A new *Arrenurus* species from India (Acari: Hydrachnidia: Arrenuridae)

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Abstract
A new *Arrenurus* species, i.e. *A. hastinapurensis* n. sp., is described from northern India. This is the seventh species for India of the subgenus *Megaluracarus*.

Key words: New species, *Arrenurus*, *Megaluracarus*, India.

Introduction

With well over 950 species described, the genus *Arrenurus* Dugès is the most species-rich of all water mites (Smit 2012). The genus has a cosmopolitan distribution, and occurs on every continent except Antarctica. Even from remote islands *Arrenurus* species are known (e.g. Micronesia, Smit 2010).

In their checklist of India, Pešić *et al.* (2010) listed 32 *Arrenurus* species, with three species more of unknown origin but possibly occurring in India as well. Undoubtedly this number will increase in the future with more research done.

In this paper a new *Arrenurus* species will be described of the subgenus *Megaluracarus* K. Viets. Thus far, only six species of this subgenus are known from India (Pešić *et al.* 2010).

Material and methods

The types of the new species are lodged in Naturalis Biodiversity Center, Leiden (RMNH). Abbreviations used: P-1 = first segment of palp; I-leg-4 = fourth segment of first leg; Vgl-4 = ventroglandularia 4. Measurements of paratypes are given in brackets. All measurements are in µm, measurements of palp and leg segments are of the dorsal margins.

Systematics

Family Arrenuridae Thor
Figures 1-5. *Arrenurus hastinapurensis n. sp.*, holotype male: 1 = dorsal view; 2 = ventral view; 3 = lateral view; 4 = palp; 5 = IV-leg-4-6. Scale bars: 1-3, 4-5 = 50 µm.
Figure 6. Arrenurus hastinapurensis n. sp., paratype female: ventral view. Scale bar = 200 µm.

Arrenurus (Megaluracarus) hastinapurensis n. sp.


Description
Male: Idiosoma colour yellow, 1050 long and 595 wide, cauda 267 wide and approximately 429 long. Cauda distinctly set off from anterior idiosoma. Dorsal shield incomplete, passing onto cauda. Posterior margin of cauda with a median cleft, posterior margins of cauda oblique. Posterior part of cauda with a pair of large glandularia, near anterior margin of cleft a rudimentary petiole. Near lateral margins of cleft a pair of short, stout setae. In lateral view cauda with two dorsal humps, one broad and shallow, the posterior hump less wide. Gonopore 50 long; genital field widest near gonopore, extending to lateral idiosoma margin. Associated setae of Vgl-4 either lost or absent. Also other long setae absent. Length of Pl-PV: 32, 62, 48, 74, 38 (measurements of the non-illustrated palp). PII medially with three setae near anterior margin. Length of I-leg-4-6: 108, 123, 148. Length of IV-leg-4-6: 227, 140, 124; IV-leg-4 without spur. Only fourth leg with swimming setae: IV-leg-2 1, IV-leg-3 two groups of 5 and 4, respectively, IV-leg-4 5.

NEW ARRENURUS FROM INDIA

Etymology. Named after the town of Hastinapur in northern India.

Remarks. The male of the new species is close to A. dahli Piersig, 1903 from New Britain, the Aru Islands and New Caledonia (Piersig 1903, Walter 1911, 1915) but differs (in brackets A. dahli) in the incomplete dorsal shield (complete), the larger size (800-830 µm), while the cauda of A. dahli has a more anteriorly located dorsal hump. The female is in many aspects (posteromedial corners of idiosoma absent, sclerotized patches of gonopore absent, medial distance of fourth coxae much smaller) very different from A. dahli. The second paratype female is smaller, but has more or less similar genital plates. Accompanying Arrenurus species were one female of A. rostratus Daday, 1898, one female of A. madaraszi Daday, 1898 and one unknown female.

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References