

Genus	Vol. 21(2): 319-323	Wrocław, 30 VII 2010
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## Salticidae from the Himalayas. The genus *Hasarius* SIMON, 1871 (Araneae: Salticidae)<sup>1</sup>

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ABSTRACT. Two species of the jumping spider genus *Hasarius* SIMON, 1871 from Nepal and Bhutan: *H. tropicus* sp. n. is described and *H. adansoni* (AUDOUIN, 1826) is discussed. Both species are diagnosed and illustrated.

Key words: arachnology, taxonomy, *Hasarius*, new species, Salticidae, Nepal, Bhutan, Himalaya.

### INTRODUCTION

The genus was erected by SIMON 1871 for *Attus adansoni* (AUDOUIN, 1826). The *Hasarius* is a widespread genus of Oriental origin with preference for warm climate. At the present the genus *Hasarius* includes 28 nominal species (PLATNICK 2009, PRÓSZYŃSKI 2009), not including the new species described in this paper. *Hasarius* is related, among others, to genera *Ptocasius* and *Yaginumaella*. The genus has not been recorded from the Himalayas, so far.

### MATERIAL AND METHODS

Material for this study was provided by Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt a. M. (the collection of Prof. J. MARTENS, Mainz) (SMF) and Naturhistorisches Museum, Basel (the collection made by Dr W. WITTMER, Dr O. STEMMLER, Dr C. BARONI-URBANI and Dr M. WÜRMLI) (NHMB).

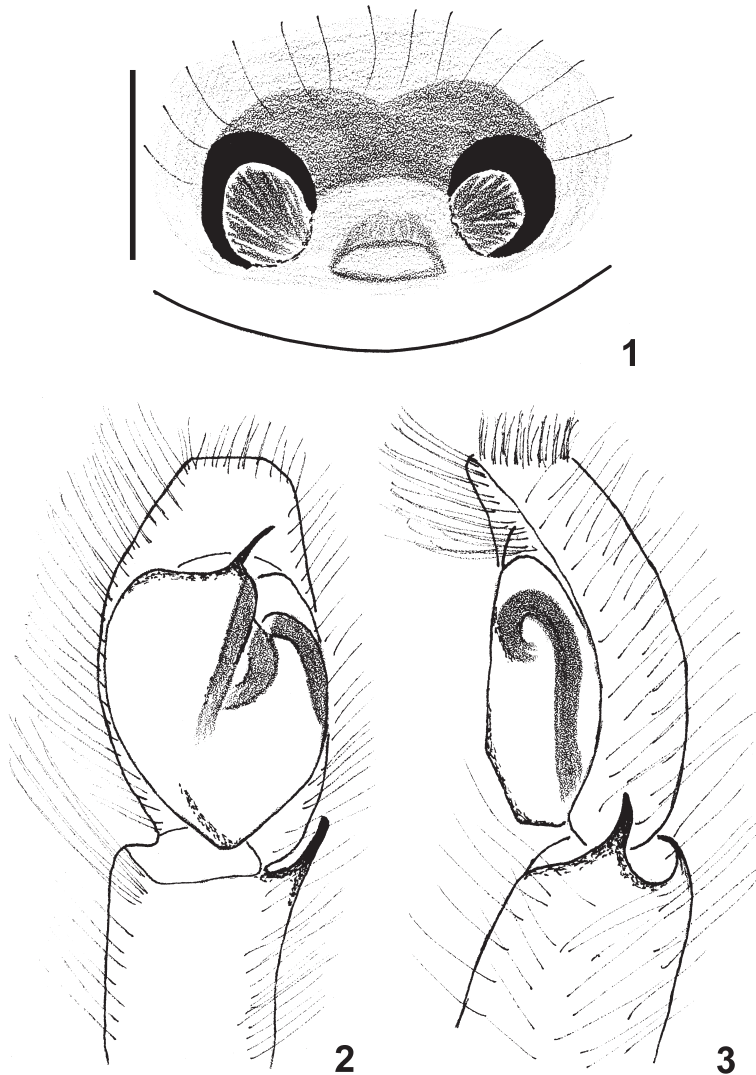
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<sup>1</sup>Results of the Himalaya Expeditions of J. MARTENS No. 270.- For. No. 269: see: Molecular Phylogenetics and Evolution, 2010.

The drawings were prepared using a grid system. Descriptions of colours pertain to wet specimens. The format of leg spination follows PLATNICK & SHADAB (1975). The photographs were taken with Canon PowerShot A620 attached to a stereomicroscope Nikon SMZ800. Further adjustments of the images were made using Helicon Focus.

All measurements are in mm.

