

First record of *Myrmarachne cornuta* (Badcock 1918) (Araneae: Salticidae: Astioida: Myrmarachnini) in Vietnam

Truong Van Tam¹, Nguyen Ngoc Han², Truong Van Anh², David Edwin Hill³

¹ Center for Vocational Education - Continuing Education, Cho Lach District, Ben Tre Province, Vietnam, *email* trvtam228@gmail.com

² Student of Center for Vocational Education - Continuing Education, Cho Lach District, Ben Tre Province, Vietnam

³ 213 Wild Horse Creek Drive, Simpsonville, South Carolina 29680, USA, *email* platycryptus@yahoo.com

Here we provide the first record of the ant-mimic jumping spider *Myrmarachne cornuta* (Badcock 1918) in Vietnam. This extends the known range of this species, endemic to tropical Sunda (Figure 1). Three males and one female of this species were collected from the foliage of coconut trees (*Cocos nucifera*) in Ben Tre Province, Vietnam (Figure 2). Our specimens were similar to those described by Yamasaki & Ahmad (2013), as well as specimens recently documented in *iNaturalist* (Figure 3), but available equipment did not allow us to count the cheliceral teeth of the males. However, the RTA of males is distinctive. With this record, 12 *Myrmarachne* species have now been reported from Vietnam.



Figure 1. Distribution of *Myrmarachne cornuta* in southeast Asia. Badcock described this species from specimens collected by the Annandale-Robinson expedition. Unnumbered records correspond to photographs posted in *iNaturalist*.

