## First reports of the Alida Angle from Tirupati, India

India has three representatives of the genus of Caprona, family Hesperiidae, subfamily Pyriginae, tribe Tagiadini; namely, C. agama, C. ransonnettii, and C. alida. To the best of our knowledge, Caprona alida vespa De Nicéville, 1891 has been documented from the Eastern Ghats with photographic evidence only from Madurai and Thiruvannamalai districts of Tamil Nadu in India (Kunte et al. 2020) and has not been reported in surveys conducted in the state of Andhra Pradesh. Surveys conducted at the Nagalapuram Hills (Best 1954), Nagarjuna Srisailam Tiger Reserve (Rao et al. 2004), Warangal (Samatha et al. 2012), and Nelapattu Bird Sanctuary (Gupta & Rao 2013) have not reported the presence of Caprona alida vespa. Here, we report six new occurrence









Photographs of *Caprona alida vespa* from this study. Photographs correspond to sightings in Table 1. UP—Upperside | UN—Under side | A—Sighting 1 UP view | B—Sighting 5, Individual 1 UP view | C—Sighting 3 UN view | D—Sighting 5, Individual 2, UN view. © Harsha Kumar.

records of the species with photographic records from Tirupati and Chittoor, Andhra Pradesh. To the best of our knowledge, these are the first records from Andhra Pradesh.

Individuals of Caprona alida vespa were identified with a combination of opportunistic sightings and targeted searching in potential habitats during the months of August,

September, and November between 2017 and 2019. All our records of the species were from low elevation (0–200 m) dry open scrub and low-lying rocky outcrops found in Tirupati described by their Acacia sp., Ixora pavetta, Dodonaea viscosa, Memecylon sp., Maytenus emarginata, Zizyphus sp., and Grewia sp. associations. Since there is seasonal variation in members of this

Table 1. Sightings of Caprona alida vespa from Tirupati.

Sighting number	Date	No of individuals	Locality	GPS
1	17.ix.2017	1	Mangalam	13.6639 N, 79.4814 E
2	19.x.2019	1	Kalyani Dam	13.6566 N, 79.2696 E
3	2.xi.2019	1	Mamanduru Forest	13.7541 N, 79.4682 E
4	8.xi.2019	1	Mamanduru Forest	13.7548 N, 79.4668 E
5	9.xi.2019	2	Mamanduru Forest	13.7537 N, 79.4648 E

Table 2. Key to identifying species of *Caprona* in southern India. WSF—Wet Season Form | DSF—Dry Season Form | UPF—Upper fore-wing | UPH—Upper hind-wing.

Feature	Golden Angle Caprona ransonnettii potiphera	Spotted Angle Caprona agama agama	Alida Angle Caprona alida vespa
Basal colors of wings and spots - WSF	UPF dark brown and UPH heavily marked with brown/ golden spots	UPF black and UPH heavily marked with white spots	UPF dark brown, white spots on UPF bordered with black and UPH heavily marked with black spots
Basal colors of wings and spots - DSF	UPF light brown and UPH weakly marked - DSF	UPF brown, white spots on UPF bordered with black and UPH weakly marked - DSF	UPF light brown, white spots on UPF bordered with black and UPH heavily marked with dark brown spots
UPF cell markings and color	White hyaline spot at base of cell on UPF absent - DSF and WSF	White hyaline spot at base of cell on UPF: a) absent - DSF; b) present - WSF	White hyaline spot at base of cell on UPF present - DSF and WSF
UPF cell markings and color	Markings at end cell on UPF absent - DSF and WSF	White hyaline crescent spot on cell end of UPF: a) absent - DSF; b) present - WSF	Brown opaque crescent spot on cell end of UPF present - DSF and WSF

genera in terms of appearance, we prepared a general key to distinguish between members, compiling keys from Swinhoe (1912-1913), Blyth (1957), Yutaka (2012), and Kunte et al. (2020).

Our findings illustrate a significant range extension of *Caprona alida vespa* of close to 200 km from its previous records at Thiruvannamalai, Tamil Nadu. It is very likely that the Alida Angle *Caprona alida vespa* 

is present in districts other than Chittoor within the state of Andhra Pradesh, but has escaped the attention of most butterfly watchers. It is also likely to have been misidentified as one of the other *Caprona*. This work illustrates the need for systematic survey of many taxa including butterflies in the low lying, dry rocky outcrops of Eastern Ghats in Andhra Pradesh reinforced by serious specimen collection drives.

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