

Three new species of genus *Xysticus* C.L. Koch, 1835 (Aranei: Thomisidae) from the Amur Area

Три новых вида рода *Xysticus* C.L. Koch, 1835 (Aranei: Thomisidae) из Амурской области

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КЛЮЧЕВЫЕ СЛОВА: Aranei, Thomisidae, пауки-бокоходы, *Xysticus*, новые виды, Сибирь, Амурская область, Дальний Восток.

ABSTRACT. Three new species of crab-spiders are described and diagnosed from Russia (Amur Area): *X. amuricus* sp.n. (♂); *Xysticus pentagonius* sp.n. (♀♀), *X. logunovi* sp.n. (♀).

РЕЗЮМЕ. Описаны три новых вида пауков-бокоходов из России (Амурская область): *X. amuricus* sp.n. (♂); *Xysticus pentagonius* sp.n. (♀♀), *X. logunovi* sp.n. (♀).

Introduction

The genus *Xysticus* is the most specious in the family Thomisidae. About 90 species are known from Northern Asia (including Russian Far East, Mongolia, China and Japan) [Platnick, 2003, web-version]. In the above areas, the genus is relatively well studied [for example, Ono, 1988; Ono et al., 1990; Logunov, Marusik, 1994; Logunov, 1995; Song, Zhu, 1997; Song et al., 1999], however new species are being constantly discovered due to high species richness. Thus, during the last decade at least 10 species of *Xysticus* have been described from South Siberia and Mongolia [Marusik, 1989; Logunov, Marusik, 1998, 2001; Marusik, Logunov, 2002].

Material and Methods

Specimens for this study were collected during expedition for study of araneofauna of Muraviovka Park for Sustainable Land Use, stated in the Amur Area. Follow abbreviations are used in the text: ALE — anterior lateral eyes, AME — anterior median eyes, ap — apical, d — dorsal, Fm — femur, MOA — median ocular area, MOA-L — length of MOA, MOA-WA —

anterior width of MOA, MOA-WP — posterior width of MOA, Mt — metatarsus, PLE — posterior lateral eyes, PME — posterior median eyes, pr — prolateral, Pt — patella, rt — retrolateral, Tb — tibia, Tr — tarsus, v — ventral, ZMMU — the Zoological Museum of the Moscow State University. All measurements are in millimeters. Terminology of genitalia is cited after Ono [1988].

Survey of species

Xysticus amuricus sp.n.

Figs 1–2.

Material. Holotype ♂ (ZMMU), Russia, Amur Area, Tambovski Distr., Muraviovka Park, 19–23.07.2001, R. Seyfulina.

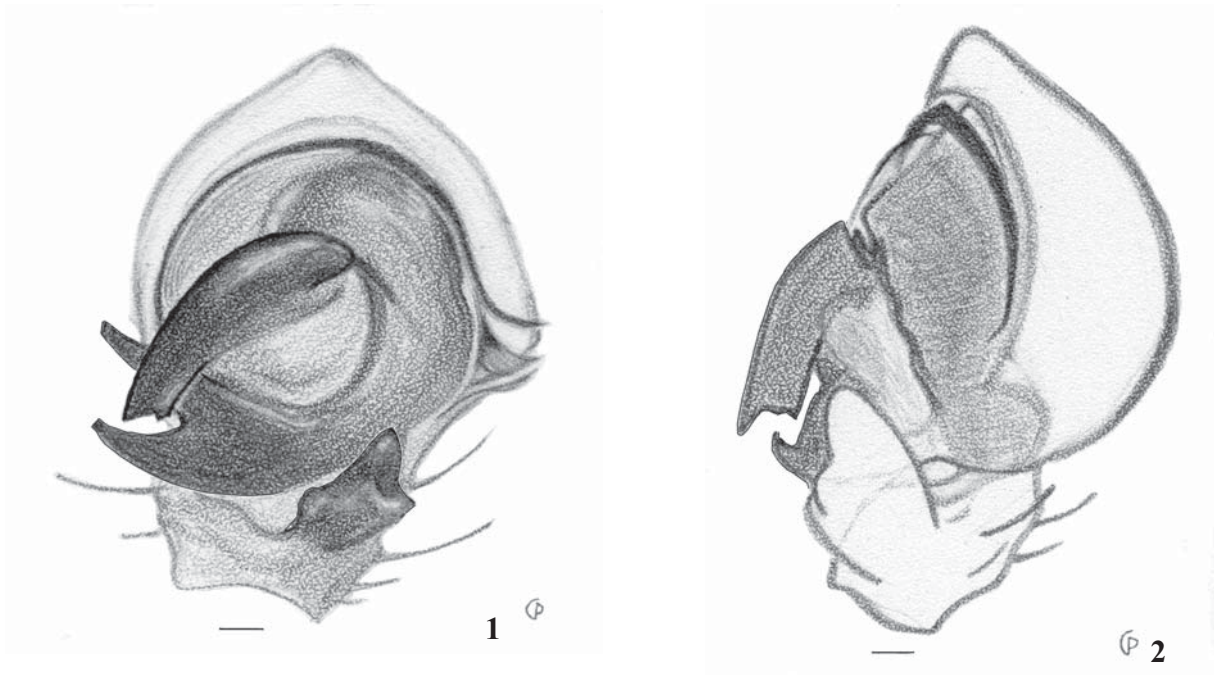
DIAGNOSIS. *X. amuricus* sp.n. is very similar to *X. insulicola* Bösenberg et Strand, 1906 (for example, see Ono, 1988: figs 94–95) and can be easily separated by the lack of teeth on upper branch of apical tegular apophysis (Fig. 1).

