

NEW DATA ON *Camillina major* WITH THE DESCRIPTION OF THE MALE AND THE PROPOSITION OF A NEW NAME (*Camillina ventana*) FOR A MALE DESCRIBED BY PLATNICK & MURPHY, 1987 FROM ARGENTINA (ARANEAE, GNAPHOSIDAE)

Ana Carla Kaross Ferreira¹
Bianca Pochmann Zambonato¹
Arno Antonio Lise¹

ABSTRACT

Camillina major (Keyserling, 1891) was described upon a female from Rio Grande, Rio Grande do Sul. Later, Platnick & Murphy, 1987 described one male, from Argentina, and tentatively associated it with *C. major*. This male in reality do not belongs in this species and is being assignet as a new species. So, in this paper, the male of *C. major* is described and some new data concerning to the female are added.

Key words: *Camillina*, Araneae, Gnaphosidae, Neotropical region, systematic.

RESUMO

Descrição do macho e novos dados sobre a fêmea de *Camillina major* da região Neotropical (Araneae, Gnaphosidae) non o macho de *Camilina major* (Platnick & Murphy, 1987)

Camillina major (Keyserling, 1891), foi descrita sobre uma fêmea de Rio Grande, Rio Grande do Sul. Posteriormente, Platnick & Murphy, 1987 descreveram um macho, da Argentina e tentativamente o associaram a *C. major*. Este macho, na realidade não pertence a esta espécie e está sendo descrito como uma espécie nova. Desta forma, no presente trabalho, descreve-se o macho de *C. major* e acrescenta-se alguns dados novos sobre a fêmea.

Palavras-chave: *Camillina*, Araneae, Gnaphosidae, região Neotropical, sistemática.

INTRODUCTION

Platnick & Shadab, 1982 revised the genus *Camillina* and elaborated a key for the six brazilian species: *C. chilensis* (Simon, 1902), *C. pulcher* (Keyserling, 1891), *C. major* (Keyserling, 1891), *C. claro*, *C. caldas* and *C. nova*. The last three was described as new ones. The only two species, reported from Rio Grande do Sul, were *Camillina pulcher* (Keyserling, 1891) described upon male and female and *Camillina major* (Keyserling, 1891), described upon the female, both having as type locality Rio Grande county. In the same paper, they stablished a

new combination for the two species described by Keyserling under *Echemus* and transferred it to *Camillina*. On the same occasion, it was established a new synonymy for *Gytha xanthomela* Mello-Leitão, 1945 with *Camillina major* and so enlarged the geographic distribution of this species to Palmar, Entre Rios, Argentina.

Platnick & Murphy in 1987 described one male from Buenos Aires, Sierra de la Ventana and associated it tentatively with *Camillina major* (misassociation) and reported two females from Santiago del Estero, Colonia Dora, all from Argentina. The male described by the authors is not co-specific with

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¹ Laboratório de Aracnologia da PUCRS. Av. Ipiranga, 6681, CEP 90619-900, Porto Alegre, RS – E-mail: lisearno@puers.br

Camillina major and is being described as a new species.

MATERIAL AND METHODS

The material examined in this work was collected with pitfall-traps, on an area of restinga, situated between "Lagoa Negra and Lagoa dos Patos" at Parque Estadual de Itapuã, Viamão county, Rio Grande do Sul, Brazil. This area have physiognomic appearance with those areas of the county of Rio Grande, located on the edges of Lagoa dos Patos. They are far from each other almost 200 kilometers, on a straight line. The material used in this study is deposited in the collection of Arachnology of the Museu de Ciências e Tecnologia da PUCRS (MCTP), Porto Alegre, Rio Grande do Sul, Brazil. The measurements are in millimeters.

Camillina major (Keyserling, 1891)

Figs. 1-28

Echemus major Keyserling, 1891, p. 32, fig. 11 (female holotype from Rio Grande, Rio Grande do Sul, Brazil, in BMNH, not examined). ROEWER, 1954, p. 420.

