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Field notes on the jumping spider *Telamonia dimidiata* in Maharashtra (Araneae: Salticidae: Plexippina)

Javed Ahmed[1], Rajashree Khalap[2], Somnath Kumbhar[3], David E. Hill[4], Richard J. Pearce[5] and Krishna Mohan[6]

[1] Panchavati Housing Society, Building No. A/3, Flat No. H/8; Opp. Police Camp, Vijay Nagar, Marol Maroshi Road, Andheri (East), Mumbai 4000, India, *email* curiocritters@gmail.com
[2] 5-A, Sagar Sangeet, 58 Shahid Bhagat Singh Marg, Colaba, Mumbai 400005, India, *email* rajashree.khalap@gmail.com
[3] Room No. 10, Ganesh Krupa Chawl, Near Ram Mandir, New Chikanghar, Rambaugh Lane No. 4, Kalyan (W) 421301, India, *email* wildobservation@gmail.com
[4] 213 Wild Horse Creek Drive, Simpsonville, SC 29680-6513, USA, *email* platycryptus@yahoo.com
[5] Moreton Morrell College, Warwickshire, UK, *email* rpearce@warwickshire.ac.uk
[6] Prabhu Hospital, Hospital Cross Road, Moodubidire 574227, India, *email* drkrishi@gmail.com

Summary: Prey records and overnight retreats of the salticid *Telamonia dimidiata* in Maharashtra are documented with photographs.

Key words: araneophagy, India, Konkan Coast, nocturnal retreat, prey records, *Rhene*

Plexippina is a large and primarily Afroeurasian salticid clade of about 493 species in 32 genera, including both large *Hyllus* and cosmotropical *Plexippus* species (Maddison 2015). This group includes many representatives in the salticid fauna of tropical Asia, from India to Indonesia (Hill 2010). The large plexippine genus *Telamonia* Thorell 1887 includes 41 named species, most from tropical southeast Asia (WSC 2019). Few are known from India, however, but *T. dimidiata* (Simon 1899) is a common and dominant species dwelling on foliage in wooded areas extending east from India to Sumatra (Sudhikumar et al. 2005; Sen et al. 2015; Roy et al. 2016; WSC 2019; iNaturalist 2019). As predators *T. dimidiata* may have a major impact on the arthropod community in these areas. In fact a number of sympatric derbid planthoppers of the genus *Rhotana* may closely mimic this particular species (Hill et al. 2019). However field studies of *T. dimidiata* are still lacking. Here we document the use of silk retreats as well as records of predation by these spiders.

Structure and use of temporary retreats. Adult spiders of both sexes were observed inhabiting small silken nocturnal retreats constructed between leaves of crepe jasmine (*Tabernaemontana divaricata*), twoleaf nightshade (*Lycianthes stellata*) and golden duranta (*Duranta erecta*) in the garden surrounding the holiday home of one of the authors (RK), located at Nagaon village in Raigad District, Maharashtra, Western India, on the Konkan coast (Figure 1). One female built a new retreat every night over a period of three days, and abandoned retreats were not dismantled or consumed. Retreats were almost always constructed between two parallel leaves at heights ranging from 1.3 to 2 metres above ground level. These structures were similar to the silk constructs of *Hyllus semicupreus* described by Ahmed & Satam (2015), but were smaller and less robust.

Figure 1. Two female and one male *Telamonia dimidiata* in their nocturnal retreats at Nagaon Village. **1,** Female resting between two crepe jasmine leaves. **2,** Adult male in shelter beneath a crepe jasmine leaf. **3,** Retreats were found in plants forming a double row of circular hedges surrounding a well. **4-8,** Female in three different temporary retreats on three successive nights. The female rested under a silk platform constructed below a leaf of either twoleaf nightshade (4-5) or golden duranta (6-8). All retreats were constructed 1.3-2 metres above the ground. Photographs by Rajashree Khalap.

Prey records. Many salticids are known to prey on other spiders (e.g., Jackson & Hallas 1986; Jackson 2000; Ahmed et al. 2015; Hill 2018a, 2018b), including other salticids, and *Telamonia dimidiata* is no exception. Records of predation by *T. dimidiata* in Maharashtra (Figure 2:1-14) and Singapore (Figure 2:15) are shown here. Since *T. dimidiata* feed on a wide variety of insects and spiders, including large dragonflies (Preston-Mafham & Cahill 2000; Raut 2015; Nasir 2016) the vulnerability of one female to an attack by a salticid of the genus *Rhene* (Figure 3) is surprising. As the *Rhene* fed from the rear this *T. dimidiata* struggled initially but gradually lost all mobility, nonetheless retaining the ability to scan with her AME (anterior medial eyes). A video record of this eye movement is available (Kumbhar 2019; Figure 3:9-12). This suggests that the nerves and muscles associated with movement of the AME may be more resistant to toxins in the venom of *Rhene*.

Figure 2 (continued on next page). Prey records for *Telamonia dimidiata*. **1-3,** Female feeding on another *T. dimidiata*. **4,** Male feeding on a fly (Diptera: Brachycera). **5,** Female feeding on a fly (Diptera: Brachycera). **6-7,** Female feeding on a male salticid of the genus *Asemonea*. **8,** Female feeding on a salticid.

