

ARTÍCULO:

**On the third valid species of the genus *Aglaoctenus* Tullgren (Araneae, Lycosidae)**

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**ON THE THIRD VALID SPECIES OF THE GENUS  
*AGLAOCTENUS* TULLGREN (ARANEAE, LYCOSIDAE)**

Adalberto J. Santos, Éder S. S. Álvares  
& Antonio D. Brescovit

**Abstract:**

In this paper *Trochosa oblonga* (C.L. Koch) is transferred to the Sosippinae genus *Aglaoctenus*, redescribed and illustrated. *Diapontia sacra* (C.L. Koch) and *Lycosa thoas* Mello-Leitão are considered junior synonyms of *T. oblonga*, and the synonymy of *Diapontia kochii* Keyserling is confirmed based on the original description and illustrations. *Aglaoctenus oblongus* new combination is the third valid species of the genus, and occurs from Southern Brazil to Northeastern Argentina.

**Keywords:** Araneae, Lycosidae, Sosippinae, spiders, *Aglaoctenus*, South America.

**Taxonomy:** *Aglaoctenus oblongus* (C.L. Koch, 1847) **new combination**

**Tercera especie del género *Aglaoctenus* Tullgren (Araneae, Lycosidae)**

**Resumen:**

Se transfiere *Trochosa oblonga* (C.L. Koch) al género *Aglaoctenus*, de la subfamilia Sosippinae, y se la redescibe e ilustra. *Diapontia sacra* (C.L. Koch) y *Lycosa thoas* Mello-Leitão son considerados sinónimos de *T. oblonga*, y se confirma la sinonimia de *Diapontia kochii* Keyserling con esta especie, basándose en la descripción e ilustraciones originales. *Aglaoctenus oblongus* combinación nueva es la tercera especie válida del género, y está presente desde el sur de Brasil hasta el nordeste de Argentina.