Gytha xanthomela Mello-Leitão, 1945, p. 257, fig. 42 (female holotype from Palmar, Entre Rios, Argentina, in MLP, not examined). ROEWER, 1954, p. 564. PLATNICK & SHADAB, 1982, p. 24 (**n. syn.**).

Camillina major: Platnick & Shadab, 1982, p. 24, fig. 71-72 (**n. comb.**). PLATNICK & MURPHY, 1987, p. 22 females only, not the male, from Argentina, Santiago del Estero, Colonia Dora in MACN, not examined.

Type: Male allotype (MCTP 16362), Parque Estadual de Itapuã, Viamão, Rio Grande do Sul, Brazil, 04.XI.2003, A.A. Lise et al. leg.

Diagnosis: The male can be recognized by the large tibial retrolateral apophysis by the coiled embolus, the granulate median apophysis and by the curved and pointed prolateral lobe of the terminal apophysis (Figs. 5-8 and 11-13, 25). Females, as pointed up by Platnick & Shadab, 1982, p. 24, can be distinguished by the wider anterior epigynal margin.

Description: male (allotype): Coloration: carapace light fulvous mottled of dark brown (Fig. 1). Ocular area dark brown. Chelicerae fulvous slightly shadowed of brown, fangs dark fulvous. Sternum, labium and

endites yellow. Abdomen: dorsum black with a dark brown dorsal scutum (Fig.1), venter gray with two white parallel lines that begin on the ventral furrow and extend to the spinnerets. On each side of these, there are three white spots (Fig. 2). Sides as dorsum but, less dark because of the numerous white marks. Abdomen all covered with small bristles (Figs. 26-28). Epigastric area yellow with a central black pattern. Spinnerets: ALS fulvous, surrounded by a white membranous base, bearing five conspicuous piri-form glands spigots, PMS whitish, with two minor ampullate gland spigots and, surrounding it, some cylindrical gland spigots, PLS fuscous, with minor ampullate gland spigot and surrounding it some cylindrical gland spigots. All bristly (Figs. 15-18).

Legs: I coxa, trochanter, prolateral and retrolateral face of the femur yellow, apex black. Patella dark brown with a dorsal lighter area. Tibia dark brown, almost black. Metatarsus and tarsus dark yellow. Leg II as I, lighter. III and IV dark yellow. Total length, not including spinnerets, 4.48. Carapace 1.80 long, 1.40 wide, 0.50 high, bristly. The bristles are larger on the clypeus and on the posterior declivity edges. Abdomen 2.30 long, 1.60 wide, 1.30 high, micro granulated and bristly (Figs. 26-28). The bristles are larger on the anterior margin. Clypeus low, 0.06. Eyes sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.10, MOQ 0.28 long, dorsal view, 0.18, frontal view, front wide 0.24, back width 0.26. AME-AME 0.04, AME-ALE 0.02, PME-PME touching, PME-PLE 0.04. Chelicerae 0.52 long, 0.30 wide, with two small teeth on the promarginal furrow, densely bristly on the promargin. Legs spination: femur I: d0-1-1-0; II: d0.1-1-0, p0-1-1; III: d0-1-1-0, p1-1, r1-1; tibia v1-2-2, p0-0.1, pd0-1-0, r1-1, rd0-1-0; metatarsus v1-0-2, p1-1, r1-1, rd1-1; IV: femur d1-1-0, pa1, ra1; tibia v2-2-2, p1-1, r1-1; metatarsus v2-2-0, p1-1-1, rd0-1-0, r1-1-1. Leg formula 4123. Legs measurements: I: femur 1.20/patella 0.72/tibia 1.00/metatarsus 0.90/tarsus 0.70/total 4.52. II: 1.10/0.70/1.00/0.90/0.60/4.30. III: 1.00/0.60/0.64/0.80/0.64/3.68. IV: 1.30/0.70/1.10/1.18/0.60/4.88.

