

First record of *Trichoncus aurantiipes* Simon, 1884 (Araneae Linyphiidae) in Italy

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ABSTRACT

The spider *Trichonchus aurantiipes* Simon, 1844 (Araneae Linyphiidae), a species never reported before for Italy, was found, sampled and identified in two different Sicilian locations: Ispica, province of Ragusa, in the south-eastern coast of Sicily, and Castelvetrano, province of Trapani, in the north-western side of the region. This record represents a new genus and a new species for Sicily and Italy. Additional notes on the taxonomy, distribution and biology are provided.

KEY WORDS

Araneae; Araneophauna; Spider; Linyphiidae; Sicily.

Received 24.11.2020; accepted 28.12.2020; published online 15.02.2021

INTRODUCTION

Up to date, there are about 28 different species belonging to the genus *Trichoncus* Simon, 1884 (Araneae Linyphiidae) in the world, mostly distributed in the Mediterranean basin (World Spider Catalog, 2020). Among them, 21 are present in Europe (Netwing, 2020) but only 8 in Italy, excluding the Islands (Pantini & Isaia, 2019): *T. affinis* Kulczynski, 1894, reported for Calabria (Ijland & Helsdingen van, 2019), Friuli Venezia Giulia (Hansen, 2011; Nardi et al., 2019), Toscana (Picchi et al., 2016), Trentino Alto-Adige (Steinberger, 2005; Steinberger, 2007; Ballini, 2009; Steinberger, 2010; Stauder et al., 2010) and Veneto (Hansen, 1995); *T. ambrosii* Wunderlich, 2011, reported for Basilicata (Ijland & Helsdingen van, 2016), Campania (Ijland & Helsdingen van, 2014), Emilia Romagna and Lombardia (Wunderlich, 2011) and Molise (Trotta, 2020); *T. auritus* (L. Koch, 1869) reported for Lom-

bardia (Pantini et al., 2016) and Trentino Alto-Adige (Rief & Ballini, 2017); *T. hackmani* Millidge, 1955, reported for Emilia Romagna (Pesarini, 1991), Lombardia (Pantini, 2000), Toscana (Picchi et al., 2016) and Veneto (Hansen, 1996); *T. helvetica* Denis, 1965 recorded for north Italy (Pesarini, 1994, sources not available); *T. saxicola* (O. Pickard-Cambridge, 1861) reported for Veneto (Hansen, 1995); *T. scrofa* Simon, 1884 reported for Veneto (Di Caporiacco, 1940) and *T. sordidus* Simon, 1884 reported for Basilicata (Ijland & Helsdingen van, 2016), Calabria (Ijland & Helsdingen van, 2016; 2019), Campania (Ijland & Helsdingen van, 2014) and Friuli Venezia Giulia (di Caporiacco, 1922; 1927).

In Europe, the species *Trichoncus aurantiipes* Simon, 1884 is only reported for Majorca (Orgidan et al., 1975) and Portugal (Telfer et al., 2003).

It is instead widely reported for Maghreb: in Morocco it was cited from Aln-es-Sebaa, Mar-

rakech and Sidi Yahia du Rharb (Denis, 1965), in Algeria from Alger (Simon, 1884; Bosman, 2007), Blida, Guelma, Oran, Tizi Ouzou and Tlemcen (Bosman, 2007) and in Tunisia from Ain Draham (Simon, 1885) and Tabarka (Bosman, 2007).

MATERIAL AND METHODS

Both specimens were sampled on sight, preserved and transported in centrifuge tubes and fixed in 75% ethanol (Levi, 1977); subsequently, they were observed under a stereomicroscope for a correct determination and some details were also photographed, using a Canon MP-E 65mm f/2.8 1–5× Macro Photo lens along with a Canon 1300D reflex camera. The program CombineZP was used to fuse images. The samples collected are currently stored in the collection of one of the authors (A. Dentici).

Classification, taxonomic order, nomenclatural arrangement, and presence/absence in the Sicilian region, follow Bosman (2007), Pantini & Isaia (2019) and the World Spider Catalog (2020).