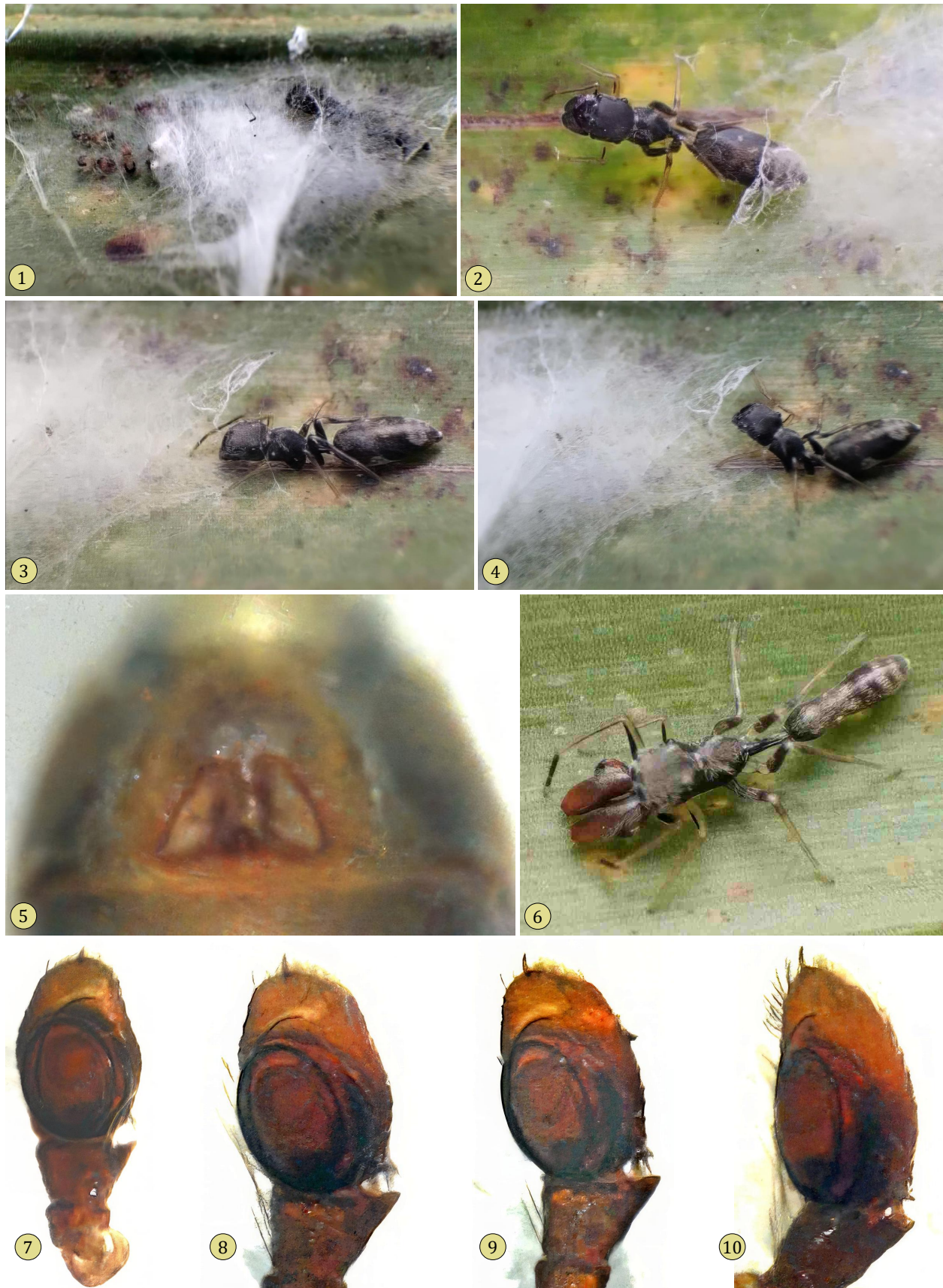


Figure 2. *Myrmarachne cornuta* from Ben Tre Province, Vietnam. **1**, ♀ in nest with hatchlings. **2-4**, ♀ near her nest. **5**, Ventral view of ♀ epigynum. **6**, Adult ♂. **7-10**, Four ventral views of the left ♂ pedipalp.



Figure 3. Records of *Myrmarachne cornuta* posted in *iNaturalist*. **1**, ♀, Singapore, 17 JUN 2022, © airgel, obs. 122627369. **2**, ♂, Malaysia, APR 2018, © Richard Ong, obs. 31771705. **3-4**, ♂, Lankat Regency, Sumatra, 10 MAR 2024, © Valentina L., obs. 204308417. **5-6**, ♂, Lankat Regency, Sumatra, 10 MAR 2024, © Bridgette Gower, obs. 205810621. All photographs used and modified under a [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.

As noted by Badcock (1918), the anterior segment of the pedicel of *Myrmarachne cornuta* is much shorter than the long posterior segment. The slender body shape associated with ant mimicry is thought to significantly reduce both the jumping distance and the ability of these spiders to capture prey. Of seven *Myrmarachne* species recently studied by Hashimoto et al. (2020), *M. cornuta* had the worst shape factor and the shortest jumping distance.

References

- Badcock 1918.** H. D. Badcock. 23 OCT 2017. Ant-like spiders from Malaya collected by the Annandale-Robinson Expedition 1901-02. Proceedings of the Zoological Society of London 87 (3/4, 1917): 277-321.
- Edmunds & Prószyński 2003.** Malcolm Edmunds, Jerzy Prószyński. On a collection of *Myrmarachne* spiders (Araneae: Salticidae) from peninsular Malaya. Bulletin of the British Arachnological Society 12 (7): 297-323.
- Hashimoto et al. 2020.** Yoshiaki Hashimoto, Tomoji Endo, Takeshi Yamasaki, Fujio Hyodo, Takao Itioka. Constraints on the jumping and prey-capture abilities of ant-mimicking spiders (Salticidae, Salticinae, *Myrmarachne*). Scientific Reports 10 (18279): 1-11.
- Hill & Otto 2015.** David E. Hill, Jürgen C. Otto. 4 SEP 2015. Exasperating taxonomy of the colourful ant-mimic *Myrmarachne exasperans* (Araneae: Salticidae: Astioida: Myrmarachinae). Peckhamia 131.1: 1-5.
- Yamasaki & Ahmad 2013.** Takesha Yamasaki, Abdul Hamid Ahmad. 18 SEP 2013. Taxonomic study of the genus *Myrmarachne* of Borneo (Araneae: Salticidae). Zootaxa 3710 (6): 501-556.