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A NEW CAVE SPIDER FROM NORTH CAROLINA

BY SHERMAN C. BISHOP*

The genus *Ivesia* was established by Petrunkevitch (Ann. Ent. Soc. Amer. 18: 320, 1925) for a new species, *I. tennesseensis*, collected in Indian Cave, Tenn., by J. D. Ives. *Ivesia* was regarded by its author as belonging to the family Theridiidae and related to the genus *Theridionexus*. As one of its structural peculiarities it was reported as possessing only six eyes but subsequent examination of the type, and additional specimens, by W. J. Gertsch, has shown the anterior median eyes to be present although much reduced. *Ivesia* is now regarded as belonging to the family Nesticidae and is related to, but amply distinguished from *Nesticus*, by the character of the bulb of the palpus and by the development of the cymbium, the basal, lateral extension of which is produced into a large trifid apophysis.

The new species of *Ivesia* described below was taken in Linville Cave, near Linville Falls, N. C., by the writer, who was accompanied on a collecting trip to the Great Smoky mountains, in April 1947, by Dr. B. I. Brown, Dr. and Mrs. Julius Ashkin and Mr. Walter C. Brown, all of the University of Rochester.

Ivesia carolinensis n. sp.

(Figs. 1-4)

Male. Length 4.5 mm. Cephalothorax short, broadly rounded on the sides, abruptly narrowed anteriorly opposite the eyes; clypeus wider than median ocular area, slanting downward and forward; median area of thorax with a depression armed with a cluster of 7 or 8 long brown hairs; a few scattered hairs in the eye region, on the clypeus and along the margins of the cephalothorax; chelicerae rather long, cylindrical, armed sparsely with short, light brown hairs; claw of chelicera sinuous, the lower margin of the furrow with a row of minute teeth, the upper margin with three brown teeth and a row of 7 or 8 long, light brown hairs; eyes eight, in two rows, the anterior row, viewed from in front, forming a nearly straight line, the anterior median eyes very small, separated from one another by slightly more than the diameter of one of them, and from the lateral eyes by about twice as much; posterior eyes in a slightly procurved line, the median eyes slightly larger than the lateral, separated by about three times the radius of one of them

* Department of Zoology, University of Rochester.

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and from the lateral by about the diameter; all eyes nocturnal and, except anterior median, elongate oval in outline; endites of the palpi widely separated at base, the distal margins with a sharp ridge and the disto-mesal margins truncated and bearing dense scopulae; labium about twice as wide as long and with scarcely an indication of a groove separating it from the sternum; sternum smooth and shining, strongly convex, broadly heart-shaped and produced behind, between the coxae of the fourth legs, into a squarely truncated lobe, sternum armed with scattered long, brown hairs; legs damaged in capture but generally long and slender; coxae globose; trochanters short; femora cylindrical, slightly tapering distally; patellae short, arched above; tibiae slender; metatarsi slender, about as long as tibiae; tarsi about half as long as metatarsi; paired claws long, curved and armed at base below with series of about 11 slender teeth increasing in size distally; third claw smooth, about half as long as others and bent ventrally at the middle of its length; all legs armed sparsely with short, light brown hairs and many longer, stronger spinelike bristles which increase in size, number and length on the distal segments. Femur of palpus moderately long, cylindrical; patella short, arched above and bearing dorsally one very long and several shorter spines, ratio of length of patella to that of tibia as 4 to 15; tibia one and one half as long as patella, strongly swollen and armed ventro-laterally with two very long, curved spines and numerous smaller ones at the distal margin and distributed around the segment; cymbium long and narrow and provided with a basal, lateral apophysis which is very large, trough-shaped and armed, on either side of trough, with a strong pointed tooth; distally the apophysis is produced into three prongs, the dorsal one long, sinuous and serrated along the distal margin; the middle piece thin and broad and squarely truncated, the ventral part more slender, somewhat twisted and strongly serrated distally. Bulb of palpus large with the long, slender, curved embolus arising from the ventro-lateral side at base and curving forward around the mesal side.

Color. Cephalothorax and its appendages bright yellow; abdomen above dirty white with a suggestion of paired gray spots on dorsum; sternum with the margins dusky; venter of abdomen with grayish blotches in front of epigastric furrow and spinnerets.

Female. Length 3.5 mm. Similar to the male in general appearance and armature but with the thorax and basal segments of the legs lighter yellow; margins of thorax dusky and with faint tinges of dusky behind the eyes and in a triangular patch in front of median depression of thorax; abdomen globose, marked above, on a dirty white ground color, with five or six pairs of large, faint grey spots; epigynum protuberant and consisting of three lobes, the center one with paired openings at the margin behind.

