



UDC 595.44(55)

REDESCRIPTION OF THE TYPE SPECIES OF THE GENUS *ARGISTES* (ARANEI, LIOCRANIDAE)

Yu. M. Marusik

Institute for Biological Problems of the North RAS, Portovaya st., 18, Magadan, Russia
Zoological Museum, Biodiversity Unit, FI-20014 University of Turku, Finland
Department of Zoology & Entomology, University of the Free State,
Bloemfontein 9300, South Africa
E-mail: yurmar@mail.ru

Redescription of the Type Species of the Genus *Argistes* (Araneae, Liocranidae). Marusik, Yu. M. — A previously unknown female of *Argistes velox* Simon, 1897, type species of the genus *Argistes*, is described and the male is redescribed. The species is known only from Sri Lanka. Status of the genus is briefly commented.

Key words: Araneae, spiders, Sri Lanka, Asia.

Introduction

Argistes Simon, 1897 is a small genus with three named species, two of which are known from Sri Lanka and one from Namibia (WSC, 2017). All of them are known from a single sex only: *A. velox* Simon, 1897 from males and the other two species from females only. The Namibian species has never been illustrated. Only the type species of the genus, *A. velox*, was a subject of a recent redescription by Deeleman-Reinhold (2001), whereas the two other species are known only from the original descriptions. While identifying material collected in Sri Lanka I found several specimens of both sexes belonging to *A. velox*. Its female is described for the first time and a detailed illustrated redescription of the male is provided.

Material and methods

Specimens were photographed with a Canon EOS 7D camera attached to an Olympus SZX16 stereomicroscope and with a SEM JEOL JSM-5200 scanning microscope at the Zoological Museum, University of Turku, Finland. Material studied here is deposited in the collection of Zoological Museum of the Moscow State University, Russia (ZMMU). Standard abbreviations are used for eyes and spination. English of the earlier draft was checked by Norman and Dawn Larsen (Cape Town, South Africa).

Argistes Simon, 1897

Argistes Simon, 1897: 143; Deeleman-Reinhold, 2001: 403.

Type species: *Argistes velox* Simon, 1897 from Sri Lanka.

Notes. Deeleman-Reinhold (2001) indicated that the genus is monotypic, although according to Bonnet (1955) and Platnick (2000) the genus encompasses three species: Simon (1897) transferred *Leptodrassus seriatus* Karsch, 1892, known from a female from Sri Lanka to this genus, and later described *A. africanus* Simon, 1910 from Namibia. Judging from the figures of *A. seriatus* (Karsch, 1892: pl. 11, figs 16 & 16 a) it is most likely misplaced in the genus and not conspecific with *A. velox*, known from the male only. It is larger in size (4.7 mm vs. 3.5 mm) and has a chevron-pattern on the abdomen which is lacking in *A. velox*. The Namibian species is known from the female only and similar to *A. velox* in the eye pattern (Simon, 1910).

In the genus description, Deeleman-Reinhold (2001) mentioned that the colulus is absent, although it is very distinct in SEM figure (fig. 16).

There are some doubts whether the genus belongs to Liocranidae. The type species has no strong ventral spines on leg I (present in *Liocranum* L. Koch, 1866 and other liocranids known to me), epigyne is lacking fovea and therefore not divided into two parts like in *Liocranum* and other genera. Because two species assigned to genus are not properly described and illustrated, males are unknown, their generic position is doubtful so I cannot provide a sufficient diagnosis to the genus.

***Argistes velox* Simon, 1897 (figs 1–24)**

Argistes velox Simon, 1897: 144 (♂); Deeleman-Reinhold, 2001: 403, figs 633–641 (♂).



Figs 1-7. Habitus and male palp of *Argistes velox*: 1-2 — female habitus, lateral and dorsal; 3 — male habitus, lateral; 4-5 — male palp, retro- and pro-lateral; 6-7 — prosoma frontal in female and male. Scale = 0.2 mm if not otherwise indicated.