**Palabras claves:** Araneae, Lycosidae, Sosippinae, arañas, *Aglaoctenus*, Suramérica.

**Taxonomía:** *Aglaoctenus oblongus* (C.L. Koch, 1847) **combinación nueva**

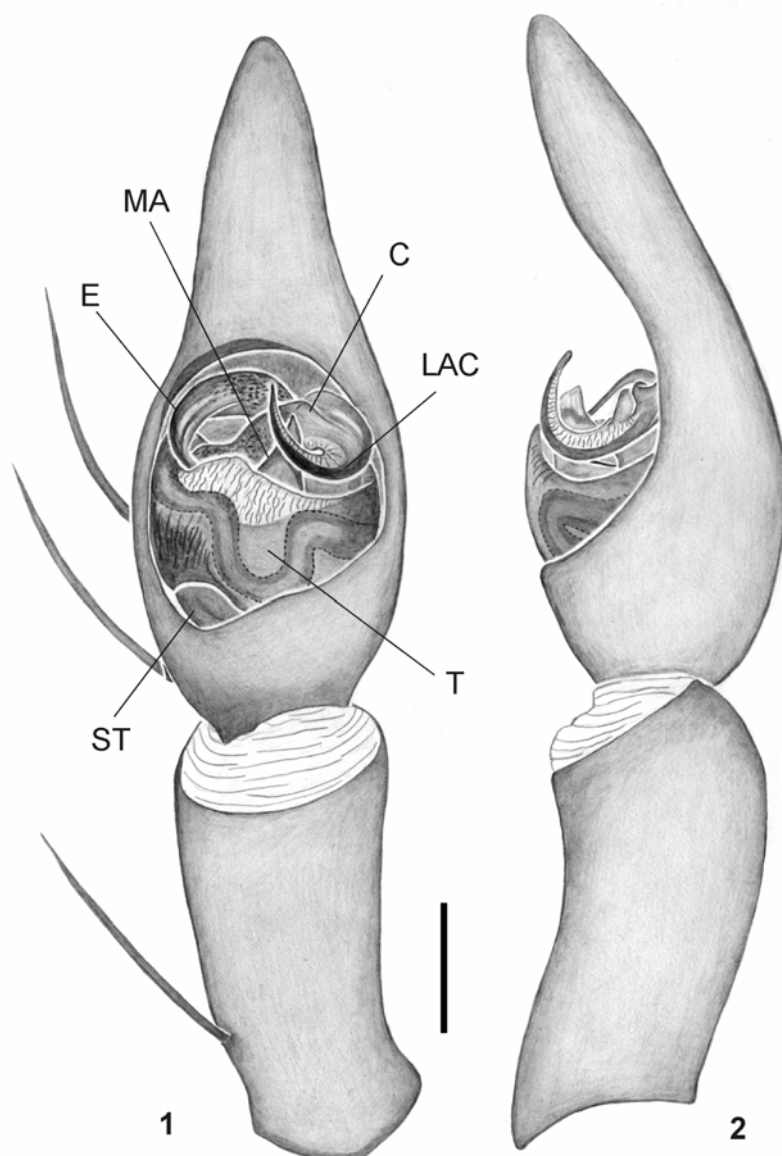
**Introduction**

Sosippinae is supposedly the most basal subfamily in Lycosidae (Dondale, 1986). It is characterized by the behavior of its members, which construct funnel-shaped webs (Brady, 1962; Santos & Brescovit, 2001). This group is probably monophyletic, supported mainly by the presence of a characteristic curved apophysis on the base of the conductor (see fig. 1; Santos & Brescovit, 2001 fig. 4; and Sierwald, 2000 fig. 7). Two genera are currently recognized: *Sosippus* Simon, 1888, with 11 species distributed from Southern North America to Costa Rica and *Aglaoctenus* Tullgren, 1905, restricted to South America (Platnick, 2003). The latter was recently revised by Santos & Brescovit (2001), who recognized only 2 valid species, with eight junior synonyms, and one *species inquirenda*.

During a visit to the Museo Argentino de Ciencias Naturales, in Buenos Aires, the first author examined several sosippine specimens from Argentina, all identified as *Trochosa oblonga* (C.L. Koch, 1847). These specimens are clearly related to *Aglaoctenus* species by the curved male palpal tibia and the presence of plumose hairs on the median septum of female epigynum. Recently, new specimens from Southern Brazil, including the type material of *Lycosa thoas* Mello-Leitão 1938, were examined by the second and third authors. All of these specimens match the original description of *T. oblonga* presented by Koch (1847), as well as the original descriptions and illustrations of *Diapontia kochii* Keyserling, 1878, and *Diapontia sacra* (C.L. Koch, 1847). Based on these evidences, *Trochosa oblonga* is transferred to *Aglaoctenus*, and redescribed. In addition, this species is considered a senior synonym of *D. sacra* and *L. thoas*.

**Material and Methods**

This study was based on material from the following institutions (acronyms and curators in parenthesis): Instituto Butantan, São Paulo (IBSP, I. Knysak); Museo Argentino de Ciencias Naturales "Bernadino Rivadavia", Buenos Aires (MACN, C. Scioscia); Museu de Ciências Naturais, Fundação Zoobotânica do Rio Grande do Sul, Porto Alegre (MCN, E. H. Buckup); Museu de Zoologia, Universidade de São Paulo, São Paulo (MZSP, R. Pinto da Rocha).



**Figs. 1-2:** *Aglaoctenus oblongus* (C.L. Koch). 1. Male palp, ventral view. 2. Lateral view.

The female genitalia were dissected and immersed in clove oil, for the examination of internal structures and illustrations. Abbreviations and description format follows Santos & Brescovit (2001). All measurements are in mm.

***Aglaoctenus oblongus* (C.L. Koch, 1847)  
comb. n.**

(Figs. 1-6)

*Dolomedes oblongus* C. L. Koch, 1847: 114, pl. 484, fig. 1350 (Female holotype from Montevideo, Uruguay, lost).

*Dolomedes sacer* C. L. Koch, 1847: 115, pl. 484, fig. 1351 (Female holotype from Montevideo, Uruguay, lost). **Syn. n.**

*Diapontia kochii* Keyserling, 1878: 614-617, pl. 14, figs. 29-30 (Male and seven female syntypes from Montevideo, Uruguay, in Bösenberg Collection N.1021, deposited in Zoologisches Institut und

Zoologisches Museum der Universität Hamburg, not examined); Simon, 1898: 334 (syn.); Rack, 1961: 19.

*Sosippus oblongus* - Simon, 1888: 206.

*Lycosa sacra* - Simon, 1898: 334.

*Lycosa oblonga* - Simon, 1898: 334.

*Diapontia sacra* - Petrunkevitch, 1911: 553.

*Lycosa thoas* Mello-Leitão, 1938: 314, fig. 2 (Female holotype from Alfredo Chaves, Rio Grande do Sul, Brazil, 30.X.1936, J. L. Gonzaga col., in IBSP 427 [ex-294], examined); Zimber, 1963: 22, figs. 14-15.

**Syn. n.**

*Diapontia oblonga* - Mello-Leitão, 1940: 28.

