

**FIRST RECORD OF *MEGACHILE SCULPTURALIS* SMITH IN SLOVENIA
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Abstract – One female of the giant resin bee, *Megachile (Callomegachile) sculpturalis* Smith, was photographed in the Trenta valley in the Julian Alps in 2016, the first record of this alien species in Slovenia.

KEY WORDS: bee fauna, Slovenia, alien species

Izveček – PRVA NAJDBA VRSTE *MEGACHILE SCULPTURALIS* SMITH V SLOVENIJI (HYMENOPTERA: MEGACHILIDAE)

Samica azijske čebele smolarke, *Megachile (Callomegachile) sculpturalis* Smith, je bila leta 2016 fotografirana v dolini Trente v Julijskih Alpah, kar je prvi podatek za to tujerodno vrsto v Sloveniji.

KLJUČNE BESEDE: favna čebel, Slovenija, tujerodne vrste

The giant resin bee, *Megachile (Callomegachile) sculpturalis* Smith, is an eastern Asian bee species, native to China, Japan, Korea and Taiwan. In the nineties it was introduced to the eastern United States, where it was first collected in 1994 and has steadily spread since then (Hinojosa-Díaz 2008). In Europe, it was first detected in 2008 in Allauch near the port of Marseille, France (Vereecken & Barbier 2009). Only a year later, it was found in Piedmont, northern Italy, on the other side of the Alps (Quaranta et al. 2014). It has reached southern Switzerland in 2010 (Amiet 2012). In 2015, it was detected in southern Germany and northern Switzerland, north of the Alps (Westrich et al. 2015), as well as in Hungary (Kovács 2015) and in 2017 in Vienna, Austria (Wiesbauer 2017).

Megachile sculpturalis is a large bee, with 20-25 mm rivaled only by the two large *Xylocopa* species, *X. violacea* and *X. valga*, among the European species. Females build their nests in all kinds of cavities like borings in wood which could then be transported long distances and newly emerged adults may start colonization of new territories. Specimens are active in July and August, males emerge earlier than females (Quaranta et al. 2014). Nest closures are made of resin, covered with mud. The use of resin in nest construction is typical for the subgenus *Callomegachile*, which is very diverse in the Oriental region. Pollen is collected from various trees and shrubs. In northern Italy *Ligustrum* was the most abundant pollen (Quaranta et al. 2014), while in southern France and Germany nests were provisioned with pollen of *Styphnolobium japonicum* (Westrich et al. 2015).

Spread of this alien species to Slovenia was expected. When Bojan Zadavec presented some of his photographs to Andrej Gogala for identification, it was recognized on a photo taken at the source of the river Soča in the Trenta valley, Julian Alps, already in 2016:

***Megachile sculpturalis* Smith, 1853**

Trenta: Izvir Soče, 1024 m, 11. 8. 2016, 1♀, photo Bojan Zadavec (Fig. 1)

What was not expected is the finding of the species in the Alpine region, at 1024 m a.s.l., first. Quaranta et al. (2014) and Westrich et al. (2015) have had doubt in the



Fig. 1: *Megachile (Callomegachile) sculpturalis* Smith in the Trenta valley, Slovenia. Photo Bojan Zadavec, 2016.

possibility of spread of the species over the Alps on their own, preferring the possibility of spread with the transport of wood. The latter is possible also here, however, with construction materials for paths and objects.

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