Female: Coloration: carapace and ocular area as in male. Eyes, the AME black. PLA with canoe-shaped tapetum. Chelicerae fulvous, shadowed of brown, fangs dark fulvous as in male. Sternum yellow, scutiform with a marginal chitinous reinforcement, labium and endites yellow. Abdomen: dorsum black with six muscular impressions, the two anterior ones more conspicuous, almost white. Sides as in dorsum but lighter because of the numerous small white dots.

Venter gray with the two white parallel lines that begin on the ventral furrow and extend to the spinnerets as in the male. Tracheal opening surrounded of white. Epigyne fulvous, epigastric plates whitish. Spinnerets: ALS fulvous, surrounded by a white membranous base, bearing five conspicuous piriform glands spigots. PMS whitish, with four minor ampullate gland spigots, in front of which there are some cylindrical gland spigots and on the margin some aciniform ones, PLS fuscous, with two anterior minor ampullate glands spigots, some central cylindrical gland spigots and marginal aciniform gland spigots. All bristly (Figs. 19-22). Epigynum (Figs. 9,10,23). Legs coloration: as in male. Total length, not including spinnerets, 5,45. Carapace 2,18 long, 1,70 wide, 0.50 high, bristly. The bristles are larger on the clypeus and on the posterior declivity edges. Abdomen 3.20 long, 2.17 wide, 1.90 high, bristly. The bristles are larger on the anterior margin. Clypeus low, 0.14. Eyes sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.10, MOQ 0.26 long, dorsal view, 0.14, frontal view, front wide 0.26, back width 0.20. AME-AME 0.06, AME-ALE 0.02, PME-PME 0.02, PME-PLA 0.02. Chelicerae 0.62 long, 0.40 wide, with two small teeth on the promarginal furrow, densely bristly on the promargin. Legs spination: femur I: d0-1-1-0; II: d0.1-1-0, p0-1-1; III: d0-1-1-0, p1-1, r1-1; tibia v1-2-2, p0-0.1, pd0-1-0, r1-1, rd0-1-0; metatarsus v1-0-2, p1-1, r1-1, rd1-1; IV: femur d1-1-0, pa1, ra1; tibia v2-2-2, p1-1, r1-1; metatarsus v2-2-0, p1-1-1, rd0-1-0, r1-1-1. Leg formula 4123. Legs measurements: I: femur 1.60/patella 1.00/tibia 1.24/metatarsus 1.10/tarsus 1.10/total 6.04. II: 1.30/0.86/1.00/0.90/0.74/4.80. III: 1.14/0.70/0.80/0.90/0.70/4.24. IV: 1.60/0.90/1.40/1.50/0.84/6.24.

Variation: Eleven males: total length 4.49 (4.00-4.93); carapace length 1.81 (1.74-2.00), width 1.64 (1.32-1.62); abdomen length 2.46 (2.25-2.71), width 1.51 (1.34-1.74); femur I 1.31 (1.22-1.40); tibia I 1.06 (0.96-1.12). Fourteen females: total length 5.49 (4.87-6.75); carapace length 2.10 (1.94-2.27), width 1.67 (1.54-1.97); abdomen length 3.28 (2.92-4.00), width 1.96 (1.66-2.87); femur I 1.50 (1.36-1.64), tibia I 1.17 (1.06-1.30). The epigynum can show some little external morphological variations and so may occur with the sperm ducts concerning to the diameter and coiling.

Natural history: The restinga of both localities, Rio Grande and Viamão, are physiognomically very similar and have similar ecological conditions.

