

ANAHITA PUNCTULATA (HENTZ), A SPECIES, GENUS, AND FAMILY OF SPIDERS NEW TO THE FAUNA OF THE VIRGINIAS AND OHIO (ARACHNIDA: ARANEAE: CTENIDAE) – The spider family Ctenidae, with 39 nominal genera, is predominantly distributed in the tropical regions of South America and Africa, marginally in Australia. A few taxa extend into the southern fringes of the Holarctic region, where the family is marginally represented in southeast Asia and the United States. The Nearctic ctenid fauna was monographed by Peck (1981), who recognized four species in *Ctenus*, three in *Leptoctenus*, and a single species in *Anahita*. At that time the northernmost known localities for *Anahita punctulata* were in southeastern Kentucky and northeastern Tennessee.

Collections of this species recently obtained by the Virginia Museum of Natural History (VMNH), the West Virginia Arachnid Survey (WVAS), and the Ohio State University Chelicerates Collection (OSAL) extend the known range over 175 miles (280 km) north and eastward in the central Appalachians, adding the species, genus, and family to the documented spider faunas of Virginia, West Virginia, and Ohio, as itemized below.

Ohio: *Adams Co.:* Stout (38.6° N, 82.38° W), 1 July 1967, F. J. Moore (OSAL 1♂). *Lawrence Co.:* Bluegrass Ridge (38.6° N, 82.5° W), 5 June, 18 June, 26 June, 3 July 1997, all U.S. Forest Service (USFS) survey (OSAL 4♂, 2♀). *Vinton Co.:* Arch Rock (39.2° N, 82.4° W), 5 June 1997, USFS (OSAL 1♀); Young's Branch (38.7° N, 82.7° W), 26 June, 16 August, 31 August, 15 September 1997, all USFS (OSAL ♂♂, ♀♀).

Virginia: *Lee Co.:* cedar glades along Rt. 656, ca. 4 miles (6.4 km) WSW of Jonesville, 24 August 1994, R. L. Hoffman (VMNH 1♀). *Wise Co.:* ca. 1.2 km SSE of Pound Gap, 5 June 1995, C. S. Hobson & T. Lane (VMNH 1♂). *Dickenson Co.:* Breaks Interstate Park, NW of Haysi, Nature Trail pitfall site, 15-29 June 1991, VMNH survey (VMNH 3♂); Breaks Interstate Park, without precise locality, 1-14 July 2000, R. Vigneault (VMNH 4♂).

West Virginia: *Cabell Co.:* Huntington (38.41° N, 82.40° W), 15 June 1991, W. J. Arnold (WVAS 1♂). *Jackson Co.:* Cedar Lakes 4-H Camp (38.80° N, 81.36° W), W. J. Arnold (WVAS 1♂). *Kanawha Co.:* 1 mi (1.6 km) south of Lens Creek (38.14° N, 81.36° W), 7 April 1966, J. Miller (VMNH 1♀). *Raleigh Co.:* Fall Branch of New River, New River Gorge National River (37.74° N, 81.92° W), 18 June 1989, K. Buhlmann (WVAS 2♂, 1♀), 11 July 1989, R. Canterbury and R. Jewel (WVAS 1♂). *Summers Co.:* 2 mi (3.2 km) N of Davy Knob (37.59° N, 80.95° W), 19 August 1997, Lisa Gatens (WVAS 2♂). *Wayne Co.:* without specific locality, November 1931, W. M. Barrows (OSAL 1♂). *Wyoming Co.:* Clear Fork of

Guyandotte River (37.58° N, 91.73° W), R. D. Bailey Wildlife Management Area, W. J. Arnold, 26 May 1990 (WVAS 1♂).

The map (Fig. 1) indicates these localities with reference to local physiographic provinces. Although existing information is obviously still very incomplete, the lack of records from the Ridge & Valley province suggests that *A. punctulata* may be confined, in this region, to the Appalachian Plateau. Ohio localities are within the unglaciated part of that state.