Abbreviations used: AEW - anterior eye width, AL - abdomen length, CL - cephalothorax length, CW - cephalothorax width, EFL - eye field length, m a.s.l. - meters above



1. *Hasarius adansoni* (AUDOUIN, 1826): epigynum. Scale = 0,2 mm; 2-3. *Hasarius tropicus* sp. n.: 2. left palpal organ, ventral view; 3. same, lateral view. Scale 0.2 mm

see level, PEW - posterior eye width, pm - prolateral metatarsal spines, pt - prolateral tibial spines, rm - retrolateral metatarsal spines, rt - retrolateral tibial spines.

***Hasarius adansoni* (AUDOUIN, 1826)**

(Figs 1, 4-5)

*Attus adansoni* AUDOUIN, 1826: 169.

*Hasarius adansoni*: SIMON 1871: 330; ŽABKA 1985: 226; 1997: 53; PRÓSZYŃSKI 1991: 504; 2003: 68; PENG et al. 1993: 85; BARRION & LITSINGER 1995: 93; SONG et al. 1999: 513; METZNER 1999: 152, 272.

REMARKS

There are many descriptions of this species (e.g. ŽABKA 1985, 1997; PRÓSZYŃSKI 1991; METZNER 1999), therefore in this paper it is omitted with reference to those publications. *H. adansoni* is a cosmopolitan species occurring in warm climates.

HABITATS

*H. adansoni* occur in various habitats both natural and synanthropic.

The natural habitats are:

- grasslands: Galapagos Islands - pampa, 600 m a.s.l. (GALIANO & BAERT 1990), grasses on the Seychelles, 300 m a.s.l. (WANLESS 1983) and in the China (ŽABKA 1985),
- forests: Seychelles - mangroves (WANLESS 1983), Krakatau - damp forest (ŽABKA & NENTWIG 2000), Nepal - subtropical deciduous forest, 950-1000 m a.s.l., Bhutan - damp tropical forest, 200-400 m a.s.l., evergreen deciduous forest, 1700-1900 m a.s.l.,
- others: Seychelles - beach (WANLESS 1983), Krakatau - waterside vegetation (ŽABKA & NENTWIG 2000).

The synanthropic are: Galapagos Islands - cultivations (GALIANO & BAERT 1990), Viet-nam - garden (ŽABKA 1985).

MATERIAL

Nepal: 1 female (SMF) Sankhua Sabha Distr., Arun Valley bottom betw. Hedangna and Num, subtropical forest, 950-1000 m, 6.-8.06. 1988, coll. MARTENS & SCHAWALLER. Bhutan: 3 females (NHMB) Phuntsholing, 200-400 m, 21.04.1972, coll. WITTMER, STEMMLER, BARONI-URBANI & WÜRMLI (NHMB).

***Hasarius tropicus* sp. n.**

(Figs 2-3, 6-7)

ETYMOLOGY

Named from occurrence in tropical forest.

DIAGNOSIS

This species can be differentiated from related *H. adansoni* by the long, dense, white hairs on the patellae and internal edge of palpal's tibiae; embolus thin, short, placed on the top of bulbus.

## DESCRIPTION

Male. Surroundings of posterior eyes black. The rest of cephalothorax dark brown; dorsum of thoracic part lighter. Abdomen grey, only frontally white; with wide, longitudinal fawn belt and dots forming slanting stripes. Spinnerets light grey. Clypeus and chelicerae brown. Maxillae light brown, its tips white. Labium brown. Sternum yellow. Venter white. Pedipalps dark brown, only patellae white. On the patellae and internal edge of palpal's tibiae long, dense, white hairs. Bulbus oval. Embolus thin, short, placed on the top of bulbus. Tibial apophysis narrow, short, with sharp tip. Legs I - brown; remain - light brown; all covered with brown spines. Scopula absent. Spines formula: tI: p1-1-1 r1-1-1; mI: p1-1 r1-1; tII: p1-1-1 r1-1-1; mII: p1-1 r1-1. Measurements: CL 2.19, CW 1.68, EFL 0.90, AEW 1.62, PEW 1.56, AL 2.22.

Female unknown.



4-7. General character: of *Hasarius* SIMON, 1871: female of *H. adansoni* (AUDOUIN, 1826): 4. dorsal aspect; 5. frontal aspect. Male of *H. tropicus* sp. n.: 6. dorsal aspect; 7. frontal aspect

## TYPE MATERIAL

Holotype, male, Bhutan: Phuntsholing, 200-400 m, 21.04.1972., coll. WITTMER, STEMMLER, BARONI-URBANI & WÜRMLI (NHMB).

## HABITAT

Bhutan: tropical forest, 200-400 m a.s.l.

## ACKNOWLEDGMENTS

Prof. Jochen MARTENS (Mainz), Dr W. WITTMER, Dr O. STEMMLER, Dr C. BARONI-URBANI, Dr M. WÜRMLI (Basel) provided specimens for study.

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