All the specimens from Parque Estadual de Itapuã were collected on an area of restinga, with pitfall-traps. The pitfalls were installed on June 2003 with the first removal of them on July and extended till June 2004. One time a month the trapped material was removed and analyzed. Almost all the specimens of *Camillina major* (70 adults and 30 juveniles) were collected on a wood area seated over early sand dunes. Among the vegetal species there are *Hexachlamys* spp., *Eugenia* sp. and *Exostyles* sp. (Myrtaceae), *Sebastiania* sp. (Euphorbiaceae), *Cereus* sp. and *Opuntia* sp. (Cactaceae), *Ficus organensis* (Moraceae), *Vitex megapotamica* and *Citharexylum myrianthum* (Verbenaceae), a soil (Bromeliaceae) *Bromelia antiacantha*, and some species of grass, on the more open and sunny areas (RGS, 1997). The ecotone is an area seated between the wood area and the dunes. This is a transition area between the wood area and the naked dunes. It is an area on which occurs few sparse trees and shrubs. There are the predominance of grasses, of *Senecio brasiliensis* and *Senecio crassiflorus* (Asteraceae) and *Petunia* sp. (Solanaceae). On the ecotone it were collected six adults and nine juveniles. On the naked dunes it were collected only five juveniles. Juveniles were present on the three environments, on the wood, on the ecotone and on the naked dunes, on the end of winter (August and early September) and spring (end of September and October of 2003) and summer (January to April of 2004). The peak of adults occurred on the end of spring November and early summer December of 2003. In this period no juvenile was collected.

Distribution: **Brazil**, Rio Grande do Sul. **Argentina**, Entre Rios and Santiago del Estero.

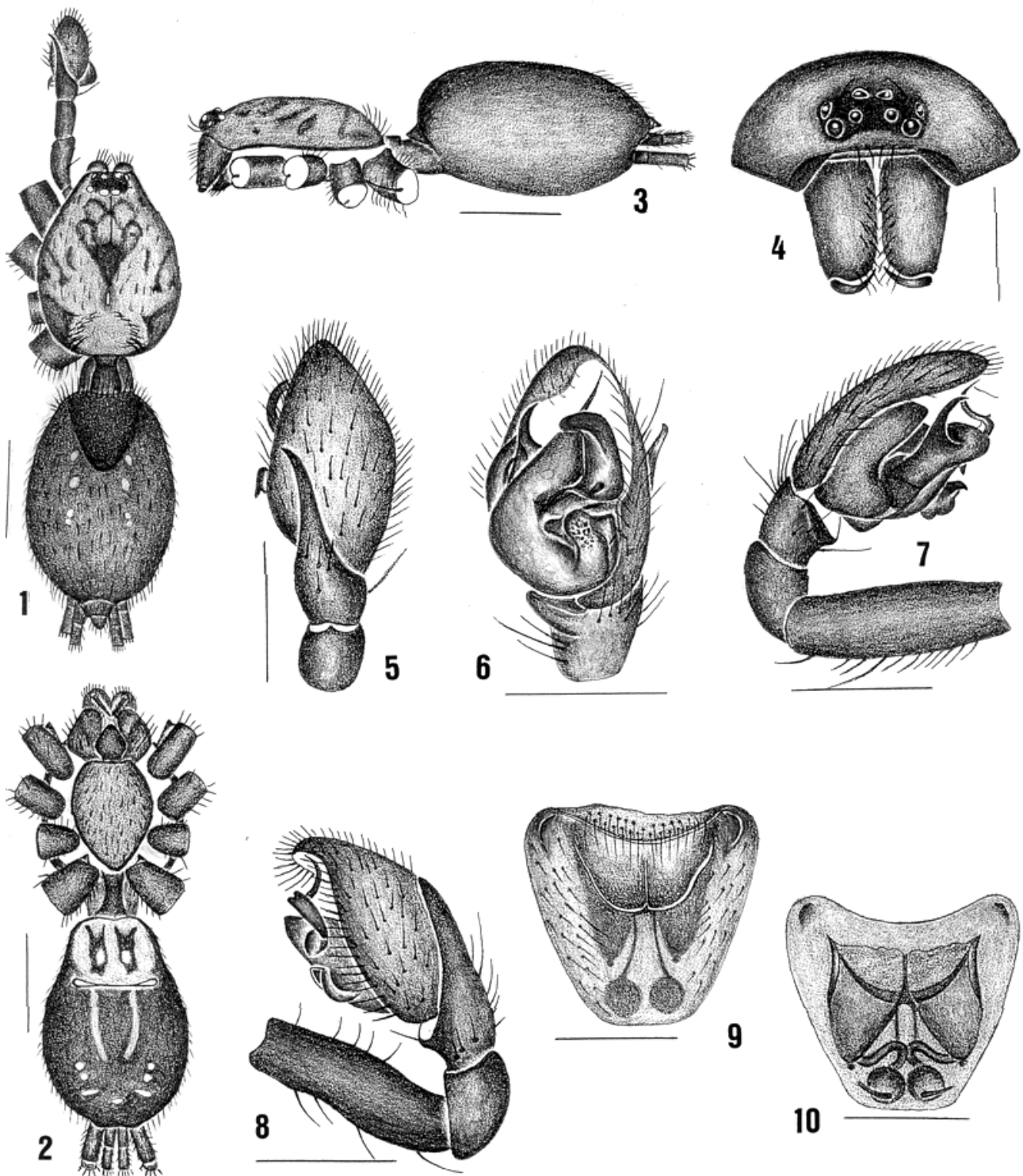
Other material examined: BRASIL. Rio Grande do Sul: **Viamão** (Parque Estadual de Itapuã), 2♂ 2♀ (MCTP16362), 04.XI.2003; 1♀ (MCTP 16363), 30.XII.2003; 3♂ 3♀ (MCTP 16364), 21.X.2003; 5♂ 18♀ (MCTP 16365), 04.XI.2003; 7♂ 6♀ (MCTP 16366), 18.XI.2003; 1♂ 4♀ (MCTP 16367), 02.XII.2003; 1♂ 5♀ (MCTP 16368), 17.XII.2003; 2♀ (MCTP 16369), 30.XII.2003; 1♂ 3♀ (MCTP 16370), 13.I.2004, all Arno A. Lise et al. col.; Estação Ecológica do Taim, Rio Grande, Rio Grande do Sul, 1♀ (MCN 16583), 02.XII.1986, Antonio D. Brescovit col.; 1♂ 1♀ (MCN 16240), 01.XII.1986, Antonio D. Brescovit col.; 1♂ (MCN 16239), 02.XII.1986, M.C. Moraes col.; 1♀ (MCN 16670), Porto Alegre, Rio Grande do Sul, 22.XII.1986, Arno A. Lise col.

