Discovery of the diminutive Comb-footed spider, *Phoroncidia americana* (Araneae: Theridiidae), in Kansas

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INTRODUCTION AND METHODS

Although *Phoroncidia americana* (Emerton 1882) (Araneae: Theridiidae) is barely 2 mm in length, it may be immediately recognized by its peculiar shape (Fig. 1). The cephalic portion of the cephalothorax is extended into a rounded lobe which bears four pairs of eyes. The abdomen is leathery, raised into a series of folds and extends over much of the cephalothorax, giving this spider the cryptic appearance of a seed or lump of dirt.

Originally described from specimens taken in Connecticut and Massachusetts as *Ulesanis americana* by Emerton (1882), the species was subsequently transferred to the genus *Oronota* Simon (Levi 1955), and then to the genus *Phoroncidia* Westwood where it currently resides (Levi 1964).

During the evening (9:00 – 11:00 PM) on July 6, 2006, four individuals of this species were found on Vajra Farm, which is located approximately 5 miles south of Oskaloosa in Jefferson County, Kansas. A GPS unit (Garmin Etrex Legend™) was used to record the latitude and longitude of this location: 39°08.475′N, 95°19.427′W. Each spider was found on a single, vertical silk thread suspended between the outer branches of red cedar trees (*Juniperus virginiana* L.) at the edge of hardwood deciduous forest and in an adjoining old field. Two small flies were stuck by their feet to one silk thread, but they were not collected.

Upon returning to the site in the evening of July 23, 2007, a female was discovered on a vertical silk thread on one of the same red cedar trees from which individuals were taken the previous year. Although this specimen was kept in captivity for about one week, it never made a web and failed to capture fruit flies which were provided as food.

This is the first report of the occurrence of the genus *Phoroncidia* in Kansas and the first natural history observations of this species anywhere in its range.

DISCUSSION AND CONCLUSIONS

Information concerning the natural history of this species is limited to habitat notes. It has been swept from bushes (Emerton 1882), from cedar trees (Kaston 1981), from pitch pine (*Pinus rigida* Mill.) and red cedar (*Juniperus virginiana* L.) on Cape Cod, Massachusetts (Edwards and Edwards 1997), from Spanish moss (*Tillandsia* sp.) (Bromeliaceae) in Sarasota County, Florida (Frank et al. 2004), and taken in pitfall traps in floodplain deciduous forest in Clarke County, Georgia (Draney 1997). In Travis County, Texas, several juveniles were collected from Ashe juniper (*Juniperus ashei* J. Buchholz), two oak species (*Quercus buckleyi* Nixon and Dorr and *Quercus virginiana* Mill.) and an elm (*Ulmus crassifolia* Nutt.) during June, July and August. An adult female was taken in a flight intercept trap in beech-magnolia forest in Sabine County during August 25 to September 10, 1989 (Allen Dean, pers. comm., 2007).

Observations of other members of the genus have revealed a unique predatory strategy. *Phoroncidia studio* Levi in Colombia spins a single, horizontal sticky line which appears to