

**NOTES ON A NEW VARIETY OF BLACK WIDOW SPIDER
FROM SOUTHERN FLORIDA**

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When a species has a distribution as wide as that of the black widow, *Latrodectus mactans* (Fabricius), it is natural to expect a certain amount of variation, and, indeed, many of the forms have been described as distinct species. The spider has been recorded from Canada in the north, to Patagonia in the south, and from the Atlantic to the Pacific. For the United States, Chamberlin and Ivie (1935) distinguished three varieties. These are *mactans mactans*, "from New Hampshire to Florida, and westward into Texas and Oklahoma," *mactans texanus*, and *mactans hesperus*, the latter two being new western varieties. Though there is some mention of a slight difference in the length of the legs, their figures indicate that when taken in relation to the length of the cephalothorax, for example, this can hardly be used as a distinguishing character. The most conspicuous variation concerns the shape and extent of the red and white markings on the abdomen.

Mr. Marshall B. Bishop, of the Peabody Museum of Natural History in New Haven, while on collecting trips around Lake Worth, Florida, during the past two winters procured a large number of specimens of a new variety on which he had made extensive observations.

Latrodectus mactans var. *bishopi* var. nov.

The abdomen of this form is well marked on the dorsum, like the brightest of the typical *mactans mactans*. There are the usual red spots along the mid-dorsal line, and the white splashes laterad. Curiously enough, however, none of the 61 specimens examined has a complete hour-glass mark on the venter. This mark is much reduced; in only six females is there even a suggestion of a posterior portion. In the remaining 47 females and eight males it is reduced to a small triangle representing the anterior portion only. In itself this reduction of the hour-glass mark is not significant, for the same can be observed in many specimens of the typical eastern variety, as already pointed out by Kaston (1937).

The males of this variety are proportionately larger than those of the others, but the most striking character by which this variety can be distinguished from all others is the color

of the cephalothorax and legs. Instead of being dark brown or black they are bright orange in most specimens. In a few they are yellow, and in some brick red! In general structure, including that of the genitalia, this variety agrees with the others. Likewise, the ratio of the length of the leg segments to that of the cephalothorax falls quite close to the figures given by Chamberlin and Ivie for the other varieties.

Type material is deposited in the American Museum of Natural History, which also has a single female from Orange County collected by Dr. H. K. Wallace, Sept. 5, 1934.

Contrary to the usual habit of the species, the members of this variety do not build their webs under stones or debris, etc., near the ground. Instead, they are commonly found in webs built three to more than four feet from the ground. The preferred habitat seems to be in dry areas where the light palmetto grows. The webs are stretched from one palmetto to another and may be more than two feet across. They have much the appearance of a sheet web after the fashion of a *Linyphia*, rather than the irregular network of a theridiid. Mr. Bishop informs me that the web appears always to be associated with the small nest of a wasp which builds at the base of the palmetto leaves. The spider usually stands near this wasp nest while waiting for prey to strike its web.

It is interesting to note that Petrunkevitch (1910) reports a somewhat similar type of web-building in a black-legged variety of southern Mexico. This builds its web some six feet above the ground among the branches of cactus. However, around Lake Worth the black-legged *mactans mactans* can be found in the same areas in which var. *bishopi* occurs, the former under stones, etc., near the ground.

During the latter half of February the sexes are mature, and several males can be found on the web of a single female. The first egg sac was observed on February 22, 1938.

LITERATURE CITED

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