DESCRIPTION. Measurements. Carapace: 3.25 long, 3.28 wide. Abdomen: 3.06 long, 2.59 wide. Clypeus 0.31 long, chelicera 1.22 long. Eye sizes and inter distances: MOA-WA 0.70, MOA-WP 0.78, MOA-L 0.62, AME-AME 0.46, AME-ALE 0.27, PME-PME 0.48, PME-PLE 0.56.

Leg measurements:

	Fm	Pt	Tb	Mt	Tr
I	3.03	1.41	2.41	2.25	1.25
II	3.19	1.47	2.25	2.22	1.34
III	2.21	1.06	1.56	1.34	0.94
IV	2.24	1.03	1.59	1.56	1.02

Male. Coloration (typical for most of true *Xysticus* species). Carapace dark brown with a wide median yellow band, marking white and brown. Eye field brown with light spots in MOA. marks between PME. Clypeal area, chelicerae, maxillae, labium and sternum brown. Abdomen dark-brown, dor-



Figs 1–2. *Xysticus amuricus* sp.n., left male palp, ventral view (1), the same, lateral view (2); Scale bars = 0.1 mm.
Рис. 1–2. *Xysticus amuricus* sp.n., левая пальпа самца, вид снизу (1), то же, вид сбоку (2). Масштаб 0,1 мм.

sally with a typical median, white, herring-bone, pattern and laterally with white strips. Book-lung covers yellow-brown. Spinnerets brown. Femora and patella of legs I, II dark brown; ones of legs III, IV yellow, dotted with brown. Other segments of all legs yellow. Spination of leg I: Fm d 0-0-1-1-1, pr irregularly 10, Tb v 2-2-1-2-2 ap, rt & pr 1-1-1, Mt v 2-2-2-2-2 ap, rt 1-1-0, pr 1-0-0-1 ap. Palpal structure as in Figs 1–2.

DISTRIBUTION. The type locality only.

ETYMOLOGY. The species is named after the type locality, Amur Area.

Xysticus pentagonius sp.n.
Figs 3–5.

Material. Holotype♀ (ZMMU), Russia, Amur Area, Tambovskiy Distr., Muraviovka Park, 9.07.2001, R. Seyfulina. Paratype 1♀, the same locality, 11–15.07.2001.

DIAGNOSIS. *X. pentagonius* sp.n. is somewhat similar to *X. insulicola* (for example, see Ono, 1988: figs 94–95), from which differ by shape of epigynal fossa. *X. insulicola* has sclerotized and evenly rounded edge of epigynal fossa, whereas anterior and posterior epigynal margins of *X. pentagonius* sp.n. curved backwards (Figs 3, 4), furthermore anterior edge is weakly expressed and posterior one is well sclerotized.

DESCRIPTION. Measurements (holotype/paratype). Carapace: 3.47/3.12 long, 3.37/3.16 wide. Abdomen: 5.25/3.53 long, 5.03/3.72 wide. Clypeus 0.31/0.37 long, chelicera 1.9/1.19 long. Eye sizes and inter distances: MOA-WA 0.75, MOA-WP 0.78, MOA-L 0.59/0.61, AME-AME 0.55, AME-ALE 0.30, PME-PME 0.57, PME-PLE 0.61.

