

MATERNAL BEHAVIOR IN *APOLLOPHANES PUNCTIPES* (O. PICKARD-CAMBRIDGE) (ARANEAE, THOMISIDAE)

Maternal defense of eggs has been reported in a number of spider families (see reviews by Burgess, J. W. 1978. Symp. Zool. Soc. Lond., 42:69-78, and Buskirk R. E. 1981. in Hermann, H. (ed.) Social Insects. Vol. 2, Academic Press, New York). Buskirk cites a study showing that the thomisid *Philodromus caespiticolis* defends its egg sacs, but to my knowledge the present note is the first report of maternal behavior in the closely related genus *Apollophanes*.

A female *A. punctipes* was found on 13 Feb. 1983 (first half of the dry season) resting on an egg sac which was on the inner surface of one of three dried leaves which had been fastened to a twig with silk lines attached near their petioles. The twig was about 1.5 m above the ground on a *Anona cherimolia* tree in a grassy yard near San Antonio de Escazu, Costa Rica (el. 1300m). The white silk of the sac formed a relatively thin wall through which the outlines of individual eggs were clearly distinguishable. The leaf with the egg sac was also fastened loosely with silk near its midpoint to the adjacent leaf.

After partially separating the leaves, I dropped a small ant onto the sac, and the spider immediately pounced on it. Seizing it in her chelicerae, she ran to the lower leaf surface below the sac and dropped the ant to the ground. Ten more essentially identical performances were elicited in the next 30 minutes by dropping as many other ants onto the sac.

Several times after dropping the ant, the spider remained on the leaf at or just below the lower edge of the sac with only her rear legs on the sac. When I dropped the ant onto the upper part of the sac where it did not touch the spider and was probably out of her sight because of the curve of the leaf, the spider nevertheless responded immediately, suggesting that she sensed the ant via vibrations of the silk.

There are several interesting parallels between the maternal behavior of *A. punctipes* and that of the salticid *Lyssomanes jemieus* (Eberhard, W. G. 1974. Bull. Br. Arachnol. Soc. 3:51.). Females of both species lay eggs at relatively exposed, aerial sites, and both defend them against ants by causing the ants to fall—the salticid employing quick flicks of its front legs, and the thomisid by use of its chelicerae. Both also make reduced egg sacs—that of the thomisid having relatively thin walls and that of the salticid being almost completely eliminated.

I thank J. H. Redner and C. D. Dondale for identifying the spider, and the Vicerectoría de Investigación of the Universidad de Costa Rica for financial support.

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