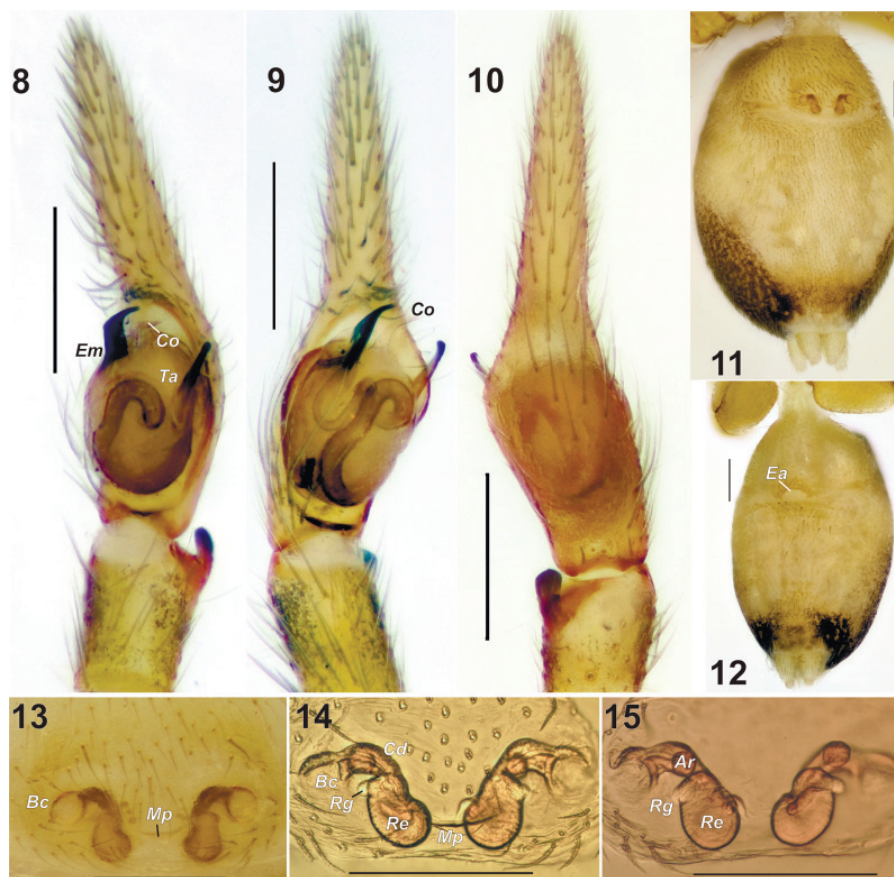
Material examined: SRI LANKA, **Central Province**: 3 ♂, 2 ♀ (ZMMU), Matale District, Dambulla Town, arboretum and forest around, 7°51'39.2" N, 80°40'29.8" E, 24-27.12.2011 (Y. M. Marusik); 1 ♀ (ZMMU), Anuradhapura District, Ritigala Strict Natural Reserve, 8°07'02.5" N, 80°39'58" E, 25.12.2011 (Y. M. Marusik).

Description. Male. Total length 2.75 (variations 2.5-2.85). Carapace 1.36 long, 1.0 wide with distinct pattern. Eye sizes and interdistances: AME 0.10, ALE = PLE 0.04, AME-AME 0.03, PME 0.05, PME-PME 0.10. Clypeus 0.14. Legs I-II thinner than III-IV, middle part of femur I 0.14 in diameter and femur IV — 0.24.

Leg length (♂/♀)