RESULTS

Systematics

Classis ARACHNIDA Lamarck, 1801

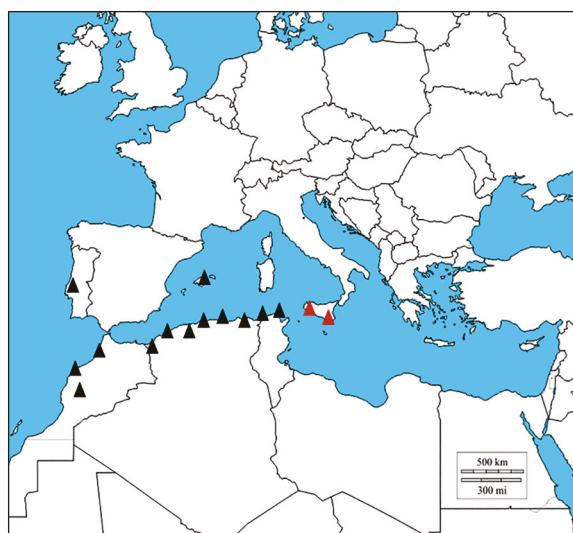


Figure 1. Distribution of *Trichoncus aurantiipes* Simon, 1884,

Ordo ARANEAE Clerck, 1757
Infraordo ARANEOMORPHAE Smith, 1902
Familia LINYPHIIDAE Blackwall, 1859
Genus *Trichoncus* Simon, 1884

Trichoncus aurantiipes Simon, 1884

MATERIAL EXAMINED. Sample A: Italy, Sicily, Ragusa, Pantano Longarini (Mouth), 36°42'15.3"N 14°59'58.0"E, 08.I.2020, 1 male, legit A.Dentici. Sample B: Sicily (Italy), Trapani, Castelvetrano, 37°40'20.6" N 12°47'53.7" E, 02.VII.2020, 1 male, legit A. Barbera.

DISTRIBUTION AND BIOLOGY. Portugal, Morocco, Algeria, Tunisia (Fig. 1).

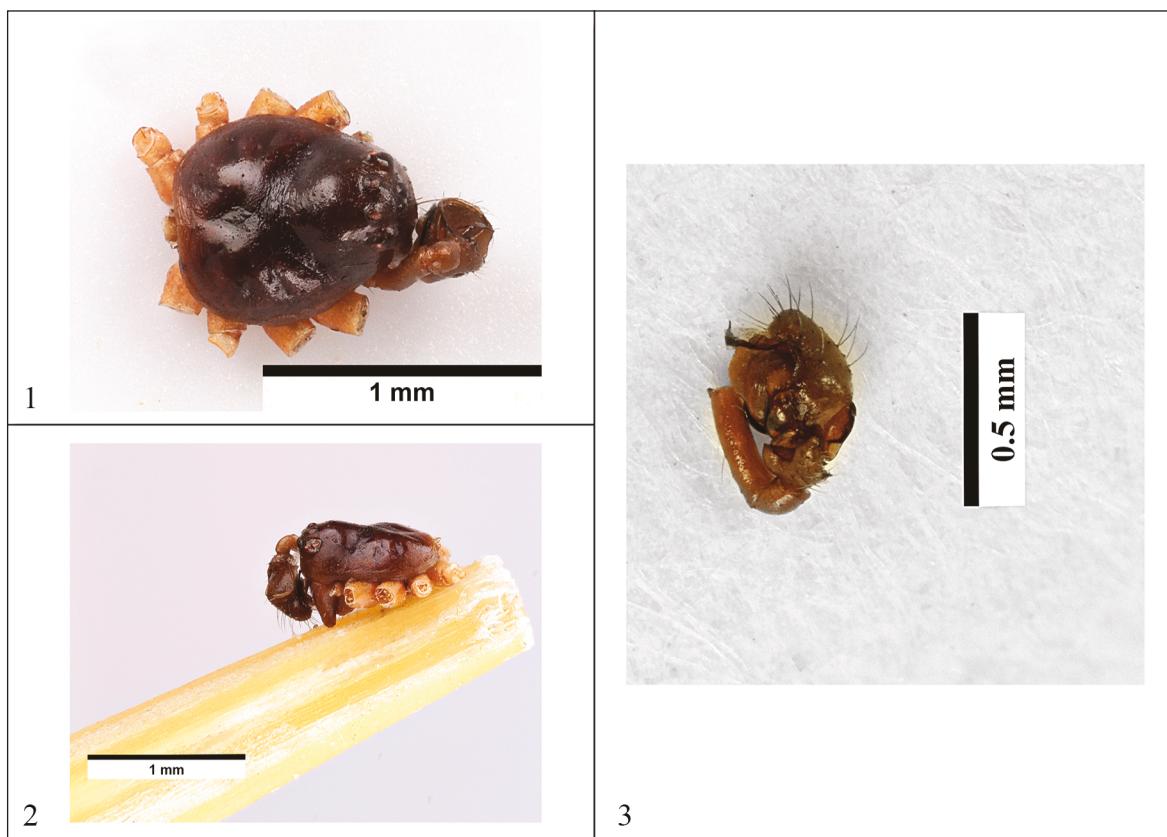
Trichoncus aurantiipes prefers large spaces with low vegetation, often found in grasslands or parks, in some cases with trees, on which, however, it has not been sampled. The specimen from Ragusa was collected among the low vegetation, near to the mouth of Pantano Longarini's swamp lake (Ispica, Ragusa). It has not been observed in other places, its finding close to the water suggests a preference for very humid and wet habitats. The sample B was sampled on sight on low vegetation, in a small private garden (Castelvetrano, Trapani) where there were a lemon tree and some aromatic plants.

