RESEARCH NOTES

DISCOVERY OF *CAVIPHANTES SAXETORUM* IN NORTH AMERICA; STATUS OF *SCIRONIS TARSALIS* (ARANEIDA, LINYPHIIDAE)

The genus *Caviphantes* Oi, 1960 was reviewed by Wunderlich (1979), who placed in synonymy the somewhat better-known name *Lessertiella* Dumitrescu and Miller, 1962; that synonymy is now generally accepted. The genus contains four species: *Caviphantes samensis* Oi from Japan, *Caviphantes dobrogicus* (Dumitrescu and Miller) from Rumania and southwestern U.S.S.R., *Caviphantes pseudosaxetorum* Wunderlich from Nepal, and *Caviphantes saxetorum* (Hull) from Britain and Germany. The first two occur in caves, soil, and litter; the third in litter; the fourth under stones in dry beds and sandy banks of rivers.

In Europe, *C. saxetorum* is rare as well as habitat-limited (Cooke and Merrett 1967; Roberts 1987); its discovery in Oregon, U.S.A., is therefore remarkable. The specimen, a male at the Thomas Burke Memorial Washington State Museum, University of Washington (UWBM), does not differ significantly from the best available description (Cooke and Merrett 1967). I am forced, therefore, to consider it a member of this species despite the geographic separation. The collection data are as follows:

OREGON: Lane Co.: Lookout Creek (564 m), 44.223°N 122.228°W, 13 April-4 May 1983 (pitfalls), G. Parsons leg. The site is in the H. J. Andrews Experimental Forest. The macrohabitat is a seral forest of 40-year-old *Tsuga heterophylla* (western hemlock), with understory of ferns, *Polystichum munitum*, and the herb *Oxalis oregona*. Due to its collection by pitfall, the microhabitat of the specimen is unknown; the site is 375 m from the boulder-strewn bed of Lookout Creek but only a short distance from an intermittent tributary, so the habitat may be the same as in Britain.

I think it highly unlikely that this collection represents an introduced population. In Europe the species is far from synanthropic, and the Oregon locality is remote (11.5 km from the nearest small town; 70+ km from Eugene, the nearest commercial center). If *C. saxetorum* is, as I suspect, a truly Holarctic species, it would be expected, and should be searched for, in other North American and Eurasian localities.

The tracheal system of *Caviphantes* is linyphiine, not erigonine (Millidge 1984). Millidge placed the genus in his "*Stemonyphantes* group," an informal assemblage of linyphiine spiders with "primitive" (i.e., simple) female genitalia. I feel that *Caviphantes* and its near relatives fit fairly well in Millidge's formal subfamily Linyphiinae, having in common an epigynal atrium formed between the dorsal and ventral plates which contains the genital openings (see Millidge 1984: fig. 17). The only difference from "typical" Linyphiinae is that the dorsal plate is not extended in a scape. *Caviphantes* shares major genitalic features, the

epigynum as described above and complex palp with long, looped embolus originating centrally, with its nearest relatives, the European *Mioxena* and the American *Scironis* (for details of palpal conformation see Millidge 1977; Cooke and Merrett 1967). *Mioxena* has the simplest palp of the three, *Caviphantes* the most complex. These three genera have identical chaetotaxy: tibial spines 2-2-1-1, TmI = 0.3-0.45, TmIV absent.

The genus *Scironis* Bishop and Crosby, 1938 has hitherto been considered erigonine. I have done a tracheal determination on a male *Scironis tarsalis* (Emerton) from Alaska (UWBM) and found a linyphiine-type tracheal system (Millidge 1984: fig. 130). The epigynum (females, UWBM, from Washington and Alaska) is very similar to that of *C. saxetorum*, but the palp (Bishop and Crosby 1938: fig. 35) is sufficiently distinct to maintain *Scironis* as a genus, which as far as known is monotypic. *Scironis autor* Chamberlin has been transferred to *Scotinotylus*, and *Scironis sima* Chamberlin also belongs elsewhere. The *Scironis* palpal conformation superficially resembles that of the erigonine *Pocadicnemis*, but the tracheal systems preclude close relationship.

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