

# New records on synanthropic spider species (Arachnida: Araneae) in Slovenia

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**Abstract.** Four spider species, *Dictyna civica* (Lucas 1850) (Dictynidae), *Philodromus praedatus* O. P. Cambridge 1871 (Philodromidae), *Cheiracanthium mildei* L. Koch 1864 (Miturgidae) and *Clubiona similis* L. Koch 1867 (Clubionidae), new for Slovenian fauna, have been recorded on bridges over the Ljubljanica river and on buildings in the centre of Ljubljana.

Keywords: Araneae, synanthropic species, Slovenia, faunistics

**Izveček. NOVE NAJDBE SINANTROPNIH PAJKOV (ARACHNIDA, ARANEA) V SLOVENIJI** - Prispevek obravnava štiri v Sloveniji doslej še neodkrite vrste pajkov: *Dictyna civica* (Lucas 1850) (Dictynidae), *Philodromus praedatus* O. Pickard-Cambridge 1871 (Philodromidae), *Cheiracanthium mildei* L. Koch 1864 (Miturgidae) in *Clubiona similis* L. Koch 1867 (Clubionidae), ki so bile najdene na mostovih prek Ljubljanice in na nekaterih zgradbah v središču Ljubljane.

Gljučne besede: Araneae, sinantropne vrste, Slovenija, favnistika

Several specimens belonging to four species new for Slovenian spider fauna were recorded during a survey on the influence of ecological light pollution on spiders in the urban environment, which took place between April 2006 and October 2007. Here we report on noteworthy faunistic findings from this survey. The spider material was collected from the facade of Slovenian Philharmonic building in the centre of Ljubljana as well as from nearby bridges crossing the Ljubljanica River, from the buildings' surface or from webs. The nomenclature of the determined spiders follows Platnick (2008). For each species, the data on collected material, including description of the collecting site, latitude, longitude (Gauss-

Krüger) and altitude are given, stage of the material and collection date. We also provide the data on the species distribution in other countries in this part of Europe and comments on the findings. The specimens are deposited in the collections of the Department of Biology, Biotechnical Faculty, University of Ljubljana.

## New records

### *Dictyna civica* (Lucas 1850) - Dyictinidae

#### Material:

- Ljubljana, Slovenian Philharmonic building, altitude: 305 m, coordinates: y: 462037 x: 100713, leg. & det.: A. Celestina  
2♀, 5♂ - 24.4.2006
- Ljubljana, Čevljarški most bridge, altitude: 289 m, coordinates: y: 462109 x: 100591, leg. & det.: A. Celestina  
8♀, 1♂ - 9.6.2006; 1♀, 2♂ - 21.5.2007; 4♀, 2♂ - 8.9.2007; 2♀ - 16.10.2007;  
3♀, 2♂ - 21.5.2007; 3♀, 2♂ - 22.6.2007; 1♀ - 27.7.2007; 4♀, 5♂ - 8.9.2007;  
19♀, 4♂ - 16.10.2007
- Ljubljana, Eastern bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462173 x: 100893, leg. & det.: A. Celestina  
1♀ - 15.7.2006; 1♀ - 29.10.2006; 1♀ - 28.4.2007; 1♀ - 5.10.2007; 1♂ - 28.4.2007
- Ljubljana, Middle bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462159 x: 100888, leg. & det.: A. Celestina  
1♀ - 26.5.2006; 1♀ - 29.10.2006; 1♀ - 2.4.2007; 1♀ - 28.4.2007;  
3♀, 1♂ - 2.6.2007; 13♀, 5♂ - 26.8.2007; 2♀ - 16.7.2007; 1♀ - 4.10.2007
- Ljubljana, Western bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462148 x: 100880, leg. & det.: A. Celestina  
4♀ 1♂ - 27.4.2007; 1♀ - 5.8.2007; 1♀ - 26.10.2007

**Distribution:** Europe, North Africa, North America (Platnick 2008). The species has been recorded throughout Central Europe, except Poland (Blick et al. 2004), including all neighbouring countries of Slovenia (Nikolić & Polenec 1981, Samu & Szinetár 1999, Blick et al. 2004), except Italy (Stoch 2003).