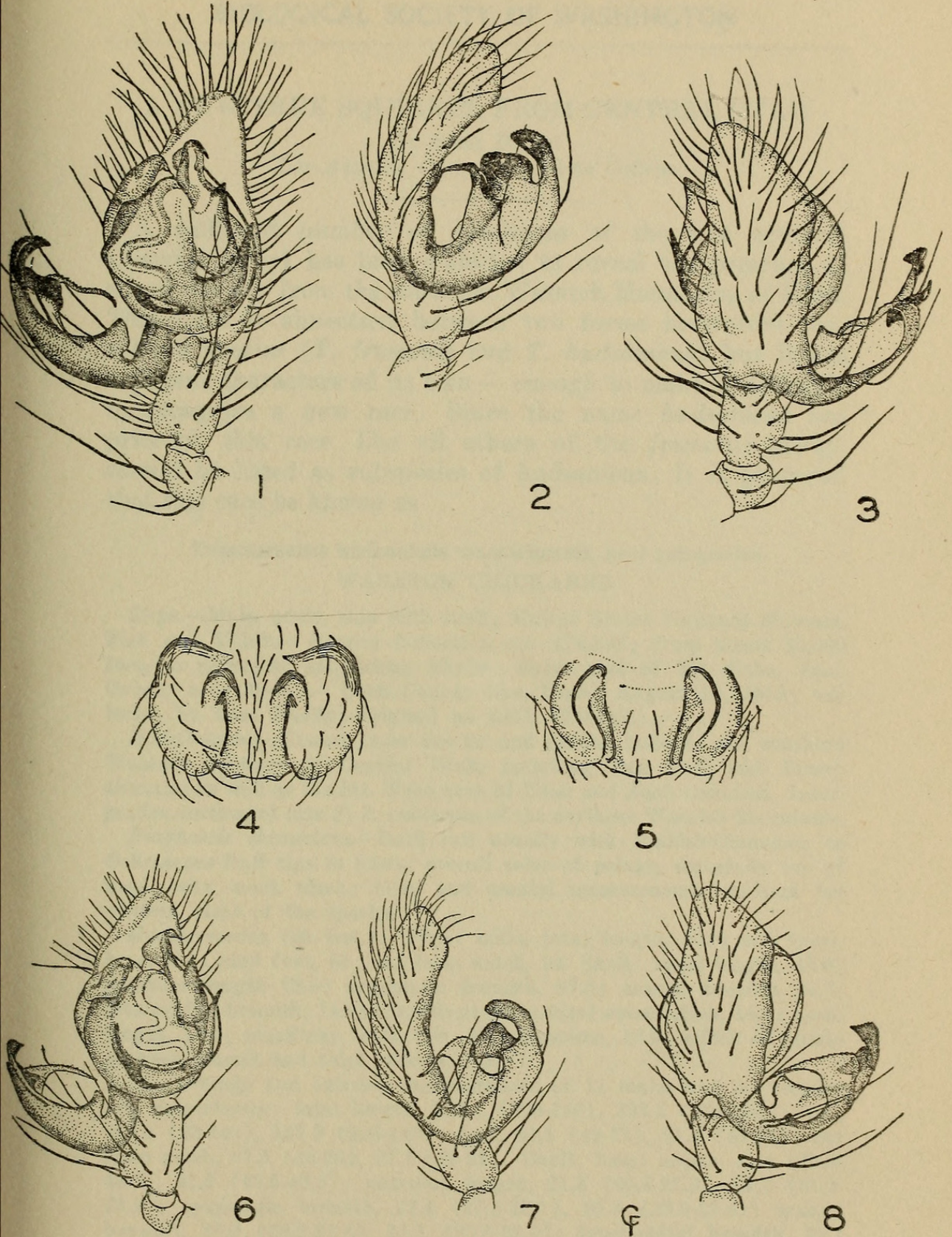
Holotype male, allotype female, only known specimens; found clinging to wall of cave a short distance from the entrance.

Type locality. Linville Cave, near Linville Falls, N. C., April 6, 1947.

Types in author's collection.

Invesia carolinensis is obviously closely related to *I. tennesseensis* Pet. (Figs. 5-8) from which it may be distinguished by the form of the apophysis of the cymbium of the male and the epigynum of the female.

The drawings were made by Miss Carolyn Fallon, staff artist, Department of Zoology, University of Rochester.





1950. "A new cave spider from North Carolina." *Proceedings of the Biological Society of Washington* 63, 9–12.

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