*Trochosa oblonga* - Roewer, 1955: 302.

*Trochosa thoas* - Roewer, 1955: 302.

**DIAGNOSIS:** *A. oblonga* is easily distinguished from the remaining *Aglaoctenus* by the elongated carapace and less procurved anterior eye row. Males are distinguished by the large anterior portion of the cymbium, the short

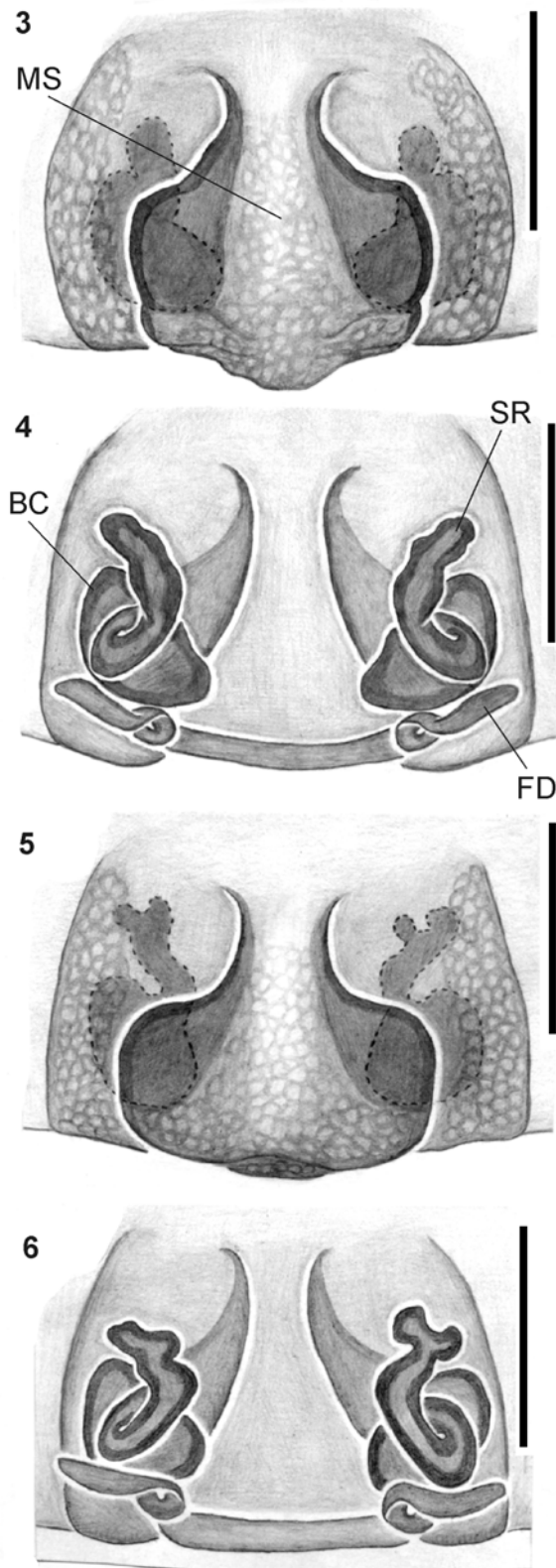
and wide conductor (Figs. 1-2), and the translucent distal margin of the tegulum (Fig. 1). Females differ by the sub-quadrangular median septum of the epigynum (Figs. 3, 5), and the internal genitalia with an elongated and curved seminal receptacle (Figs. 4, 6).

#### DESCRIPTION:

**MALE** (MACN 7771). Carapace brown, with a pair of lateral longitudinal yellow paramedian bands covered by white hairs, close to the margin. Thoracic groove and lateral grooves conspicuous, with sparse covering of white hairs close to the lateral bands. Clypeus brown, chelicerae dark-brown. Endites brown, labium dark-brown. Sternum brown. Legs with coxae and femur orange and rest brown. Palpal trochanter and femur orange, tibia red-brown, cymbium brown. Abdomen brown, with a pair of longitudinal lateral and three transversal posterior bands of white hairs. Laterally dark-gray, sparsely covered by white hairs. Venter cream colored with two median dark bands. Spinnerets brown. Total length 13.00, carapace 6.50 long, 5.20 wide. Clypeus 0.25 high. Eye diameters and interdistances: AME 0.25, ALE 0.25, PME 0.40, PLE 0.40, AME-AME 0.25, AME-ALE 0.15, PME-PME 0.60, PME-PLP 0.60. MOQ length 0.90, posterior width 1.20. Chelicerae 2.90 long, with 3 promarginal teeth, the median the largest, and 3 larger retromarginal teeth. Abdomen 6.50 long, 4.70 wide. Legs: I – femur 5.00/ patella 2.70/ tibia 4.10/ metatarsus 4.00/ tarsus 2.30/ total 18.10. II – 4.40/ 2.60/ 3.60/ 3.70/ 2.10/ 16.40. III – 3.70/ 2.30/ 3.30/ 4.10/ 1.70/ 15.10. IV – 5.10/ 2.40/ 4.60/ 6.00/ 2.60/ 20.70. Leg spination follows the typical pattern for the genus. Palpus with the typical structure of the genus, except by the retrolateral basal ventral region of cymbium not swollen. Embolus base arising from close to the apex of the lateral apophysis of conductor (Figs. 1-2).

