

First record of the spider *Gibbaranea omoeda* (THORELL, 1870) (Araneae: Araneidae) to the fauna of Latvia

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Abstract: The orb-weaver spider *Gibbaranea omoeda* (THORELL, 1870) is recorded from the fauna of Latvia for the first time. Studied specimens were identified as *Araneus angulatus* CLERCK, 1758 by Grube. They were collected in 19th century in Jūrmala, Dubulti. As this species has not previously been reported from Latvia, here we provide a brief illustrated description of this species with comments on its distribution and synonymy.

Key words: *Gibbaranea omoeda*, faunistic, new record, orb-weaver, Latvia, Northern Europe.

Introduction

For the past years spiders have not been intensively studied in Latvia. According to the last checklist (Relys, Spungis 2002) the araneofauna of Latvia includes 446 species. However at present new generation of arachnologists intensified researches about spiders there. After few years there were recorded several new spiders (Cera 2008, 2009, Cera, Spungis 2008). Whilst searching through the collections of European *Araneus* species from Museum für Naturkunde der Humboldt Universität zu Berlin we found two males of *Gibbaranea omoeda* (THORELL, 1870), new species for Latvian araneofauna. They were confused with *Araneus angulatus* CLERCK, 1758.

Methods

Photographs and measurements were obtained with a digital camera

(CANON PowerShot G9) connected to a stereomicroscope (Zeiss Stemi 2000-C) using AxioVs40 V 4.7.2.0. All measurements are in millimetres. The studied material is deposited in the collections of the Museum für Naturkunde, Berlin (MHUB).

Description

Gibbaranea omoeda (THORELL, 1870)

Material: 2♂♂ MHUB, Dubulti, resort of the city Jūrmala (Dubbeln – an older German name, mentioned on the original label), collected and probably also identified by Adolph Eduard Grube. The original label is hardly readable, but from a list of Grube's publications we found out that these spiders were collected in the forest most probably in 1853 (Grube 1859, Marusik 2010).

Measurements: Male total body length 8.0 mm. Carapace length 4.3 and width 3.3. Leg I: femur 4.9; patella 2.0; tibia 4.5; metatarsus 3.3; tarsus 1.1.

Diagnose: Male pale brown without distinct marks (Figs 1-2), probably caused

by storing in alcohol for a long period. Live specimens dark brown with contrast whitish markings on the opisthosoma. Prosoma brown with lighter cephalon. Diameter of PME greater than AME, the specific feature for the genus (Fig. 3). Sternum brown in the middle paler. Dorsum of abdomen brown anteriorly, between two small tubercles, white longitudinal spot. Tips of tubercles pointed straight up, not laterally. Ventrally, between epigastric furrow and spinnerets, dark median stripe enclosed by white longitudinal bands. Legs pale, indistinctly banded (as consequence of long-term storing in alcohol). Coxa I with hook. Tibia II modified with long, strong spines (Fig. 6). Male palp (Fig. 5) with large, flat terminal apophysis (Ta); big median apophysis (Ma), distally broad, on the margin without distinct spines (Fig. 4); embolus (Em) with two pointed processes, and long weak sclerotised conductor (Co), terminally broadened. Stipes large and well sclerotised, radix smaller.

Remarks: In comparison to the other European species of the genus *Gibbaranea*, it is the biggest species (♂ 8.0–9.0; ♀ 9.0–10.5) (Nentwig et al. 2011). Unlike *Araneus angulatus*, it has flat terminal apophysis; big median apophysis, distally without pointed bifurcated tip; lack white longitudinal band on sternum, and short, strong, black spines on Tibia II; ventrum of abdomen with two white bands not small spots.

Distribution: *Gibbaranea omoeda* is a Palearctic species widespread almost at all states of continental Europe, West and Central Siberia, Sakhalin and the Russian Far East to Japan (Aakra 2000). In addition to spider Fauna Europaea (Helsdingen 2011), it was recorded from Greece recently (Keer et al. 2010). It is a typical arboreal species occurring particularly in the higher layers of conifer trees (Wiehle 1931, Palmgren 1974). The canopy layers are rarely studied therefore it is scarce in collections.