Fairly extensive pitfall trapping in the Southern Blue Ridge (at and around Mount Rogers and Buffalo Mountain) has so far failed to disclose the species in that section of Virginia. A symbol on Peck's (1981) distribution map for extreme eastern Tennessee may be for a lowland locality in the Tennessee Valley rather than the Blue Ridge itself. However, another symbol on

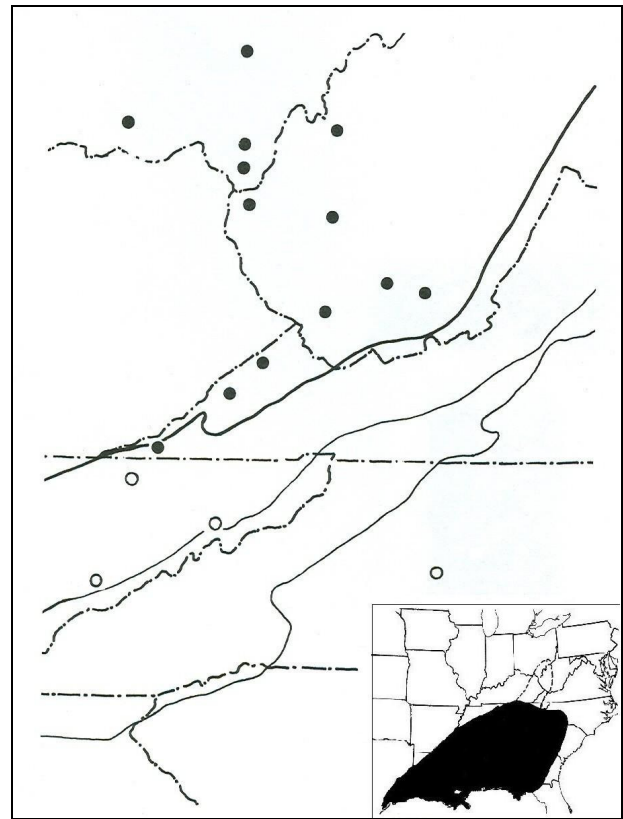


Fig. 1. Central Appalachians, showing distributional records for *Anahita punctulata*. Open circles, published (Peck, 1981); solid dots, new localities. Heavy solid line, eastern edge of the Appalachian Plateau Physiographic Province. Thin line, Blue Ridge Physiographic Province. The small inset map shows by dark shading the range as defined by Peck's records, the area extended by new records by the dashed line.

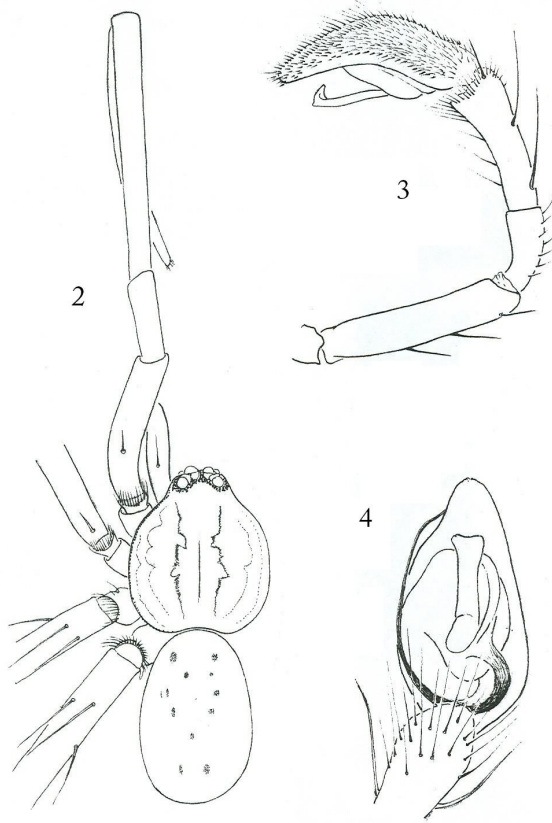


Fig. 2. *Anahita punctulata* (Hentz). Dorsal aspect of body and leg bases. Leg of 1st pair is flexed dorsad and in actuality is longer than represented by the drawing.

Fig. 3. Palpus of male, lateral aspect.

Fig. 4. Apical palpomere showing details of sperm transfer structure, ventral aspect.

the same map placed in the vicinity of Statesville, North Carolina, suggests that the range of *A. punctulata* may extend northward into at least the "Southside" counties of the Virginia Piedmont. How much of northern West Virginia may be occupied by the species also remains to be determined, as does the extent of its occurrence in Ohio, where the locality Arch Rock in Vinton County is now the northernmost documented for this species. Widespread occurrence in eastern Kentucky may be assumed, as it is unlikely the existing lack of records for

this bracketed region is due to anything other than a deficiency of field work.

Anahita punctulata is an interesting small spider, resembling in general appearance a corinnid or anyphaenid. It is easily recognizable by the elongate legs (those of the first pair in particular being up to twice as long as the body length) and dorsal color pattern (Fig. 2). For the benefit of those lacking access to Peck's (1981) revision, we provide sketches (Figs. 3-4) of the male pedipalpal organ to confirm identification.

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