Salticidae from the Himalayas. First description of the female *Chinattus validus* (XIE, PENG & KIM, 1993) (Araneae: Salticidae)¹

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ABSTRACT. Hitherto unknown female of the species *Chinattus validus* (XIE et al. 1993) is described and a new diagnosis based on both sexes is provided. *C. validus* is reported for the first time from the Himalayas.

Key words: arachnology, taxonomy, jumping spiders, new record, Nepal, Bhutan.

INTRODUCTION

The genus *Chinattus* was established by Logunov (1999), by the exclusion of the species allocated in the genus *Habrocestoides* Prószyński 1992, and comprises 12 species (Platnick 2014). *Chinattus* is related to *Habrocestum* Simon 1876, and *Phintella* Bösenberg & Strand 1906 (Logunov 1999). *C. validus* was described as *Habrocestoides validus* by Xie, Peng, Kim in 1993, and later by Peng & Xie (1995) from Hunan Province (China). Until now the state of knowledge of *C. validus* was incomplete, because of lack of information on a female. The species has not been previously recorded from the Himalayas.

The aim of this study is to redefine the species and describe the female for the first time, providing diagnostic drawings and photos.

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MATERIAL AND METHODS

Material was provided by Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt a. M. (SMF), and Naturhistorisches Museum, Basel (NHMB). A Nikon D5100 digital camera, attached to the stereomicroscope Nikon SMZ 1000 and Helicon Focus software were used for photographing specimens. Measurements are given in millimeters millimeters, and were taken using MultiScan software.

Abbreviations used: AEW – anterior eye width, ag – accessory glands, AL – abdomen length, ALE – anterior lateral eyes, AME – anterior medial eyes, CH – cephalothorax height, CL – cephalothorax length, ClypH – clypeus height, co – copulatory openings, CW – cephalothorax width, DAM – diameter of anterior medial eyes, e – embolus, EFL – eye field length, F – female, id – insemination ducts, L – leg, M – male, m – metatarsus, PEW – posterior eye width, PLE – posterior lateral eyes, PME – posterior median eyes, rta – retrolateral tibial apophysis, s – spermathecae, t – tarsus.

Chinattus validus (XIE, PENG & KIM, 1993) (Figs 1-14)

Habrocestoides v. XIE et al. 1993: 25; H. v. PENG & XIE, 1995: 62, 64; C. v. LOGUNOV 1999: 148.

MATERIAL

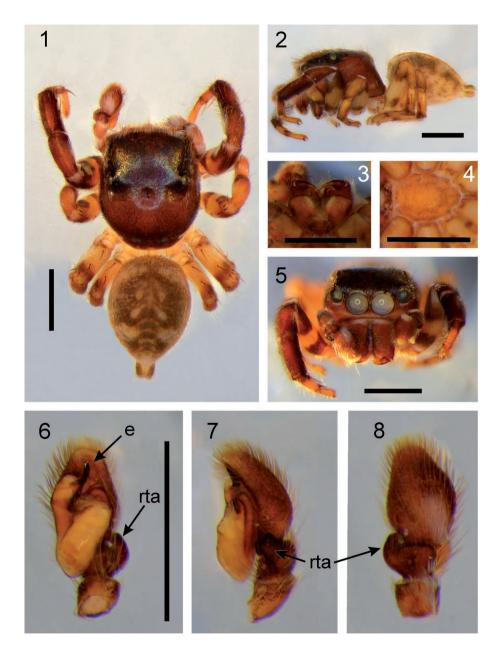
Bhutan: 2F, 2M (NHMB), Changra, 18 km S Tongsa, 1900 m, 22 Jun. 1972; Nepal: 1F (SMF), Taplejung Distr., between Hellok and lower Gunsa Khola, 1620–2000 m, tree-rich cultural land, 18 May 1988, Martens & Schawaller; 1M (SMF), Lamjung Distr., Marsyandi, 1100–1250 m, cultural land with trees, Bahundanda, 10 April 1980, Martens & Ausobsky; 1M (SMF), Gorkha Distr., Darondi Khola below Barpak, 1500–1800 m, cultural land, *Gebüsch*, 12 Aug. 1983, Martens & Schawaller; 1M (SMF), Taplejung Distr., Kabeli Khola, Yamputhin, 1650–1800 m, cultural land mixed forest/*Bambus*, 3–4 Sept. 1983, Martens & Daams; 1F (SMF), Gorkha/Dhading Distr., Gorlabesi – Dhoban, 30 Jul. 1983, 1000–1100 m, mixed forest in gorges, Martens & Schawaller; 1F (SMF) Taplejung Distr., Gunsa Khola, [near] Kibla and Amjilesa 2400–2600 m, Berlese, deciduous forest 12 Sept.1983, Martens & Schawaller.

