

## SHORT COMMUNICATION

### A NEW SPECIES AND A NEW SYNONYMY IN THE SPINY ORB-WEAVER SPIDER GENUS *MICRATHENA* (ARANEAE, ARANEIDAE)

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**ABSTRACT.** A new species, *Micrathena cicuta*, is described and illustrated based on females from southeastern Brazil. *Plectana degeeri* Walckenaer is synonymized with *M. plana* (C.L. Koch), based upon the original description.

**Keywords:** *Micrathena*, Brazil, South America, systematics, new species

The genus *Micrathena* Sundevall 1833 is a common and conspicuous group of diurnal spiders endemic to the Americas. They can be easily recognized by their spiny abdomen, vertical orb-webs with an open hub and their characteristic upside down position on the webs, with the abdomen inclined horizontally. They differ from *Gasteracantha* Sundevall 1833 by the shape of carapace and from *Chaetacis* Simon 1895 by lacking spines or tubercles on the carapace behind the lateral eyes (Levi 1985). The genus was revised by Levi (1985) and comprises 104 species with a mostly Neotropical distribution. Of these, 33 are known only from females and except for two notes describing males of previously known species (Bonaldo 1990; Lise 1995) and the synonymy of *Thaumastobella mourei* Mello-Leitão 1945 with *Micrathena saccata* (C.L. Koch 1836) (Scharff 1991), the systematics of the genus has remained unaltered since Levi's revision.

In this paper we describe a new species, *Micrathena cicuta*, of the kirbyi group (as defined by Levi 1985). This is the largest species group in this genus and includes 45 species distributed from Central America to southern South America. Additionally, we synonymize *M. degeeri* (Walckenaer 1842) with *M. plana* (C.L. Koch 1836), another member of the kirbyi group, based upon the original description.

The specimens examined were deposited in the spider collection of the Instituto Butantan, São Paulo (IBSP) and Museu de Zoologia, Universidade de São Paulo (MZSP). The description format follows

Levi (1985) and all measurements are in millimeters.