REMARKS. Identification follows Denis (1965) and Bosmans (2007), whose description of the male's palp coincides perfectly with the specimens found: “*Tibia with long, semicircular anterolateral, and shorter, obtuse prolateral apophysis, with two small teeth in between, one pointed, one truncate; embolic division with rounded tail-piece, a somewhat twisted anterior apophysis and a gradually narrowing embolus, describing a complete circle*” (Figs. 2–4).

This record represents a new genus and a new species for Sicily and Italy.

ACKNOWLEDGEMENTS

We wish to thank Enrico Schifani (Palermo, Italy) for the detailed photos and his patience, Marco Capritti (Palermo, Italy) for his help and friendship, Paolo Pantini (Bergamo, Italy), Ignazio Sparacio (Palermo, Italy) and Salvatore Surdo (Trapani,



Figures 1–3. *Trichoncus aurantiipes* Simon, 1884, sample A. Fig. 1: prosoma, dorsal view.
Fig. 2: prosoma, lateral view. Fig. 3: palp, external face (photos by E. Schifani).

Italy) for their useful advice, and our families, who are always close to us.

REFERENCES

- Ballini S., 2009. Arborikole und epigäische Spinnen (Arachnida: Araneae) in Laubmischwäldern bei Lana und Burgstall (Südtirol, Italien). *Gredleriana*, 9: 187–212.
- Bosmans R., 2007. Contribution to the knowledge of the Linyphiidae of the Maghreb. Part XII. Miscellaneous erigonine genera and additional records (Araneae: Linyphiidae: Erigoninae). *Bulletin et Annales de la Société Entomologique de Belgique*, 143: 117–163.
- Di Capriacco L., 1922. Saggio sulla fauna aracnologica della Carnia e regioni limitrofe. *Memorie della Società Entomologica Italiana*, 1: 60–111.
- Di Capriacco L., 1927. Secondo saggio sulla-fauna aracnologica della Carnia e regioni limitrofe. *Memorie della Società Entomologica Italiana*, 5: 70–130.
- Di Capriacco L., 1940. Arachniden aus der Provinz Verona (Norditalien). *Folia Zoologica et Hydrobiologica*, 10: 1–37.
- Denis J., 1965. Notes sur les érigonides. XXVIII Le genre *Trichoncus* (Araneae). *Annales de la Société Entomologique de France* (N.S.), 1: 425–477.
- Hansen H., 1995. Über die Arachniden-Fauna von urbanen Lebensräumen in Venedig-III. Die epigäischen Spinnen eines Stadtparkes (Arachnida: Araneae). *Bollettino del Museo Civico di Storia Naturale di Venezia*, 44(1993): 7–36.
- Hansen H., 1996. Über die Arachniden-Fauna von urbanen Lebensräumen in Venedig-IV. Die epigäischen Spinnen der Insel S. Giorgio Maggiore (Arachnida: Araneae). *Bollettino del Museo Civico di Storia Naturale di Venezia*, 46(1995): 123–145.
- Hansen H., 2011. Contributo alla conoscenza dell’aracnofauna di alcuni biotopi naturali del Friuli Venezia Giulia (Arachnida Araneae). *Gortania. Botanica e zoologica*, 32(2010): 115–134.
- Ijland S. & Helsdingen van P.J., 2014. On some spiders (Arachnida, Araneae) from the surroundings of Castellabate, Italy. *Nieuwsbrief SPINED*, 34: 16–33.
- Ijland S. & Helsdingen van P.J., 2016. On some spiders