Diagnosis

According to PENG & XIE (1995) males differs from *C. sinensis* by structure of pedipalp: the shape of tegulum, slender embolus (fig. 6), and robust tibial apophysis (figs. 6–8). The female of *C. validus* could be recognize by very characteristic internal structure of epigynum, from similar *C. chichila* Logunov 2003, can be separated by short insemination ducts and arrangement of duct-like spermathecae (fig. 14).DESCRIPTION

Male (figs. 1-8). XIE *et al.* (1993) and PENG & XIE (1995) gave a *description* of the male holotype and diagnostic drawings; in the present paper we provide images of male to provide more data useful for identification of the species.

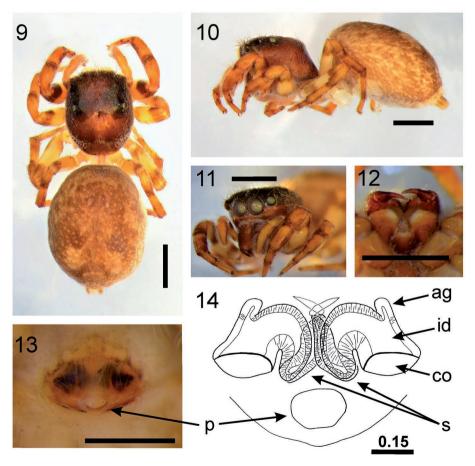
Female. Cephalothorax brown, rounded (outline from above), its upper surface smooth; sides covered by white hairs (fig. 9), posterior thoracic slope distinctive (fig.



1-8. Chinattus validus, male: 1. Dorsal view. 2. Lateral view. 3. Cheliceral dentition, endites and labium. 4. Sternum. 5. Frontal view. 6. Palpal organ, ventral view. 7. Palpal organ, retro-lateral view. 8. Palpal organ, dorsal view. Scales 1.00 mm

10). Eyes surrounded by black circle. Eye field trapezoid, wider than long. PME closer to PLE than ALE. Fovea visible.

Abdomen grey-brown with lighter pattern of lines and small spots (fig. 9). Spinnerets light-brown. Clypeus narrower (18%) than AME diameter, light-brown, covered with long white hairs (fig. 11). Chelicerae subvertical and small, brown, with papillate anterior surface (fig. 11); promargin with two teeth, retromargin with single tooth (unidentate). Maxillae and labium light-brown, with lighter tips (fig. 12). Sternum oval, light-brown. Venter light-brown with small grey spots. Palps pale-yellow. Epigynum with posterior pocket (after Logunov 1999), copulatory openings well separated, insemination ducts wide, spermathecae duct-like. Accessory glands well visible, short (fig. 14). Legs pale-yellow to brownish, with darker distal parts. First legs the strongest, ventral spination: tI: 2-2-2; mI: 2-2. Legs II light-brown; ventral spination: tII: 2-2-2, mII: 2-2. Other legs light-brown. Leg formula 1-4-2-3.



9–14. *Chinattus validus*, female: 9. Dorsal view. 10. Lateral view. 11. Frontal view. 12. Cheliceral dentition, endites and labium. 13. Epigyne, ventral view. 14. Vulva. Scales 1.00 mm; scale on drawing as in figure

Measurements: CL 1.88, CW 1.59, CH 1.05, EFL 0.86, AEW 1.30, PEW 1.26, AL 2.93, AW 2.32, DAM 0.39, ClypH 0.07, LI 3,96, LII 3,53, LIII 4,62, LIV 4,54.

Remarks. Specimens from the Himalayas were collected in subtropical and evergreen deciduous forests, 1100–2000 m a. s. l.

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