

SHORT COMMUNICATION

THE FIRST RECORDS OF *MYRMARACHNE FORMICARIA* (ARANEAE, SALTICIDAE) IN THE AMERICAS

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ABSTRACT. A population of *Myrmarachne formicaria* has been discovered in northeastern Ohio. There is reason to believe that this species, which is widespread in Europe, is a recent accidental introduction to this area. This species seems to be well established, having been found with increasing frequency over the past three years. The species appears to be common in a variety of situations, including occasionally inside buildings.

Keywords: *Myrmarachne*, ant-like, introduced species, Ohio

There have been several recent reports of spiders accidentally introduced that have established local populations in North America. These include *Linyphia triangularis* (Clerck 1757) (Jennings et al. 2002); *Synageles venator* (Lucas 1836) (Hutchinson & Limoges 1998); and *Zoropsis spinimana* (Dufour 1820) (Griswold & Ubick 2001). We have discovered yet another such species, *Myrmarachne formicaria* (De Geer 1778). This find represents the first observation of a member of this genus in North America. The large genus *Myrmarachne* (Araneae, Salticidae) includes over 200 species, with representatives on every biogeographic region except the Nearctic.

The first specimen records of *M. formicaria* from North America have all been from Ohio, USA: from Warren, Trumble County on 16 August 2001; the J.H. Barrow Field Station, Portage County on 15 September 2002; and at a residence near Peninsula, Summit County. Additional individuals have been observed by the third author in and around the J.H. Barrow Field Station and the Peninsula residence during the summers of 2003 and 2004. The species appears to be fairly common and is active during the warm months of the year in open areas as well as in buildings. It is sometimes associated with the local ants of the genus *Formica*. It is the only ant-like North American jumping spider in which the male chelicerae project forward more than 50% of the carapace length, and in which the female palpal tarsus is dorsoventrally flattened and bent downward distally.

The date and origin of this presumed introduction are unknown. It seems likely that this species is a recent introduction because it is a relatively large (body length ~ 6 mm), conspicuous and distinctive species, it is hard to imagine that it could have been previously missed. The fact that this spider is day active and prefers open sunny environments, combined with its active foraging behavior make it unlikely that the species would have been overlooked for an extended period. According to Lockett & Milledge (1951) "It is a long slender spider with a superficial resemblance to the ant *Formica rufa* Linn. It does not jump, but runs about in the grass, etc., sometimes in company with ants. It is adult in May–July, and is recognisable at once in the field." Other species in the genus *Myrmarachne* are said to associate with particular species of ants (Edmunds 1978). *Myrmarachne formicaria* does appear somewhat similar to one other ant-like salticid that can be found in Ohio, *Sarinda hentzi* (Banks 1913). A search through extant historical collections of *S. hentzi* from Ohio has not yielded additional specimens of *M. formicaria*. It is true, however, that relatively few spider researchers have investigated this portion of Ohio until recently.

Myrmarachne formicaria is a Palearctic species (Platnick 2004). It is tempting to speculate that this species was inadvertently introduced into Ohio from Eurasia via human activities. This is the second species of Eurasian ant-like salticid to be

established in North America in recent years. *Synageles venator* (Lucas 1836) was first noted in the Montreal area in the early 1990's and is now a common house spider in southeast Quebec (Hutchinson & Limoges 1998; Paquin & Dupérré 2003). Possibly *M. formicaria* was imported with planting materials or horticultural plants. The species seems to be well established in Ohio. Individuals have now been observed in four successive years. The fact that the species now occupies a span of over 60 km in localities from three counties in NE Ohio suggests that the species may be expanding its range.

Material Examined.—USA: *Ohio*: Portage County: J.H. Barrow Field Station (41°18'N, 81°08'W), 15 September 2002, R. Bradley, 1 ♀, 1 ♂ (Ohio Spider Survey #SPM010921); Trumble County: Warren (41°13'N, 80°50'W) in residence, 16 August, 2001, T. Robinson, 1 ♂ (Ohio Spider Survey #SPM008004).

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