## RESULTS

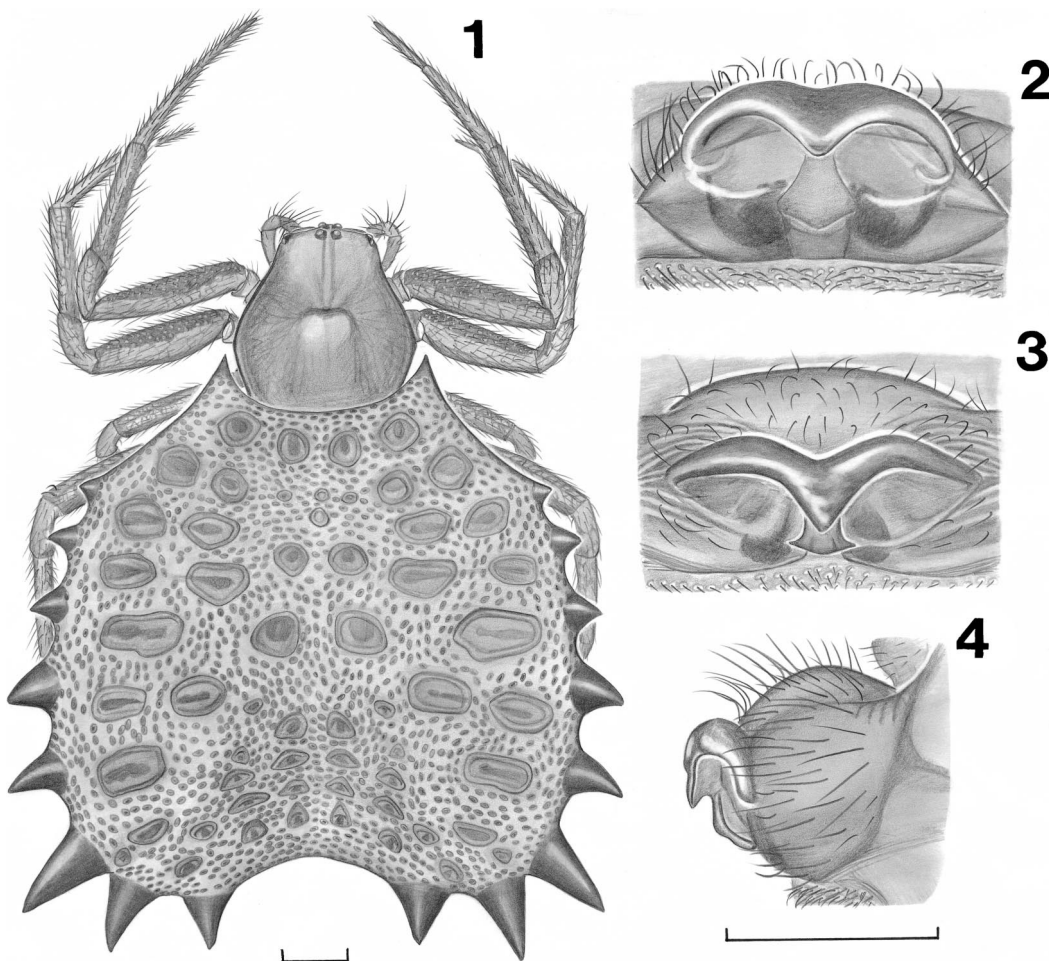
### *Micrathena cicuta* new species

Figs. 1–5

**Material examined.**—Holotype female, Volta Redonda, Área de Relevante Interesse Ecológico Floresta da Cicuta, 22°31'S 44°07'W, State of Rio de Janeiro, Brasil, 18 February 2002, M.O. Gonzaga (IBSP 36322). *Paratype:* 1 female, Resende, District of Serrinha do Alambari, 22°20'S 44°30'W, State of Rio de Janeiro, Brasil, E.F. Ramos, 31 March 1996 (IBSP 27195). *Other material examined:* BRASIL: São Paulo: Salesópolis, Estação Biológica de Boracéia, May 2001, equipe BIOTA, 1 ♀ (IBSP 39799); Cotia, Reserva Florestal de Morro Grande, 26 March 2003, A. A. Nogueira et al., 1 ♀ (IBSP 39794), 4 ♀ (IBSP, 39795–39798); 15 ♀ (MZSP).

**Etymology.**—The specific name is a noun in apposition taken from the type locality.

**Diagnosis.**—*Micrathena cicuta* shares with *Micrathena clypeata* (Walckenaer 1805) a flat abdomen with rounded sides, covered by several sclerotized disks and minute granules and with one anterior pair of spines. It is distinguished by the abdomen with 8 marginal pairs of black thorns (5 in *M. clypeata*) and by the absence of dimples on the carapace (Fig. 1). The epigynum differs by the narrower lateral lobes and median plate in ventral



Figures 1–4.—*Micrathena cicuta* new species. 1. Female habitus, dorsal view. 2. Female epigynum, posterior view. 3. Ventral. 4. Lateral. Scale bars, 1 = 1.00 mm; 2–4 = 0.50 mm.

and posterior views (Figs. 2, 3), the anteriorly notched transverse bar with a longer and posteriorly directed lobe (Fig. 3) and by the rounded bulge in lateral view (Fig. 4).

**Description.**—Male: Unknown.

**Female (holotype):** Carapace orange, with a high thoracic region. Clypeus, chelicerae, labium, endites and sternum orange. Palpus and legs orange-brown, darker ventrally. Abdomen orange, lighter than carapace, with one anterior pair of spines overhanging carapace and 8 pairs of marginal black thorns. Dorsum of abdomen flat with a slight posterior median longitudinal depression. Dorsal sclerotized disks and minute granules as in *M. clypeata*. Total length 8.6, carapace 2.8 long, 2.5 wide. First femur 2.3; patella and tibia 2.5; metatarsus 1.0; tarsus 0.6. Second patella and tibia 2.3; third patella and tibia 1.4. Fourth femur 3.2; patella and tibia 2.3; metatarsus 1.6; tarsus 0.7.

**Distribution.**—Known only from southeastern Brazil. This species seems to be closely related to *M. clypeata*, which occurs in Panama, northern South America and the Amazon Basin (Fig. 5). These two species display a disjunct distribution, occurring in tropical rainforest areas separated by central and northeastern Brazilian savanna vegetations (cerrado and caatinga, Hueck 1972).

*Micrathena plana* (C.L. Koch)

*Acrosoma planum* C.L. Koch 1836:81, fig. 228.

*Micrathena plana*: Levi 1985:509, figs. 311–325, map 6.

*Plectana degeeri* Walckenaer 1842:174 (female holotype from Suriname, lost) NEW SYNONYMY.

*Acrosoma degeeri*: Butler 1873:425.

