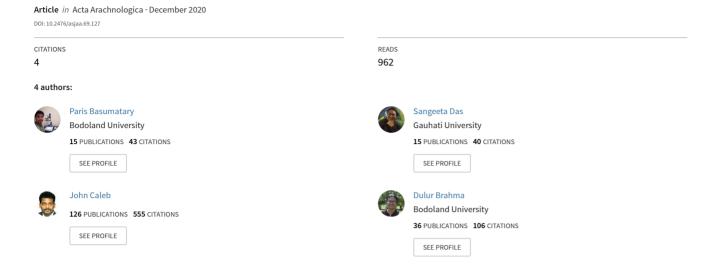
# First record of the genus Chinattus Logunov 1999 with the description of a new species from India (Araneae: Salticidae: Hasariini)



## First record of the genus *Chinattus* Logunov 1999 with the description of a new species from India (Araneae: Salticidae: Hasariini)

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**Abstract** — A new jumping spider species, *Chinattus prabodhi* sp. nov. is described based on female specimens collected from Assam State of India. Females of the new species can be distinguished from other known congeners by the epigyne lacking a distinctive circular median pocket, the long, narrow and arching copulatory ducts, aligned posteriorly at the copulatory openings, and the oblong spermathecae. With the discovery of the new species, the genus *Chinattus* Logunov 1999 is reported for the first time from India.

Key words — Assam, Bhumka, Jharbari, taxonomy.

#### Introduction

The jumping spider genus *Chinattus* was erected by Logunov (1999) with the type species *Habrocestoides szechwanensis* Prószyński 1992. It comprises of 17 accepted species (World Spider Catalog 2020), and is currently placed within the tribe Hasariini of the subfamily Salticinae (Maddison 2015). The present paper reports the genus for the first time from India with discovery of a new species, *C. prabodhi* sp. nov. from Jharbari Forest Range of Chirang Reserve Forest, Assam.

#### **Materials and Methods**

Field photographs were taken with a Sony DSC HX90V camera. The specimens were preserved in 80% ethanol and microphotographs were made under a Leica M205A stereomicroscope equipped with a Leica DFC500 HD camera enabled with a Leica Application Suite (LAS) version 3.8. Measurements are given in millimeters (mm). The types are deposited in the National Zoological Collections, North Eastern Regional Centre, Shillong, Zoological Survey of India (NERC – ZSI). Abbreviations used in the text: ALE = anterior lateral eye; AME = anterior median eye; CD = copulatory duct; FD = fertilization duct; PLE = posterior lateral eye; PME = posterior median eye.

Taxonomic account: *Chinattus* Logunov 1999

Type species: *Habrocestoides szechwanensis* Prószyński 1992 Diagnosis: For detailed diagnosis see Logunov (1999).

### *Chinattus prabodhi* sp. nov. (Figs. 1–11)

**Type series.** Holotype: ♀ (IV/ARA/ERS–39): Jharbari Forest Range, Bhumkah, Kokrajhar (26.1873 N, 90.1758 E), 74 m a.s.l., 8 August 2019, leg. P. Basumatary. Paratype: 1♀ (IV/ARA/ERS–40), collected along with the holotype.

**Etymology.** The species is named for Prabodh Kumar Brahma, a forest officer and keen nature lover, in recognition of his support in hosting and encouraging our field research work on spiders.

**Diagnosis.** The female of *C. prabodhi* sp. nov. resembles *C. szechwanensis* (Prószyński 1992) and *C. undulatus* (Song & Chai 1992) in genital morphology, but is distinguishable by having oblong spermathecae, long and arching CDs pointing posteriorly along the copulatory openings (Figs. 8–11), whereas spermathecae is elongated, CDs short without arching and directed laterally in *C. szechwanensis* (see figs. 27–28 in Peng & Xie 1995) and *C. undulatus* with globular spermathecae, narrow CDs folded medially (see figs. 5B–C in Song & Chai 1992).

**Description.** Female holotype (IV/ARA/ERS–39). Total length: 5.77 long; carapace: 2.46 long, 1.94 wide; abdomen: 3.31 long, 2.31 wide. Carapace dark brown, covered with greyish hairs (Fig. 3). Anterior and posterior eyes surrounded by reddish-brown orbital setae. Clypeal region dark brown with a row of white hairs below the anterior eyes and margin of the carapace (Fig. 5). Eye measurements: AME 0.26, ALE 0.14, PME 0.09, PLE 0.17, ALE–ALE 0.52, PME–PME 1.01, PLE–PLE 0.91, PME–PLE 0.15. Clypeus height: 0.35. Sternum oval, reddish brown. Chelicerae red-





Figs. 1–2. General morphology of *Chinattus prabodhi* sp. nov.: 1, female feeding on a water strider, live habitus, dorsal; 2, ditto, lateral view.

