwestern State University, and Drs. C. D. Dondale, D. T. Jennings and Mr. J. H. Redner for their critical reviews of the manuscript and helpful suggestions.

**Ebo (Titanebo) redneri**, new species  
Figs. 1-2

**Types.**—Holotype male and five paratypes (one male and four females) from Goodman Road Pond, NE corner Wichita Falls, Wichita County, Texas, 300m elevation (18 Nov. 1976, J. C. Cokendolpher); deposited in the American Museum of Natural History. Additional paratypes, deposited in the Invertebrate Collection at Midwestern State University. TEXAS: Archer County; one female (23 Feb. 1973, H. Horry). Wichita County: one male (Hicks); 2 km S. Burk Burnett, one female (16 Sept. 1976, J. C. Cokendolpher); Wichita Falls, one female (29 Dec. 1976, J. C. Cokendolpher and K. Douglass); Lake Wichita, three males (16 Sept. 1967, R. M. Carpenter), six males and ten females (1 Oct. 1967, R. M. Carpenter).

**Etymology.**—This species is named in honor of J. H. Redner of the Biosystematics Research Institute, Ottawa, Canada, in recognition of his work on the Philodromidae and his assistance in the determinations of crab spiders from Wichita County, Texas.

**Male.**—Total length 3.84 ± 0.26; cephalothorax length 1.69 ± 0.05, width 1.74 ± 0.10; femur II length 3.64 ± 0.14. Cephalothorax light brown, darker marginally; sides evenly covered with black reticulations. Lateral edges of cephalothorax with thin white line, indistinct in some specimens. Cephalothorax with median, light band slightly wider than second eye row; creamy-white, V-shaped maculation enclosed within median band. Eyes dark brown to black, on low, light-brown tubercules flecked with brownish-black spots. Clypeus creamy to white. Dorsum of abdomen off-white to yellowish, with extensive brownish-black blotches and few white spots laterally; cardiac mark brownish-black, margined in white; venter off-white with few, indistinct brownish spots. Sternum, labium, palp-coxal lobes and legs light brown with scattered brownish-black spots, these concentr-
Figs. 1-2.—Ebo redneri, new species: 1, ventral view of left palp with retrolateral view of RTA; 2, spermathecae, dorsal view.

Palpal segments lightened distally.

Palp as in Fig. 1. Embolus of intermediate length, arch broad; conductor length index 6.2-7.0, averaging 6.5. Cymbium pointed distally, one-tenth longer than tibia. Tegulum broadly arched distally. RTA tridentate with teeth directed anteriad or slightly mesad.

Female.—Total length 4.57 ± 0.56; cephalothorax length 1.88 ± 0.11, width 1.87 ± 0.11; femur II length 3.30 ± 0.19. Coloration as in male, but with V-shaped mark on cephalothorax indistinct; cardiac mark with yellowish-white border. Brownish-black blotches on body smaller and less distinct than in male. Palpal segments white distally.

Epigynum typical for subgenus. Spermathecae as in Fig. 2. Intromittent division extending beyond spermathecae anteriorly and far laterad, with the anterior part greatly expanded and with margin horizontal or sloping posteromesad. Spermathecal organ arising on caudal edge of intromittent division, projecting anteriad. Torus directed antero-mesad.

Comments and Diagnosis.—Ebo redneri males differ from all other known species of Ebo, except E. texanus and E. californicus, by having a tridentate RTA and a conductor length index of about 6.5. Ebo redneri can be distinguished from E. texanus by having the palpal tibia shorter than the cymbium, clypeus white, and the shorter length of femur II. Ebo redneri differs from E. californicus by always having a tridentate RTA and by the distally arched tegulum. Females of E. redneri differ from all other known species of Ebo by the large and laterally expanded intromittent division of the copulatory tubes, and by the anteriorly directed spermathecal organs. Ebo redneri females can also be distinguished from females of E. creosotis and E. andreaannae by the lack of gold-colored scales on the abdomen.
Mature specimens have been collected from the middle of September to late February. Specimens have been recorded from mesquite trees (*Prosopis juliflora*), where they prefer to stay on outer limbs one to two meters above ground. Three females collected in November deposited egg sacs in the laboratory. One egg sac contained 13 fertile eggs but the second female produced an infertile yolk-like material in which the individual "eggs" appeared to run together. The third female deposited fertile eggs on 20 November, which resulted in nine spiderlings. The spiderlings first left the egg sac on 20 December of the same year.

**James C. Cokendolpher**, Department of Biology, Midwestern State University, Wichita Falls, Texas 76308 (present address: Department of Biological Sciences and The Museum, Texas Tech University, Lubbock, Texas 79409).

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**THERIDION BIMACULATUM (LINNÉ) IN VERMONT**

**(ARANEAE : THERIDIIDAE)**

In 1975, six specimens of the European spider *Theridion bimaculatum* (Linné) were collected by Mark E. Whalon in the Meserole Apple Orchard, Colchester, Vermont, U.S.A. These specimens were collected by sweep-netting in grass and other low vegetation immediately beneath apple trees. Deposited in the University of Vermont Museum of Zoology are one male 5 June 1975, and two males and one female 9 June 1975. Deposited in the Harvard Museum of Comparative Zoology are one male and one female 19 June 1975. This species was previously known in North America only from Washington and British Colombia (Levi and Randolph 1975:43).

When *Theridion* was revised for North America (Levi 1957, 1963), *bimaculatum* was not included in the genus. A good description of this species is found in Levi (1956:407-412). The male can be easily recognized by the spur at the base of femur IV, the central tubercle on the sternum, and the shape of the palpal cymbium. The female has a distinctly protruding epigynum, similar to that of *Theridion neomexicanum* Banks (Levi 1957:76, fig. 269) and *Thymoites unimaculatus* (Emerton) (Levi 1957:108, fig. 409; Levi and Randolph 1975:47). The female of *T. bimaculatum* could easily be misidentified as either or these two species, but differs from both of them in having a small depression in the anterior facing surface of the epigynum. The color patterns and the shape of the clypeus are also useful characters for distinguishing these species from each other.

There is a typographical error in Levi (1956:409). Where it says, "The male, however, lacks the . . .", it should say, "The female, . . .". In Levi and Randolph (1975:43) the name of *T. bimaculatum* is misspelled, "bimaculata".

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**John A. Kochalka**, Department of Zoology, Marsh Life Science, University of Vermont, Burlington, Vermont 05401, U.S.A.