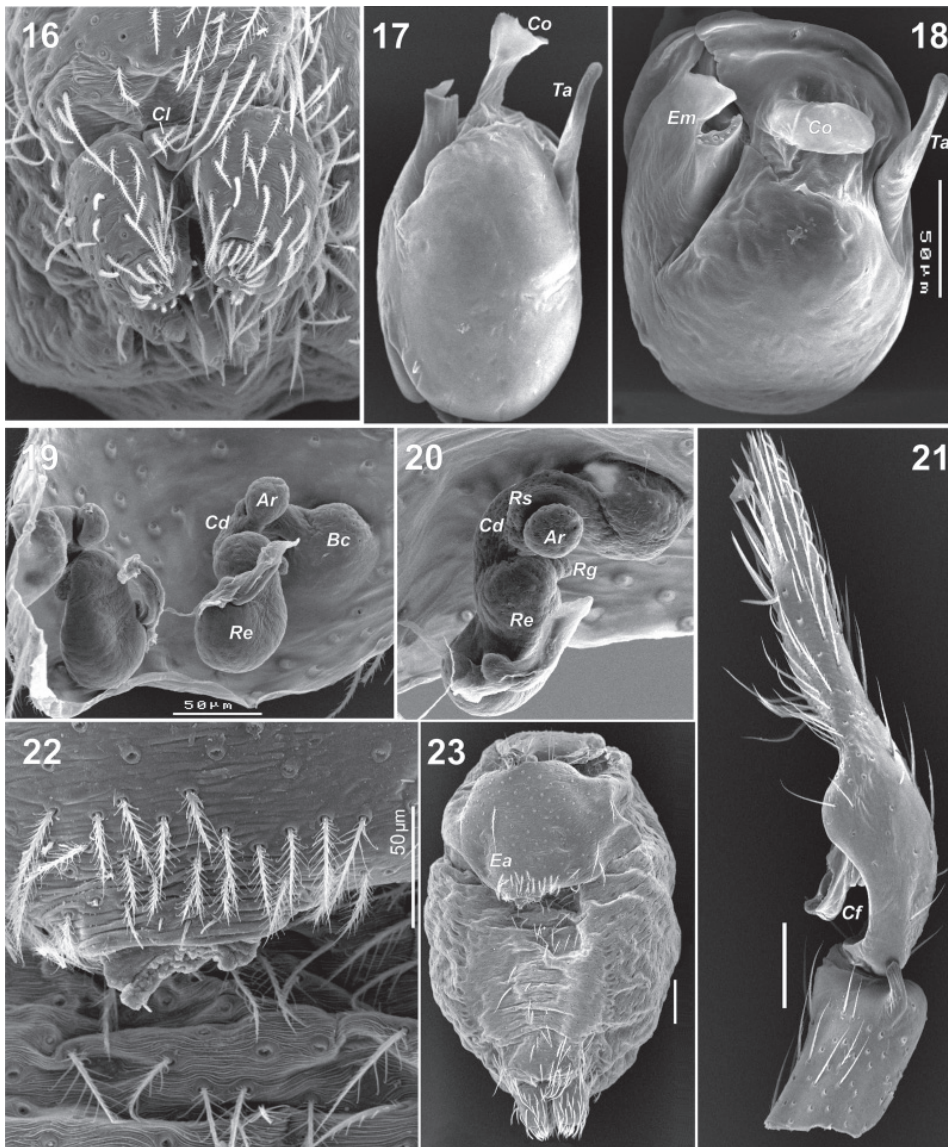
	Fe	Pt	Ti	Mt	Ta	Total
Palp	0.55/0.65	0.25/0.3	0.33/0.35	-	0.63/0.75	1.76/2.05
I	1.75/2.28	0.4/0.43	2.0/2.2	1.75/1.75	1.1/1.13	7.0/7.89
II	1.4/1.5	0.43/0.43	1.25/1.35	1.3/1.38	0.75/0.73	5.1/5.49
III	1.3/1.45	0.4/0.43	1.1/1.2	1.4/1.4	0.6/0.63	4.8/5.21
IV	2.15/2.3	0.45/0.55	2.0/2.15	2.4/2.58	0.7/0.75	7.7/8.33

Abdomen with pattern (figs 3, 12), epigastrum with well-defined epiandrous area (figs 12, 23). Colulus triangle-shaped, with three setae (fig. 16).



Figs 8-15. Copulatory organs and abdomen of *Argistes velox*: 8-10 — male palp, ventral, ventro-prolateral and dorsal; 11-12 — ventral side of abdomen in female and male; 13 — intact epigyne, ventral; 14-15 — macerated epigyne, ventral and dorsal. Scale = 0.2 mm.

Abbreviations: *Ar* — accessorial receptacle, *Bc* — bursa copulatrix, *Cd* — copulatory duct, *Co* conductor, *Ea* — epiandrus, *Em* — embolus, *Mp* — median pocket, *Re* — receptacle, *Rg* — gland of receptacle, *Ta* — tegular apophysis.