dish brown with two promarignal and one retromarginal teeth; labium and maxillae reddish brown (Figs. 6–7). Legs yellowish-brown covered with greyish hairs (Fig. 4). Leg measurements: I 3.53 (1.03, 0.68, 0.72, 0.67, 0.43), II 2.79 (0.99, 0.34, 0.47, 0.57, 0.42), III 3.82 (1.13, 0.68, 0.83, 0.72, 0.46), IV 4.27 (1.29, 0.70, 0.86, 0.88, 0.54). Abdomen yellowish-brown, covered with pale brownish hairs; dorsum with three white patches (two along the median region and one at the posterior end of abdomen); anterior region and lateral sides lined with a fringe white hair; venter brownish with pale brownish hairs; spinnerets brownish (Figs. 1–3). Epigyne sclerotized with a pair of copulatory openings placed laterally; spermathecae oblong; CDs long, slightly arching and with a pair of glandular ducts aligned posteriorly; FDs arise anteriorly from the spermathecae (Figs. 8–11).

Male. Unknown.

**Natural history.** The species was found along moist and damp bank of the perennial Bhumka stream. The bank is mostly covered with leaf litter, under thick canopy cover and the forest type is moist deciduous. They were observed feeding on water striders (Figs. 1–2)

Distribution. India (Assam).

**Remarks.** Though the species lacks the epigynal rounded pocket present in most congeners, it however, shares other diagnostic characters of the genus having unidentate chelicerae, leg formula 4312, widely separated copulatory openings, transversely arranged copulatory ducts and the presence of glandular ducts. The species, therefore has been placed in *Chinattus*.

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#### References

Logunov, D. V. 1999. Redefinition of the genus *Habrocestoides* Prószyński, 1992, with establishment of a new genus, *Chinattus* gen n. (Araneae: Salticidae). Bull. Br. Arachnol. Soc., 11: 39–149.

Maddison, W.P. 2015. A phylogenetic classification of jumping spiders (Araneae: Salticidae). J. Arachnol., 43: 231–292.

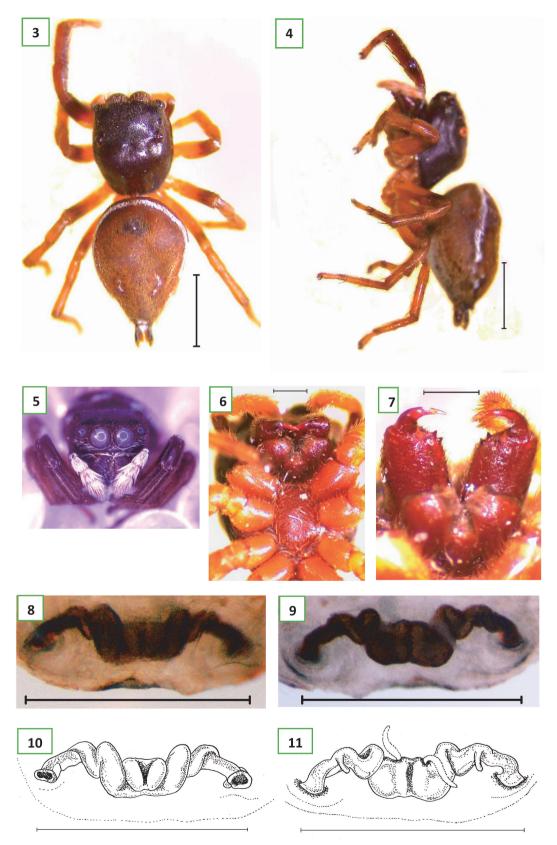
Prószyński, J. 1992. Salticidae (Araneae) of the Old World and Pacific Islands in several US collections. Ann. Zool., Warszawa, 44: 87–163.

Peng, X. J. & Xie, L. P. 1995. Spiders of the genus *Habrocestoides* from China (Araneae: Salticidae). Bull. Br. Arachnol. Soc., 10: 57–64.

Song, D. X. & Chai, J. Y. 1992. On new species of jumping spiders (Araneae: Salticidae) from Wuling Mountains area, southwestern China. J. Xinjiang Univ., 9: 76–86.

World Spider Catalog 2020. World Spider Catalog. Version 21.5. Natural History Museum Bern. Available from http://wsc.nmbe.ch (accessed 27 August, 2020)

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**Figs. 3–11.** General morphology and genitalia of *Chinattus prabodhi* sp. nov.: 3, habitus, dorsal; 4, ditto, lateral; 5, head, frontal; 6, sternum, ventral; 7, chelicerae, ventral; 8, epigyne, ventral view; 9, vulva, dorsal; 10, epigyne, ventral; 11, vulva, dorsal. Scale bars: 3–4, 2 mm; 5–11, 0.5 mm.