

***Icius subinermis*, a Mediterranean jumping spider species  
new to the fauna of Romania (Araneae: Salticidae)**

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**Abstract** – *Icius subinermis* Simon, 1937 (Araneae: Salticidae), a jumping spider species of Mediterranean origin, is reported for the first time from Romania. Three specimens were collected from canopies of urban ornamental trees on the bank of the river Crişul Repede in Oradea in August 2021. Photographs of the copulatory organ and the habitus of voucher specimens from Romania are provided.

**Key words** – introduced species, distribution, faunistics, new record

## INTRODUCTION

Although the Romanian arachnofauna is relatively well-studied, new faunistic records (e.g. GALLÉ *et al.* 2019, FIERA *et al.* 2020, GALLÉ *et al.* 2021) and newly described species (e.g. NAE *et al.* 2018, NAE 2021) are still often reported from this country. The genus *Icius* Simon, 1876 (Araneae: Salticidae) currently comprises six species in Europe (WSC 2021), but only one of them, *I. hamatus* (C. L. Koch, 1846), has been reported from Romania, however, its presence is doubtful (WEISS & URÁK 2000). An additional *Icius* species is reported as new to the fauna of Romania in the present paper.

## MATERIAL AND METHODS

*Icius* specimens (two subadult males and one juvenile) were collected on the bank of the river Crişul Repede in Oradea (47°03'53"N, 21°55'06"E), on 10.VIII.2021 by beating branches of urban ornamental trees (*Acer campestre* L., Sapindaceae; *Catalpa bignonioides* Walter, Bignoniaceae). Subadult specimens were kept alive and fed with adults of the fruit fly species *Drosophila hydei* Sturtevant, 1921

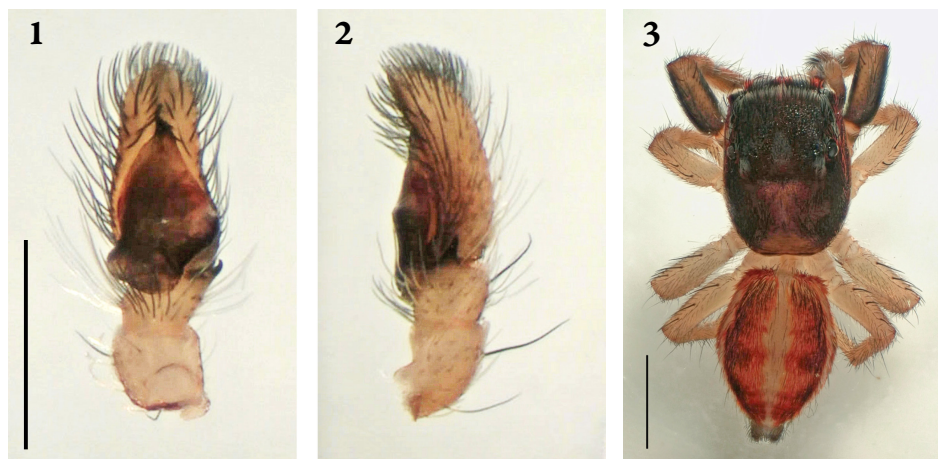
(Diptera: Drosophilidae) until their final moult. The specimens were stored in 70% ethanol and the spiders were examined in the laboratory of the Department of Entomology, Hungarian University of Agriculture and Life Sciences, Budapest. The specimens were identified after ALICATA & CANTARELLA (1993) and NENTWIG *et al.* (2021) using a binocular stereo microscope (Leica MZ6). One of the voucher specimens (an adult male) is deposited in the Hungarian Natural History Museum, Budapest, the remaining two specimens (an adult male and a juvenile) in the author's private collection. Copulatory organ and general appearance were photographed using a Euromex HD-Ultra digital camera connected to a Zeiss Stemi 2000-C stereomicroscope. Measurements were taken using an ocular micrometer calibrated with a stage micrometer. Adobe Photoshop CS3 software was used for post-processing work of photographs and preparation of scale bars.