- (Arachnida, Araneae) of Basilicata and Calabria, Italy. *Nieuwsbrief SPINED*, 36: 25–36.
- Ijland S. & Helsdingen van P.J., 2019. Update on the spiders (Arachnida, Araneae) of Calabria, Italy. *Nieuwsbrief SPINED*, 38: 8–21.
- Levi H.W., 1966. The Care of Alcoholic Collections of Small Invertebrates. *Systematic Zoology*, 15: 183–188.
- Nardi D., Lami F., Pantini P. & Marini L., 2019. Using species-habitat networks to inform agricultural landscape management for spiders. *Biological Conservation*, 239: 1–8. <https://doi.org/10.1016/j.biocon.2019.108275>
- Orghidan T., Dumitrescu M. & Georgescu M., 1975. Mission biospeologique “Constantin Dragan” cl Majorque (1970–1971). *Travaux de l’Institut de Speleologie “Emu Racovitză”*, 14: 9–33.
- Pantini P., 2000. I ragni del Sebino Bergamasco (Italia, Lombardia) (Araneae). *Memorie della Società Entomologica Italiana*, 78: 361–378.
- Pantini P., Isaia M., Mazzoleni F. & Oneto C., 2016. Nuovi dati sui ragni di Lombardia (Arachnida, Araneae). *Rivista del Museo civico di Scienze Naturali “E. Caffi”*, Bergamo 29: 21–44
- Pesarini C., 1991. Primo contributo per una fauna aranologica del ferrarese (Arachnida: Araneae). *Quaderni della Stazione di Ecologia del Civico Museo di Storia Naturale di Ferrara*, 4: 5–34.
- Pesarini C., 1994. Arachnida Araneae. In: Minelli A., Ruffo S. & La Posta S. (Eds.), *Checklist delle specie della fauna italiana*. Calderini, Bologna, 23: 1–42.
- Picchi M.S., Bocci G., Petacchi R. & Entling M.H., 2016. Effects of local and landscape factors on spiders and olive fruit flies. *Agriculture, Ecosystems and Environment*, 222: 138–147. <https://doi.org/10.1016/j.agee.2016.01.045>
- Rief A. & Ballini S., 2017. Erhebung der Spinnen und Webspinnen (Arachnida: Araneae, Opiliones) in den LTSER-Untersuchungsflächen in Matsch (Südtirol, Italien) im Rahmen der Forschungswoche 2016. *Gredleriana*, 17: 173–183.
- Simon E., 1884. Les arachnides de France. Tome cinquième, deuxième et troisième partie. Roret, Paris, 180–885.
- Simon E., 1885. Etudes sur les Arachnides recueillis en Tunisie en 1883 et 1884 par MM. A. Letourneau, M. Sedillot et Valery Mayet, membres de la mission de l’Exploration scientifique de la Tunisie. In: *Exploration scientifique de la Tunisie*. Paris, pp. 1–55.
- Stauder F., Steinberger K.-H. & Ballini S., 2010. Webspinnen und Webspinnen (Arachnida: Araneae, Opiliones). In: *GEO-Tag der Artenvielfalt 2009 im Tauferer Tal nördlich von Bruneck (Pustertal, Gemeinde Bruneck, Südtirol, Italien)*. Gredleriana, 10: 357–361.
- Steinberger K.-H., 2005. Die Spinnen (Araneae) und Webspinnen (Opiliones) der Etsch-Auen in Südtirol (Italien). *Gredleriana*, 4: 55–92.
- Steinberger K.-H., 2007. Spinnen und Webspinnen (Arachnida: Araneae, Opiliones) Südtiroler Flussslandschaften - Auwaldfragmente an Eisack und Rienz (Südtirol, Italien). *Gredleriana*, 7: 171–194.
- Steinberger K.-H., 2010. Spiders of arable land in the Eisack- and the Puster Valley (South Tyrol, Italy) (Arachnida: Araneae). *Gredleriana*, 10: 227–238.
- Telfer G., Bosmans R., Melic A. & Rego F., 2003. The spiders of Portugal: some additions to the current checklist (Araneae). *Revista Iberica de Aracnologia*, 7: 251–255.
- Trotta A., 2020. Spiders from Molise (Italy): state of knowledge, new faunistic data and taxonomic notes (Arachnida: Araneae). *Fragmenta entomologica*, 52: 77–83. <https://doi.org/10.4081/fe.2020.415>
- World Spider Catalog, 2020. World Spider Catalog. Version 21.5. Natural History Museum Bern, online at <http://wsc.nmbe.ch>, accessed on 24/11/2020. <https://doi.org/10.24436/2>
- Wunderlich J., 2011. Extant and fossil spiders (Araneae). *Beiträge zur Aranalogie* 6: 1–640.