Leg measurements:

	Fm	Pt	Tb	Mt	Tr
I	2.84/2.94	1.4/1.59	2.19/2.34	2.00/2.03	1.16
II	2.84/2.97	1.34/1.53	1.97/2.19	1.87	1.19
III	1.97/2.16	0.94/1.06	1.25/1.28	1.06/1.012	0.78/0.84
IV	2.09/2.19	0.97/1.00	1.56/1.59	1.28/1.31	0.84

Female. Coloration (typical for most of true *Xysticus* species). Carapace reddish-brown, gently more light in the middle of thorax region and white behind. The light part bordering narrow white V-shaped line. Eye field yellow and only in PME area brown. Clypeal area brown with white zone in front of AME, chelicerae brown with light band apically. Maxillae and labium yellow-brown. Sternum yellow, dotted with brown. Abdomen yellow-white, dorsum with a typical median, herring-bone, pattern. Book-lung covers yellow. Spinnerets brown. Legs yellow with numerous white and brown spots, ventrally with strips. Hind femora yellow apically with large brown spot. Spination of leg I: Fm pr 0-1-1-1-0, Tb v 2-2-2-1-2 ap, Mt rt 1, pr 1-1-0-1 ap. Epigyne and spermathecae as in Figs 3–5.

NOTES. Probably females of *X. pentagonius* sp.n. and male of abovedescribed *X. amuricus* sp.n. belong to the same species, but there are not true evidences to state this.

DISTRIBUTION. The type locality only.

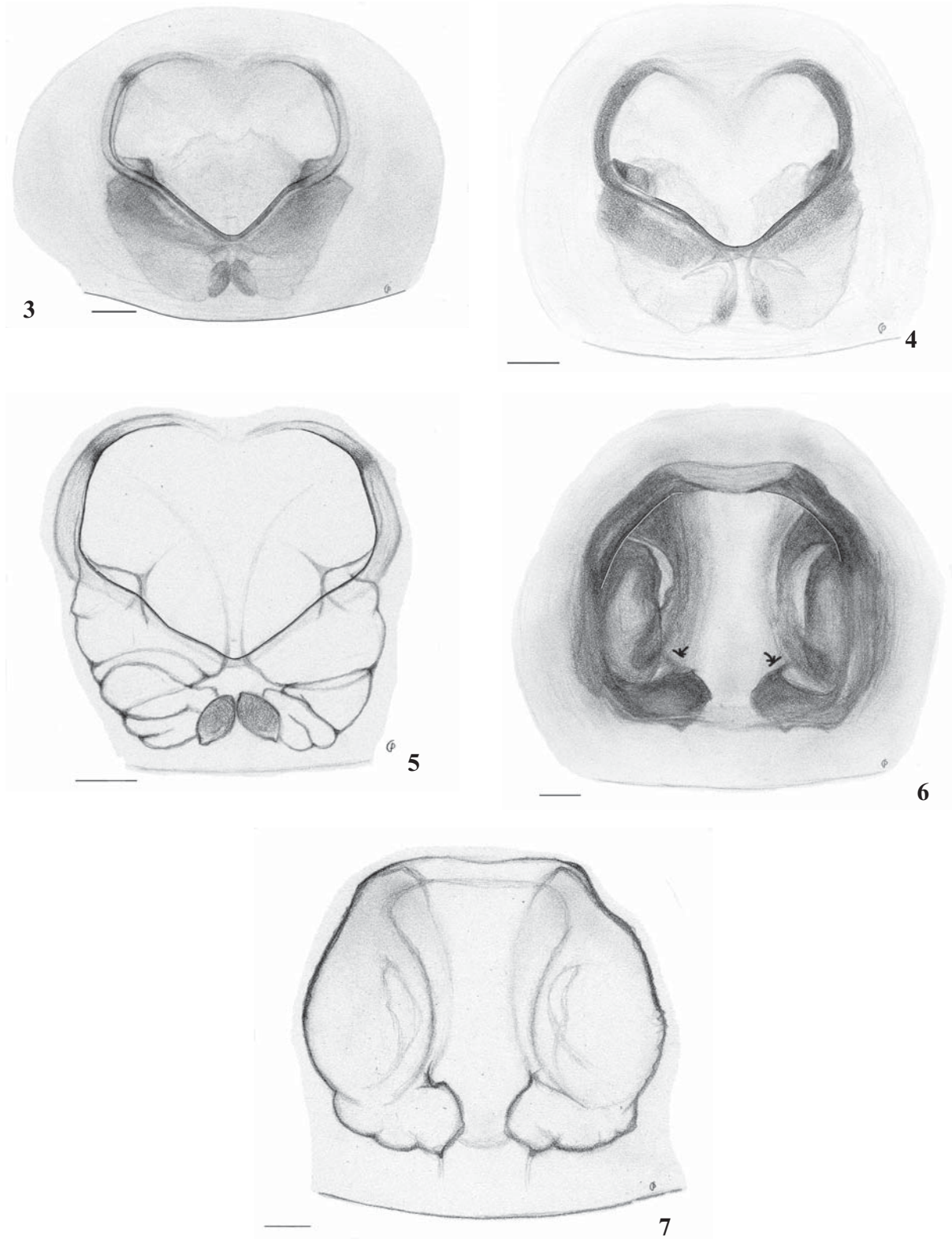
ETYMOLOGY. The species is named after characteristic epigynal shape resembling a pentagon.

