

Spiders from Colombia VIII. *Neohahnia chibcha* n. sp. from the Sierra Nevada mountains, northern Colombia (Arachnida, Araneida, Hahniidae)

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Introduction

The author H.-G. Müller found a new species of the spider family Hahniidae from the Sierra Nevada mountains, northern Colombia. This is described below.

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Specimens are deposited in the Senckenberg Museum Frankfurt, Germany (SMF), the Instituto de Investigaciones Marinas de Punta de Betin, Santa Marta, Colombia (INVEMAR) and in the collections of the authors.

***Neohahnia chibcha*, new species (Figs. 1-7)**

Types: Male holotype (SMF No. 35508). All other adult specimens are paratypes; 1 male, 8 females, 2 juv. near San Lorenzo, 2250 m, northern Sierra Nevada de Santa Marta, Dept. Magdalena, Colombia, bamboo cloud-forest, from leaf-litter and *Sphagnum*, 18-25 August 1985 (1 female Coll. INVEMAR, 3 females, 2 juv. Coll. SMF, No. 35509, 1 male, 2 females Coll. Heimer, 2 females Coll. Müller). 1 female, Cerro Kennedy, northern Sierra Nevada, 2600 m, from leaf-litter, 9 August 1985 (Coll. SMF, No. 35510). 1 male, San Lorenzo, 2200 m, from leaf-litter and moss, 20 April 1986 (Coll. Müller).

Male: Total length 1.27 mm. Cephalothorax 0.64 mm long, 0.52 mm wide. Light yellow with grey pattern of radial stripes and a large triangular spot around the fovea. Margin of cephalothorax and eye region dark grey. Three to four long bristles near fovea. AME the smallest, their diameter half that of lateral eyes. PME separated from each other by nearly their diameter. PME and lateral eyes of equal size. Clypeus with some long bristles. Sternum light yellow, as long as wide, with long bristles near its margin. Labium and gnathocoxae same colour as sternum. Chelicerae yellowish grey.

Abdomen dorsally yellowish grey with light yellow pattern (Fig. 1). Ventral side light yellow. Spinnerets in typical arrangement, little darker than ventral side of abdomen. Posterior spinnerets longest, anterior medians shortest. Relative length of spinneret segments, apical/basal: AM 0.5; AL 0.27; PS 1.0

(Fig. 7). Abdomen with many long setae which are very strong between epigastric furrow and petiole.

Legs uniform yellowish grey with many strong setae, arranged in rows on ventral side of femora and tibiae. All patellae with one, tibiae I-IV with two dorsal spines. Measurements:

	I	II	III	IV
Fe	0.51	0.48	0.42	0.50
Pa	0.19	0.18	0.17	0.18
Ti	0.40	0.32	0.28	0.37
Mt	0.35	0.30	0.29	0.36
Ta	0.31	0.30	0.27	0.31
Total	1.76	1.58	1.43	1.72

Palp: Patella with a large apophysis which has a curved tip. At the base of this tip are some strong spines, one of them very thick and thorn-like (Figs. 2, 3). Tibia also with a long curved apophysis which is directed towards the patellar apophysis. Base of cymbium with a deep furrow in which the embolus lies. Distal part of cymbium has a small spoon-like lamella to conduct the embolus. The embolus curves around the bulb in a full circle. Then it curves in an S-shaped figure between the bulb and the cymbium (Figs. 2, 4) to the furrow at the base of the cymbium.

Female: Measurements and coloration similar to male.

Epigynum simple with nearly rectangular pit in its anterior part (Fig. 5). From this pit the ducts loop laterally; each duct makes many irregular loops before connecting with the lateral surface of a small, posterior lateral spermatheca (Fig. 6).

After studying the copulatory organs it is supposed that in copula the patellar apophysis of the male palp with its thorn-like spine will be anchored in the epigyneal pit. Then the embolus glides out of the furrow at the base of the cymbium and the base of the tibial apophysis will conduct the embolus against the curved tip of the patellar apophysis. This apophysis directs the embolus into the epigyneal opening which is opposite to that in which the thorn-like spine is anchored.

Diagnosis: The neotropical genus *Neohahnia* Mello-Leitão, 1917 is closely related to *Hahnia* because the tracheal spiracle is near the spinnerets and the anterior median eyes are much smaller than the others. It differs from *Hahnia* in the shape of the male copulatory organ which shows relations to *Neoantistea* Gertsch, 1934.