## RESULTS AND DISCUSSION

Based on the details of the male copulatory organ the reared adults were identified as *Icius subinermis* Simon, 1937 (Figs 1–3). Considering its broad distribution in Europe (NENTWIG *et al.* 2021) and presence in neighbouring countries (Hungary: KORÁNYI *et al.* 2017, Serbia: STANKOVIĆ 2012) the occurrence of *I. subinermis* in Romania is not surprising. The first specimen of the species in Hungary was collected in 2016 (KORÁNYI *et al.* 2017), and it seems to have become established in Hungary since that, since it has been collected at various locations within Budapest several times (László Mezőfi, unpublished data, and for further Hungarian records of the species see [izeltlabuak.hu](http://izeltlabuak.hu)\*). In Oradea, Romania, three specimens were collected from different trees, suggesting that the species might be already established there. Though the species is originated from the Mediterranean area (ALICATA & CANTARELLA 1993), it was introduced to many places across Europe during the last decades (NENTWIG *et al.* 2021), and recently it was reported even from North America (CUTLER & PARR 2020). Outside of its native range *I. subinermis* has been often collected in urban habitats (e.g. STANKOVIĆ 2012, KORÁNYI *et al.* 2017, CUTLER & PARR 2020, present paper). The species was probably introduced into Romania by human mediation (e.g. with imported fruits), but the possibility of climate change-linked range expansion cannot be excluded. Further expansion of the species is expected in the future.

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\* <https://www.izeltlabuak.hu/faj/icius-subinermis/terkep>



**Figs 1–3.** Left palp and habitus of a male specimen of *Icius subinermis* Simon, 1937 from Romania, 1 = ventral view of left palp, 2 = retrolateral view of left palp, 3 = male, dorsal view. Scale bars in Figs 1–2 = 0.5 mm, in Fig 3 = 1 mm (photos by László Mezőfi)

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## REFERENCES

- ALICATA P. & CANTARELLA T. 1993: The Euro-mediterranean species of *Icius* (Araneae, Salticidae): a critical revision and description of two new species. – *Animalia* **20**: 111–131.
- CUTLER B. & PARR M. 2020: First records of *Icius subinermis* (Araneae: Salticidae) in North America, with notes on the local establishment of this species and its behavior in captivity. – *Peckhamia* **226.1**: 1–5.
- FIERA C., ULRICH W., POPESCU D., BUNEA C. I., MANU M., NAE I., STAN M., MARKÓ B., URÁK I., GIURGINCA A., PENKE N., WINTER S., KRATSCHEMER S., BUCHHOLZ J., QUERNER P. & ZALLER J. G. 2020: Effects of vineyard inter-row management on the diversity and abundance of plants and surface-dwelling invertebrates in Central Romania. – *Journal of Insect Conservation* **24**: 175–185. <https://doi.org/10.1007/s10841-019-00215-0>

- GALLÉ R., GALLÉ-SZPISJAK N., ZSIGMOND A. R., KÖNCZEY B. & URÁK I. 2021: Tree species and microhabitat affect forest bog spider fauna. – *European Journal of Forest Research* **140**: 691–702. <https://doi.org/10.1007/s10342-021-01359-y>
- GALLÉ R., SAMU F., ZSIGMOND A. R., GALLÉ-SZPISJAK N. & URÁK I. 2019: Even the smallest habitat patch matters: on the fauna of peat bogs. – *Journal of Insect Conservation* **23**: 699–705. <https://doi.org/10.1007/s10841-019-00164-8>
- KORÁNYI D., MEZŐFI L. & MARKÓ V. 2017: First record of the jumping spider *Icius subinermis* (Araneae, Salticidae) in Hungary. – *Arachnologische Mitteilungen* **54**: 38–40. <https://doi.org/10.5431/aramit5408>
- NAE A. 2021: A new species of the genus *Harpactea* (Araneae, Dysderidae) from the Carpathians Mountains (Romania). – *Travaux de l'Institut de Spéologie "Émile Racovitza"* **59**: 25–32.
- NAE A., SARBU S. M. & WEISS I. 2018: *Kryptonesticus georgescuae* spec. nov. from Movile Cave, Romania (Araneae: Nesticidae). – *Arachnologische Mitteilungen* **55**: 22–24. <https://doi.org/10.30963/aramit5503>
- NENTWIG W., BLICK T., BOSMANS R., GLOOR D., HÄNGGI A. & KROPF C. 2021: *Spiders of Europe, Version 10.2021*. Available from: <http://araneae.nmbe.ch> (accessed 26 October 2021). <http://doi.org/10.24436/1>
- STANKOVIĆ B. 2012: Contribution to the knowledge of jumping spiders (Araneae: Salticidae) from vicinity of Jagodina, central Serbia. – *Biologica Nyssana* **3**: 37–42.
- WEISS I. & URÁK I. 2000: Faunenliste der Spinnen Rumäniens (Arachnida: Araneae). Available from: <http://www.arachnologie.info/fauna.htm> (accessed 26 October 2021).
- WSC 2021: *World Spider Catalog, Version 22.5*. Natural History Museum, Bern. Available from: <http://wsc.nmbe.ch> (accessed 26 October 2021). <http://doi.org/10.24436/2>