**FEMALE** (MACN 7782). Coloration pattern as in male, except for: legs brown except metatarsus and tarsus black. Endites dark-brown, palpus uniformly dark-brown, chelicerae black. Abdominal dorsum brown, without lateral bands of white hairs. Total length 16.50, carapace 8.10 long, 6.30 wide. Clypeus 0.30 high. Eye diameters and interdistances: AME 0.30, ALE 0.25, PME 0.60, PLE 0.45, AME-AME 0.20, AME-ALE 0.15, PME-PME 0.40, PME-PLP 0.50. MOQ length 1.10, back width 1.50. Chelicerae 3.60 long, as in male. Abdomen 8.40 long, 5.70 wide. Legs: I – femur 5.90/ patella 3.40/ tibia 4.50/ metatarsus 4.40/ tarsus 2.70/ total 20.90. II – 5.70/ 3.30/ 4.10/ 4.20/ 2.60/ 19.90. III – 5.00/ 3.00/ 3.60/ 4.30/ 2.50/ 18.40. IV – 6.70/ 3.30/ 5.50/ 6.60/ 3.00/ 25.10. Leg spination following typical pattern for genus. Seminal receptacle anterior to a large copulatory bursa. Fertilization ducts curved, pointing outwards (Fig. 4).

**VARIATION:** One female specimen presented lateral longitudinal bands of white hairs on abdomen. Male leg coloration can be lighter. The posterior margin of the female epigynal median septum varies from truncated



**Fig. 3-6:** *Aglaoctenus oblongus* (C.L. Koch). **3.** Female epigynum, ventral view. **4.** Dorsal view. **5.** Ventral view. **6.** Dorsal view. Scale bars: 0,5 mm. BC – copulatory bursa, C – conductor, E – embolus, FD – fertilization duct, LAC – lateral apophysis of conductor, MA – median apophysis, MS – median septum, SR – seminal receptacle, ST – subtegulum, T – tegulum.

(Fig. 3) to projected (Fig. 5); and the seminal receptacles are apically bifid in some specimens (Fig. 6). Total length variation: males (N = 5) 13.00 – 14.30; females (N = 5) 14.30 – 21.80. Carapace width variation: males (N = 5) 4.90 – 5.80; females (N = 5) 5.40 – 8.20. Patella+Tibia I/carapace width ratio (Santos & Brescovit 2001): males (N = 5) 1.25 – 1.43; females (N = 5) 1.25 – 1.43.

**NATURAL HISTORY:** Nothing is known of this species' habits except for the observations noted on the label of some males from Buenos Aires (MACN 7782). According to the label, these specimens were collected under a tree trunk in a wetland area. Unfortunately, it is not possible to know by this short note whether or not this species constructs webs, as the other members of the subfamily.

**DISTRIBUTION:** Southern Brazil, Uruguay and Northeastern Argentina.

**MATERIAL EXAMINED:** BRAZIL: *Rio Grande do Sul*: Canela, Barragem Canastra, 21.II.2001, R. Ott, 1♂, several juv. (MCN 33724); Caxias do Sul, Água Azul, 15.I.1975, A.A. Lise, 1♂ with egg-sac (MCN 2552); Santa Cruz, 28.VIII.1950, R. Steinhaus, 2♀♀ 5♂ & 6 juv. (IBSP 1119); São Francisco de Paula, Herald col., 1♂ with egg-sac (MZSP 4916); ARGENTINA: *Buenos Aires*: Punta Lara, 11.X.1981, Miranda & Ramirez, 1% 1♂ (MACN 7781); 4.XI.1981, 1% 2♂ & 2 juv. (MACN 7782); Buenos Aires, Palermo, 19.VIII.1917, A.G. Fress, 3♀♀ (MACN 7782).

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