Neohahnia chibcha n. sp. seems to be closely related to *Neohahnia ernesti* (Simon, 1897) reported from Venezuela and the West Indies. These species differ from each other in the shape of the patellar and tibial apophyses of the male palp as well as in the shape of epigynum and vulva. In *N. ernesti* the tibial apophysis has three pointed processes, whereas in *N. chibcha* the tibial apophysis is long and curved, bearing one short, thorn-like spine below its tip (cf. Lehtinen, 1967: 455, fig. 366 of *N. ernesti* and Fig. 3 in this paper). The epigynum of *N. chibcha* is characterised by one pit but the epigynum of *N. ernesti* has two separate pits. Although the vulva structure of *N. ernesti* is not known

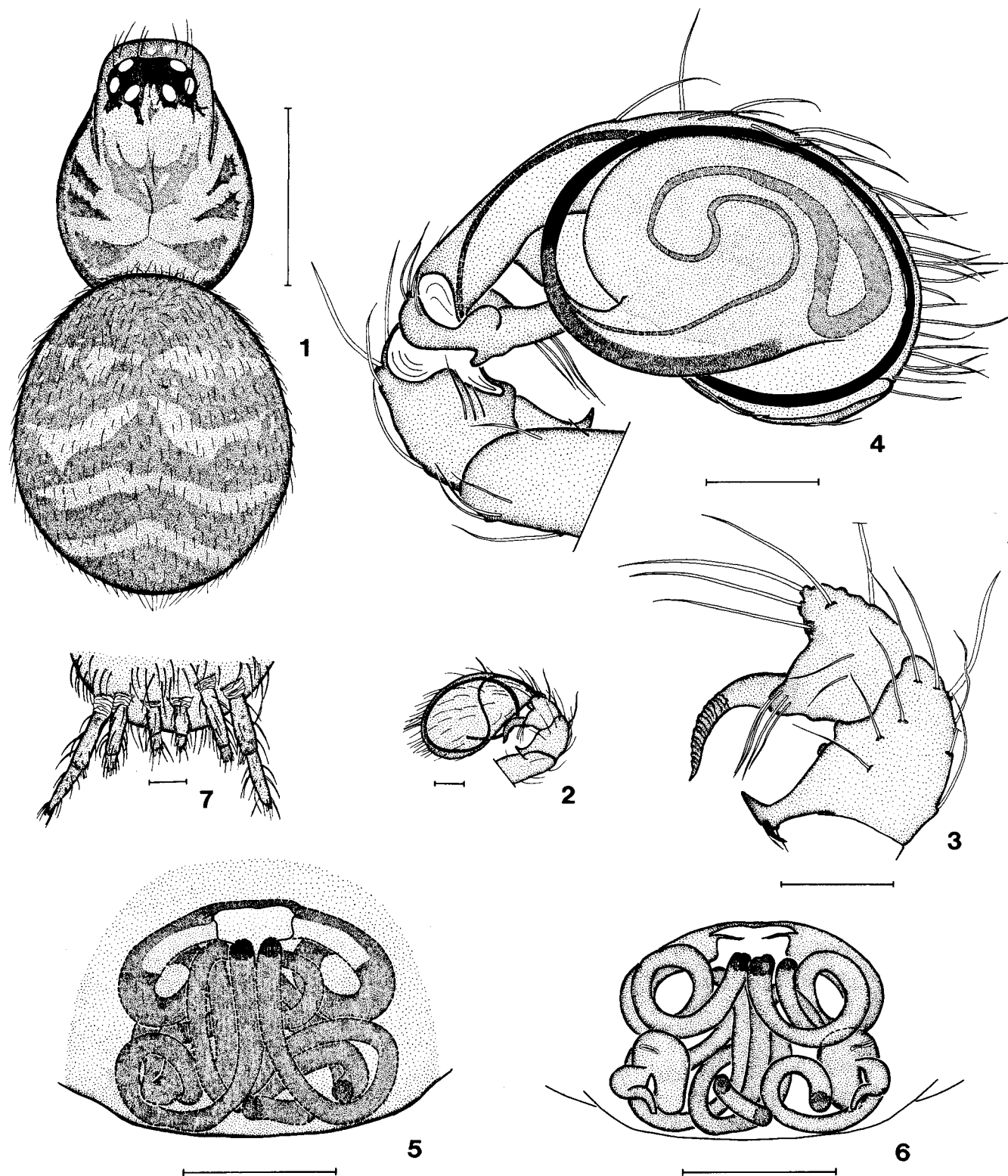
the species can be separated by the translucent vulva structures visible in the epigynum (cf. Lehtinen, 1967: 455, fig. 370 and Fig. 5 in this paper).

Etymology: Chibcha is the name of some Indian people who created precolombian states before 1499.

References

LEHTINEN, P. T. 1967: Classification of the cribellate spiders and some allied families, with notes on the evolution of the sub-order Araneomorpha. *Ann. Zool. Fenn.* **4**: 199-468.

SIMON, E. 1897: On the spiders of the Island of St. Vincent. Part III. *Proc. zool. Soc. Lond.* **1897**: 860-890.



Figs. 1-7: *Neohahnia chibcha* n. sp. **1** Female, dorsal view; **2** Male palp, retrolateral view; **3** Patella and tibia of male palp, retrolateral view; **4** Male palp, prolateral view; **5** Epigynum, ventral view; **6** Vulva, dorsal view; **7** Spinnerets, ventral view. Scale lines: Fig. 1 = 1.0 mm, Figs. 2-7 = 0.1 mm.