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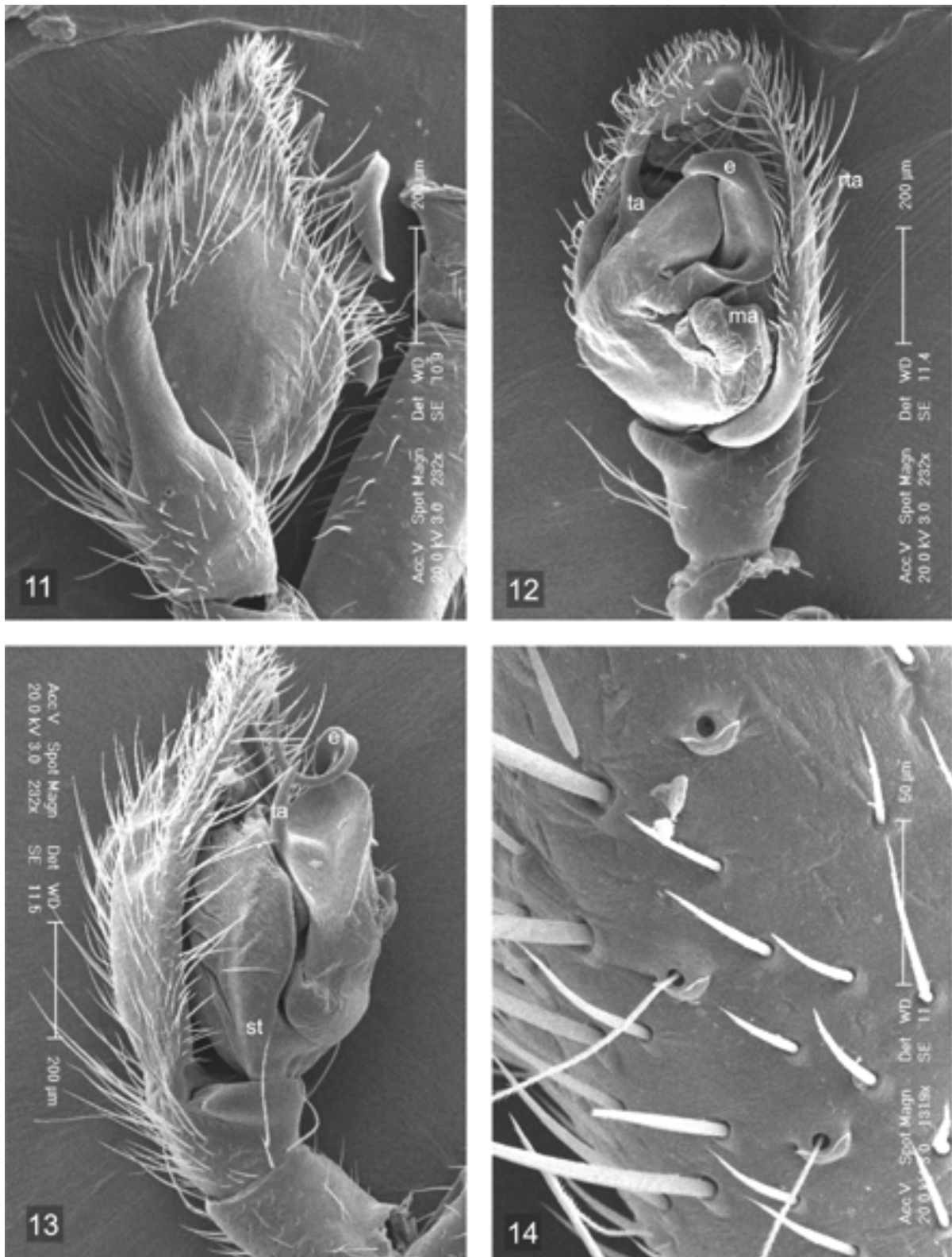
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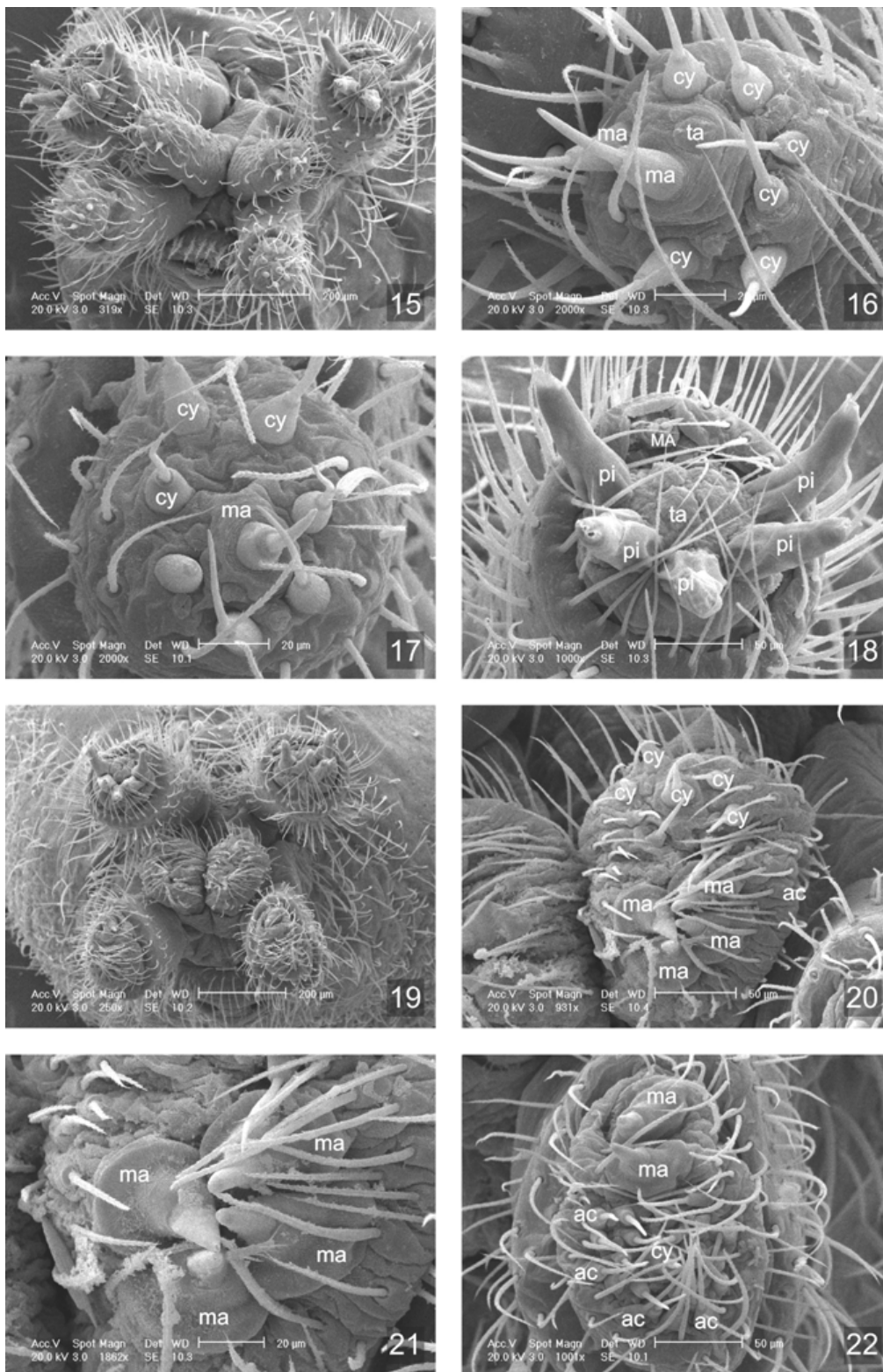
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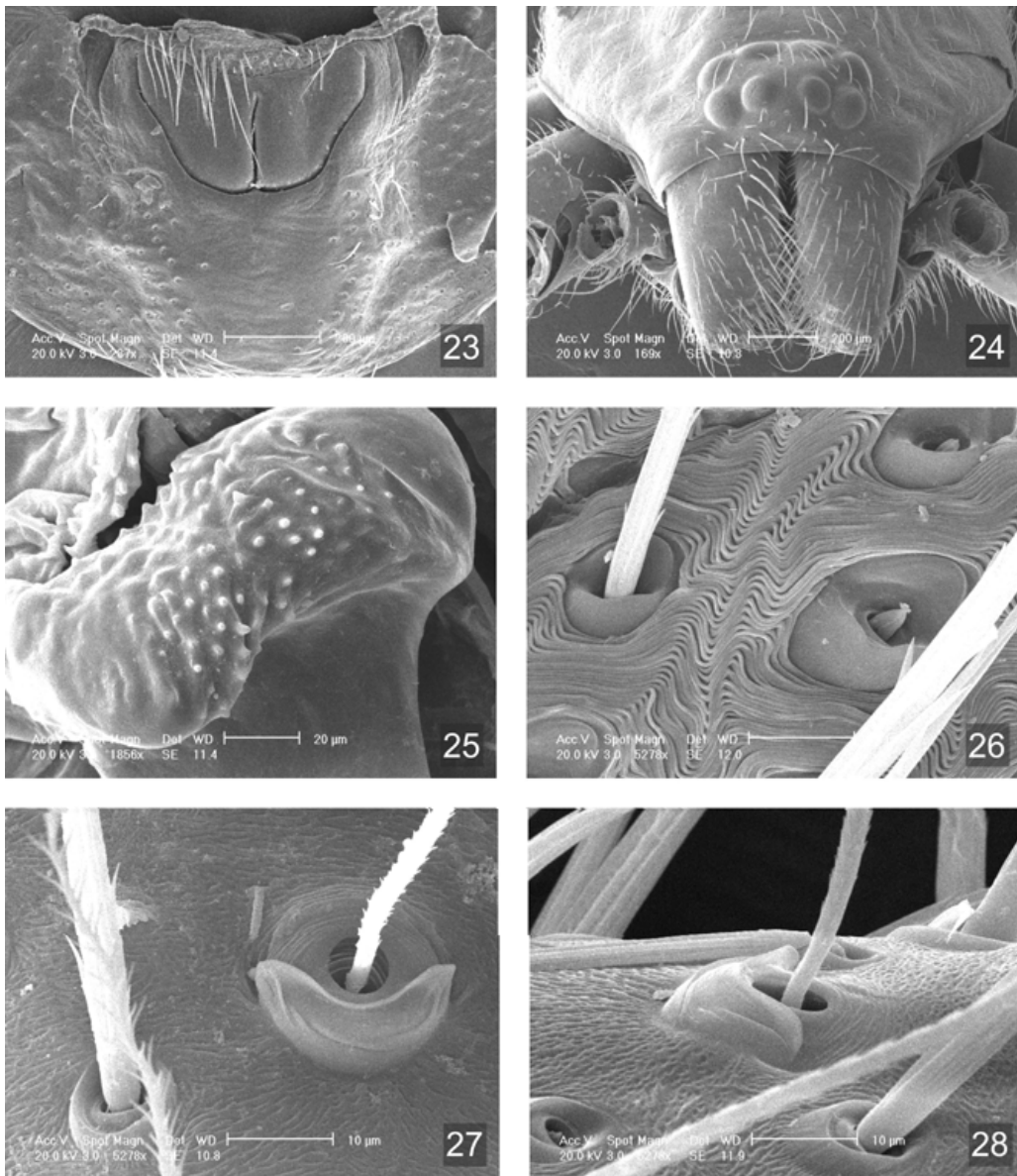
Figs. 1-10. *Camillina major*: **1-8.** male. **1.** dorsal view; **2.** ventral view; **3.** lateral view; **4.** carapace and chelicerae, frontal view; **5-8.** palpus. **5.** dorsal view; **6.** ventral view; **7.** prolateral view; **8.** retrolateral view; **9-10.** female epigynum. **9.** ventral view; **10.** dorsal view. Scale bar: **1-3.** 1 mm; **4-10.** 0.5 mm.



Figs. 11-14. *Camillina major*: Male palpus. **11.** dorsal view; **12.** ventral view; **13.** prolateral view; **14.** retrolateral tibial apophysis, row of trichobotriae on dorsal face of tibia.



Figs. 15-22. *Camillina major*: spinnerets. 15-18. male. 15. general view; 16. posterior median; 17. posterior lateral; 18. anterior lateral, detail of piriform spigot gland; 19-22. female. 19. general view; 20. posterior median; 21. posterior median, detail of minor ampullate spigot gland; 22. posterior lateral. ac = aciniform, cy = cylindrical, MA = major ampullate, ma = minor ampullate, pi = piriform, ta = tartipores.



Figs. 23-28. *Camillina major*: **23.** female epigynum, ventral view; **24-30.** male. **24.** carapace and chelicerae, frontal view; **25.** base of tegulum, detail; **26.** abdomen, dorsal view; **27.** dorsal trochobotria of leg II; **28.** dorsal trichobotria of leg I.