Figs 16–23. Somatic characters and copulatory organs of *Argistes velox*: 16 — innerrets of male; 17–18 bulb, ventral and anterior, embolus is broken; 19 — epigyne, dorsal; 20 — right part of epigyne, antero-dorsal; 21 — tibia and cymbium of male palp, retrolateral; 22 — epiandrous region; 23 — male abdomen, ventral. Scale = 0.1 mm if not otherwise indicated.

Abbreviations: *Ar* — accessory receptacle, *Bc* — bursa copulatrix, *Cd* — copulatory duct, *Cf* — cymbial fold, *Cl* — colulus, *Co* — conductor, *Ea* — epiandrus, *Em* — embolus, *Re* — receptacle, *Rg* — gland of receptacle, *Rs* — round swelling, *Ta* — tegular apophysis.

Palp as in figs 4–5, 8–10, 17–18, 21: long, longer than carapace; femur equal in length to patella + tibia; tibia 3 times longer than wide, with short, slightly bent retrolateral apophysis; cymbium long, with long apical part and basal fold (*Cf*); bulb oval, with long straight, not hooked, tegular apophysis (*Ta*); spermophore with characteristic loops (fig. 9); conductor (*Co*) weakly sclerotized, with widened tip; embolus (*Em*) claw-like. Length of palp and relative length of cymbial tip vary.

Female. Total length 3.5 (variation 3.4–3.5). Carapace 1.8 long, 1.14 wide. Colouration as in male (figs 1–2, 11). Eye sizes and interdistances: AME 0.14, AME-AME 0.04, PME

0.09, PME-PME 0.11. Spination differs on left and right legs and in different specimens. Femora: II 1d, III 3d, IV 2d; tibia III 1p, 2r, 1-1v, IV 5p, 2r, 2-2v and 1-1va; metatarsi: II 1-1v, III 3p 3r, 1-1v, IV 3r, 2-2v, 1-1va. Legs I-II thinner than III-IV, middle part of femur I 0.17 in diameter and femur IV — 0.27.

Epigyne as in figs 11, 13-15, 19-20: plate with small median pocket (*Mp*) faced anteriorly, copulatory openings (bursa copulatrix, *Bc*) round, spaced by 4 diameters; translucent receptacles (*Re*) spaced by 1.5 diameters; receptacles kidney-shaped, with weakly sclero-