Xysticus logunovi sp.n.
Figs 6–7.

Material. Holotype♀ (ZMMU), Russia, Amur Area, Tambovskiy Distr., Muraviovka Park, 2.07.2001, R. Seyfulina.

DIAGNOSIS. *X. logunovi* sp.n. is closely related to *X. wunderlichi* Logunov et al., 2001 (see Logunov et al., 2001: figs 6–7) and can be separated as follows: septum extends rather for all width of epigynal fossa; spermathecal cocks is positioned above than posterior epigynal margin; the distance from posterior epigynal margin to epigastric furrow amounts a third of epigynal height (Fig. 6), whereas they are equal for *X. wunderlichi*.

DESCRIPTION. Measurements. Carapace: 3.59 long, 3.16 wide. Abdomen: 4.06 long, 3.53 wide. Clypeus 0.37



Figs 3–7. Genitalia of *Xysticus* spp: 3–5 — *X. pentagonius* sp.n., epigyne, ventral view, holotype (3), the same, paratype (4), spermatecae, dorsal view, holotype (5); 6–7 — *X. logunovi* sp.n., epigyne, ventral view (6), spermatecae, dorsal view (7). Scale bars = 0.1 mm.

Рис. 3–7. Гениталии *Xysticus* spp: 3–5 — *X. pentagonius* sp.n., эпигина, вид снизу, голотип (3), то же, паратип (4), сперматека, вид сверху (5); 6–7 — *X. logunovi* sp.n., эпигина, вид снизу (6), сперматека, вид сверху (7). Масштаб 0,1 мм.

long, chelicera 1.28 long. Eye sizes and inter distances: MOA-WA 0.70, MOA-WP 0.77, MOA-L 0.64, AME-AME 0.48, AME-ALE 0.27, PME-PME 0.42, PME-PLE 0.61.

Leg measurements:

	Fm	Pt	Tb	Mt	Tr
I	3.03	1.62	2.31	2.12	1.22
II	2.97	1.56	2.25	2.10	1.20
III	2.09	1.22	1.28	1.31	0.94
IV	2.31	1.06	1.53	1.41	0.94

Female. Coloration (typical for most of true *Xysticus* species). Carapace brown with a wide median yellow-white bands and lateral yellow ones. Eye field white with brown marks between PME. Clypeal area and chelicerae yellow-brown with white. Maxillae and labium yellow-brown. Sternum yellow, dotted with brown. Abdomen dorsally yellowish-brown with a wide light pattern, venter, sides and booklung covers yellow. Spinnerets yellowish-brown. Femora, patellae and tibia of legs yellow with numerous brown specks and longitudinal white strips, other segments only yellow. Spination of leg I: Fm pr 0-1-1-1-0, Tb v 2-2-2-2-2 ap, Mt v 2-2-2-2-2 ap, rt 1, pr 1-0-0-1 ap. Epigyne and spermathecae as in Figs 6–7. Intromitten orifices of epigyne are hiding in the folds of vestibulum and not visible outside (they are marked by arrows in figure).

DISTRIBUTION. The type locality only.

ETYMOLOGY. The species is named in honour of famous Russian arachnologist Dmitri V. Logunov.

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