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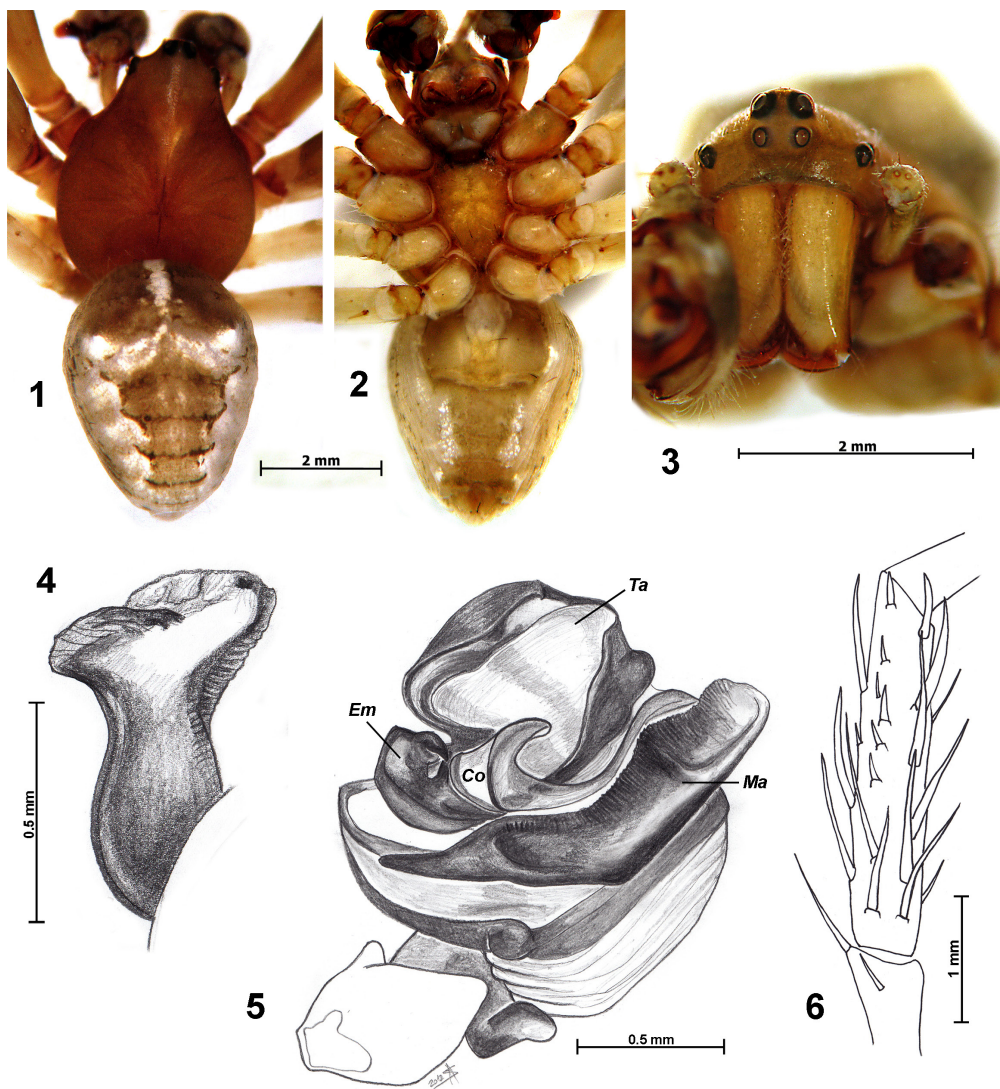
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Figures 1-6. Morphology of ♂ *Gibbaranea omoeda* (THORELL, 1870). 1-2 – habitus, dorsal & ventral; 3 – prosoma, frontal; 4 – median apophysis, ventral; 5 – palp, ventral; 6 – tibia II, prolateral.