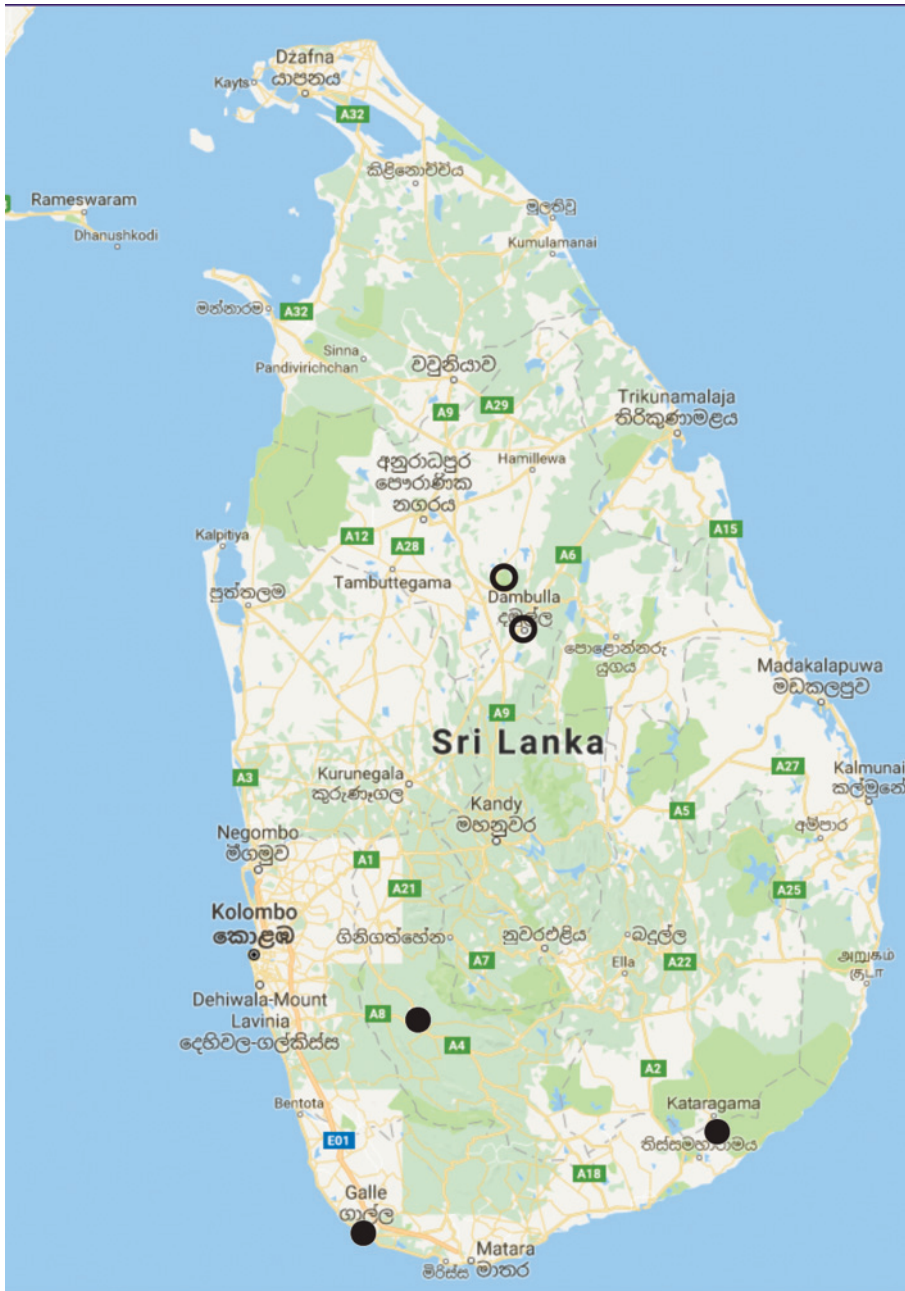


Fig. 24. Distribution records of *Argistes velox*. Filled circles refer to literature data and open circles refer to present data.

tized glands (*Rg*) latero-anteriorly; copulatory ducts (*Cd*) broad, as long as receptacles, with a kind of small and globular “accessorial” receptacle (*Ar*) originated from round swelling (*Rs*).

Note. Males examined are smaller in size than those described by Deeleman-Reinhold (2001): 2.5–2.85 vs. 3.0, but have longer legs (leg I 7.0 vs. 6.0).

I thank Benjamin Suresh (Kandy, Sri Lanka) and my wife Irina Marusik (Magadan, Russia) for their help in arranging the expedition to Sri Lanka.

References

- Bonnet, P. 1955. *Bibliographia araneorum*. Toulouse, 2 (1), 1–918.
- Deeleman-Reinhold, C. L. 2001. *Forest spiders of South East Asia: with a revision of the sac and ground spiders (Araneae: Clubionidae, Corinnidae, Liocranidae, Gnaphosidae, Prodidomidae and Trochanterriidae)*. Brill, Leiden, 1–591.
- Karsch, F. 1892. Arachniden von Ceylon und von Minikoy gesammelt von den Herren Doctoren P. und F. Sarasin. *Berliner Entomologische Zeitschrift*, 36, 267–310.
- Platnick, N. I. 2000. *The world spider catalogue, version 1.0*. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog81-87/index.html> (accessed 7 March 2017)
- Simon, E. 1897. *Histoire naturelle des araignées*. Paris, 2, 1–192.
- Simon, E. 1910. Arachnoidea. Araneae (ii). In: Schultze, L., ed. *Zoologische und anthropologische Ergebnisse einer Forschungsreise im Westlichen und zentralen Südafrika. Denkschriften der Medizinisch-Naturwissenschaftlichen Gesellschaft zu Jena*, 16, 175–218.
- World Spider Catalogue, 2017. *World Spider Catalogue*. Natural History Museum Bern, online at <http://wsc.nmbe.ch>, version 18.0. (accessed 7 March, 2017)

Received 28 April 2017

Accepted 24 October 2017