**Comments:** *Dictyna civica* is a small (♀: 3 – 3,5 mm, ♂: - 2,5 – 3 mm) and stout cribellate spider. The species is almost exclusively synanthropic (i.e. ecologically associated with humans) (Roberts 1995, Nentwig et al. 2003), usually found on building walls, where it builds a mesh web approximately 5 cm in diameter, which often appears as a cloth of dirt. Because their webs often compromise the aesthetic appearance of buildings, the species is considered economically problematic in urban environments and even potentially invasive (Essl & Rabitsch 2004, Wittenberg 2005). Due to its Palearctic distribution and occurrence in the neighbouring countries, the presence of *D. civica* was expected in synanthropic environments in Slovenia as well. Although the sources report its phenology between April and June (Roberts 1995, Nentwig et al. 2003), we found adults throughout the sampling season, from April to late October.

### ***Philodromus praedatus* O. P. Cambridge 1871 - Philodromidae**

#### **Material:**

- Ljubljana, Eastern bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462173 x: 100893, leg.: A. Celestina, det.: R. Kostanjšek  
1♂ - 1.6.2007
- Ljubljana, Western bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462148 x: 100880, leg.: A.Celestina, det.: R. Kostanjšek  
1♂ - 30.6.2007

**Distribution:** Europe, Russia (Platnick 2008). Recorded throughout Central Europe and in all countries adjacent to Slovenia (Nikolić & Polenec 1981, Samu & Szinetár 1999, Stoch 2003, Blick et al. 2004), except Croatia (Nikolić & Polenec 1981).

**Comments:** *Philodromus praedatus* is usually found in deciduous or mixed woodland on the lower branches of broad-leaved trees such as oak, at the edge of clearings or rides (Roberts 1995). Possibly it is often overlooked because of its similarity to the common *P. aureolus* and *P. cespitum* (Heimer & Nentwig 1991). The occurrence of the species in synanthropic environment is probably occasional, whereas the presence of the specimens on the Tromostovje bridge is more likely due to black poplar (*Populus nigra*) growth in close vicinity.

***Cheiracanthium mildei* L. Koch 1864 - Miturgidae****Material:**

- Ljubljana, Eastern bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462173 x: 100893, leg. & det.: A. Celestina  
1♀ - 28.4.2007

**Distribution:** Holarctic, Argentina (Platnick 2008). In Central Europe, the species has been recorded from Slovakia, Germany, Switzerland and all countries adjacent to Slovenia (Nikolić & Polenec 1981, Samu & Szinetár 1999, Stoch 2003, Blick et al. 2004).

**Comments:** *Cheiracanthium mildei* is a species native to southern Europe and the Mediterranean, where it is commonly found in bushes (Nentwig et al. 2003), although it has been also recorded in synanthropic habitats (Spilman & Levi 1970).

***Clubiona similis* - L. Koch 1867 - Clubionidae****Material:**

- Ljubljana, Western bridge of the Tromostovje bridges, altitude: 289 m, coordinates: y: 462148 x: 100880, leg. & det.: A. Celestina  
1♀ - 23.9.2007

**Distribution:** Palaearctic (Platnick 2008). In Central Europe, the species was found in Germany, Austria, Czech Republic and Poland and in all countries adjacent to Slovenia (Nikolić & Polenec 1981, Samu & Szinetár 1999, Stoch 2003, Blick et al. 2004).

**Comments:** Due to the presence of *C. similis* in all neighbouring countries, its presence in Slovenia was expected. Since the natural habitat of the species is wetlands (Nentwig et al. 2003), the single record of the species in synanthropic environment is probably accidental.

## Acknowledgements

The authors are indebted to Cene Fišer for his confirmation of determinations, and to Matjaž Kuntner for his critical comments on the manuscript.

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