

***ELASMUS POLISTIS* BURKS (HYMENOPTERA: EULOPHIDAE) REPORTED IN OKLAHOMA**

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Elasmus polistis Burks has been recently reported and described from the Eastern United States as a primary parasite on the larvae of the social wasp genus *Polistes* (1). Specimens of this parasite were collected in Pennsylvania in 1969 and in Maryland and Georgia in 1970 (1). It was collected in Texas for the first time in 1971 (2). Several U.S. investigators have looked at the parasites associated with the wasps previous to this (3, 4, 5) without finding *Elasmus* sp. in the nest. I have collected several hundred *Polistes* nests in the Central U.S. during the past ten years without finding this parasite (6, 7). The rapid expansion of the range of *E. polistis* would seem to confirm Burks' (1) suggestion that it has been recently introduced into the United States since it is now being readily found in the Eastern half of the country. At present however, we have no clue to the origin of the species since it has only been collected in the U.S.

A single *Polistes exclamans* nest was taken from a honeysuckle bush in a yard hedge at Bixby, Tulsa County, on August 19, 1975. The nest was about three feet off the ground and had 160 cells, of which 35 were capped. The others all had eggs or larvae in them. As soon as the nest was collected, the wasp larvae and pupae were removed and preserved. At that time, two of the capped cells were observed to have a hard transverse covering about the middle of the cell, below the one spun by the pupating wasp larva. The appearance of the wasp larvae immediately indicated that they had been attacked in some way. One larva was about $\frac{3}{4}$ eaten from the posterior end and the other was about 90% gone. Its head was unrecognizable. Because the cell caps had already been spun, most of the damage by the parasites must have been done after eclosion by the wasp larvae. The nest was put in a container and observed daily. Ten days later, on August 29, 121 specimens (111 females and 10 males) identified as *Elasmus polistis*, emerged. The nest was subsequently dissected revealing a thick hard transverse wall near the center of the cell. It was brown on the outer, visible side and black on the inner side. This wall or cap, which must be constructed by the parasite larvae although the mechanism is unknown, appeared to be the only modification of the nest itself. However, since it is so distinct, I believe that examination of any abandoned wasp nest will reveal the previous presence of this parasite as readily as it does for the other primary parasites of *Polistes* (6).

Nests of *Polistes exclamans* had been taken from this same hedge during two of the three previous years and each had been parasitized by *Pachysomoides fulvus*. Whether *E. polistis* is competing with *P. fulvus* for the nest, or whether it is simply opportunistic in invading the *Polistes* nest, as are the other parasites of the wasps (6), remains to be determined.

It is hoped that additional data will be collected in the next few years that will give more information regarding the origin, distribution, and life history of *Elasmus polistis* in the United States.

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