Figure 2 (continued from previous page). Prey records for *Telamonia dimidiata*. **9-10,** Female feeding on a salticid of the genus *Phintella*. **11,** Female feeding on a *Platensina* sp., a tephritid fly. **12-13,** Female feeding on a salticid. **14,** Female feeding on a female araneid spider of the genus *Neoscona*. **15,** Female feeding on a salticid of the genus *Epeus*. Photographs 1-10, 14 taken by Somnath Kumbhar at Kalyan in Thane District, Maharashtra, India. Photographs 11-13 taken by Rajashree Khalap at Nagaon Village, Maharashtra. Photograph 15 taken at Neo Tiew Crescent, Singapore by Marcus Ng, © Marcus Ng (budak), posted at https://www.inaturalist.org/photos/12468697, adapted under a Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license.

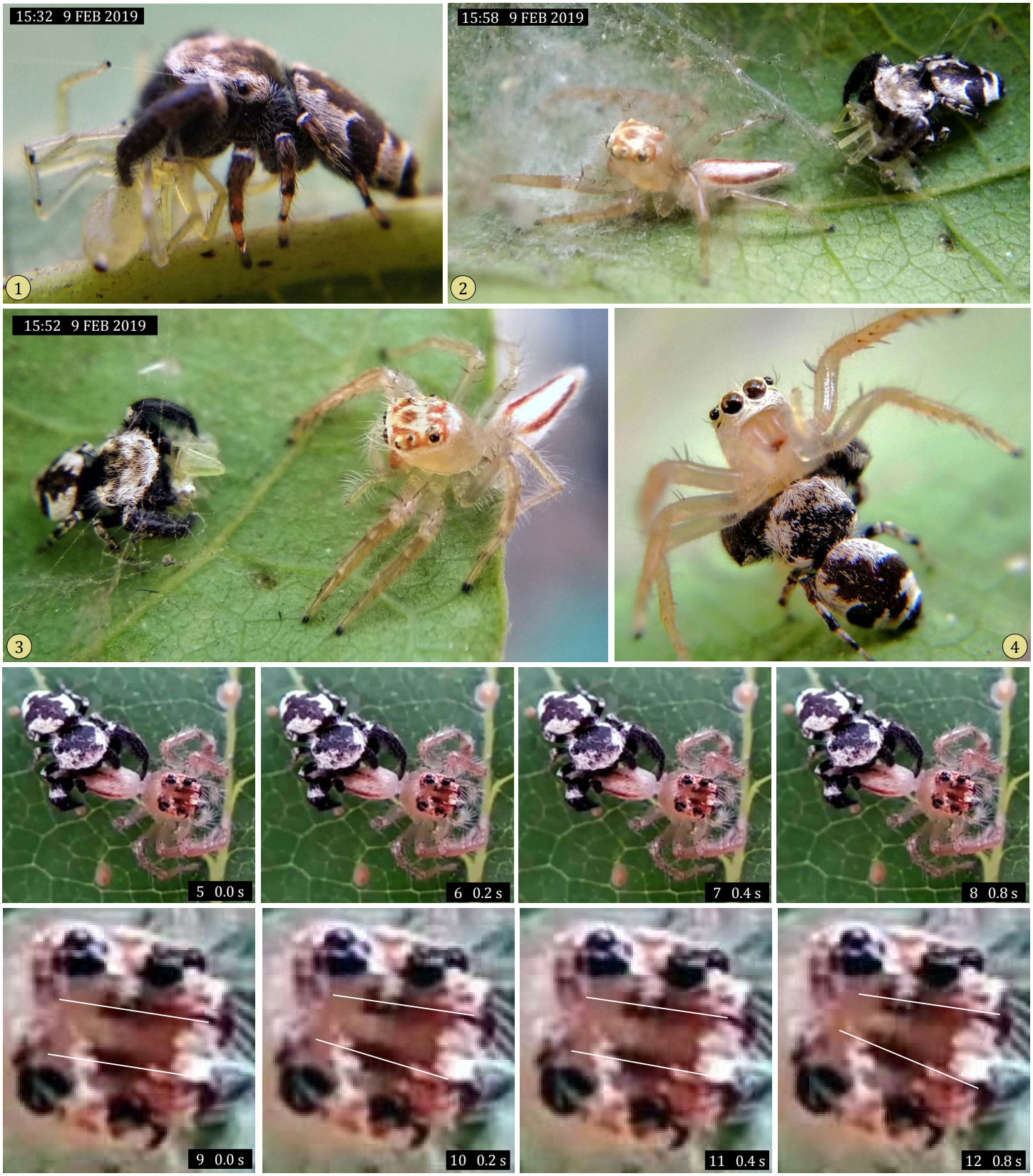

Figure 3. Encounter between an adult female *Telamonia dimidiata* and a salticid of the genus *Rhene* at Kalyan in the Thane District, Maharashtra, India (9 FEB 2019). **1,** The *Rhene* was feeding on an *Asemonea* as it wandered on a branch occupied by the retreat of the *Telamonia*. **2,** The *Rhene* approached the *Telamonia*. **3,** The *Telamonia* left her retreat and faced the *Rhene*, at times with legs I extended. **4,** The *Rhene* dropped the *Asemonea* and captured the *Telamonia* from the front. **5-12,** Selected frames (5-8) with detailed views (9-12) of the *Telamonia* from a video of subsequent feeding by the *Rhene*. **9-12,** Lines indicate axes of the AME of the *Telamonia*, which continued to actively scan as the *Rhene* fed. Images by Somnath Kumbhar.

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