*Micrathena degeeri*: Petrunkevitch 1911: 368; Platnick 2003.

**Remarks.**—*Micrathena degeeri* was overlooked

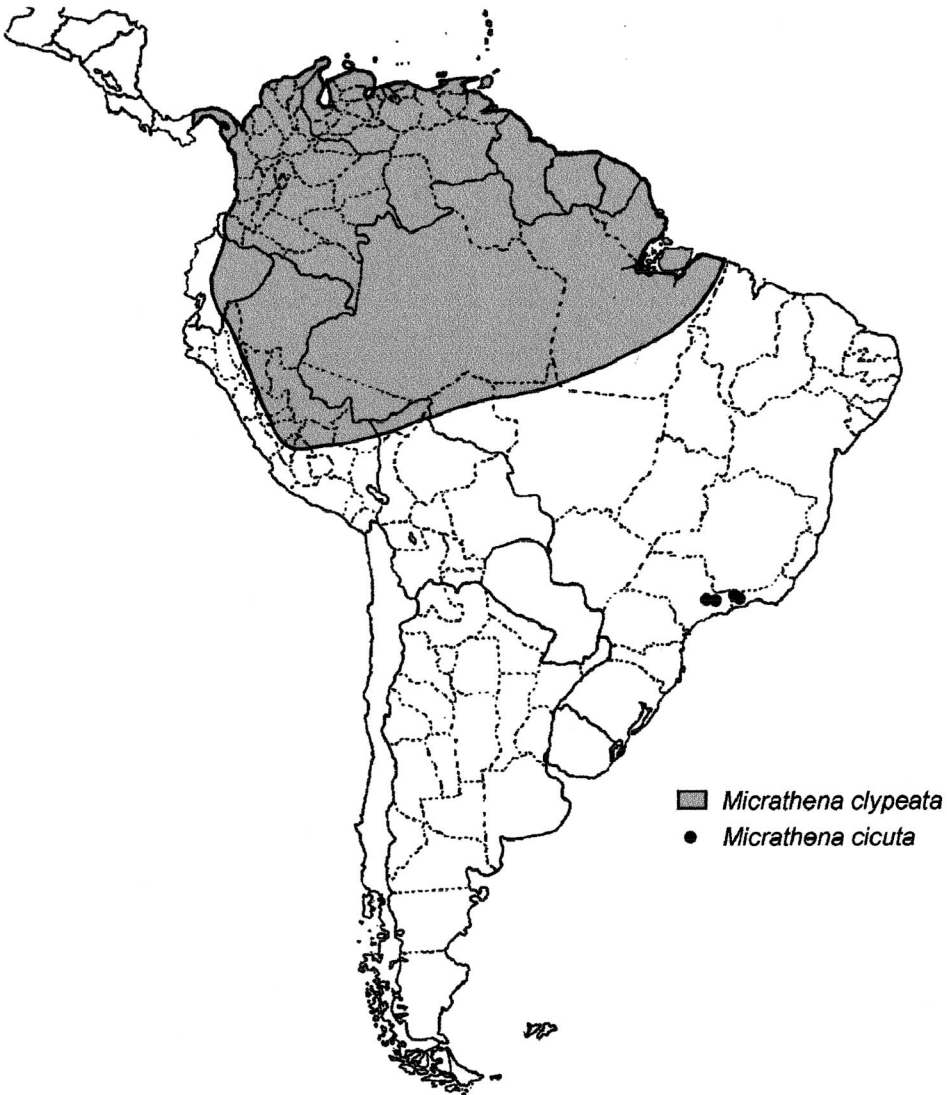


Figure 5.—Geographic distribution of *Micrathena clypeata* (gray area, based on records from Levi 1985) and locality records for *Micrathena cicuta* new species (circles).

by Levi (1985), and the type specimens are lost like so many of the species described by Walckenaer (1842). According to the original description (Walckenaer 1842:174), *M. degeeri* possesses an oval-triangular abdomen with 12 spines: an anterior pair of small ones (described as “médiocre” by the author), a pair of large and diverging posterior spines with two small ones on the base, one dorsal and one ventral. The sides of the abdomen were described as bearing two small spines. This description matches Levi’s (1985) illustrations of *Micrathena plana*, a species distributed from Panama and the West Indies to Argentina, and the only species with 12 abdominal spines recorded from Suriname.

As such, we here consider *M. degeeri* a junior synonym of *M. plana*.

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