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## A NEW WATER MITE (ACARI, HYDRACHNIDIA, SPERCHONTIDAE) FROM THE HIMALAYA MOUNTAINS (NORTHERN INDIA)

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**A New Species of Water Mites (Acari, Hydrachnidia, Spermontidae) from Himalaya Mountains (Northern India).** Pešić V., Gerecke R. – A water mite *Spermont ivonae* Pesic et Gerecke, sp. n. (Acari, Hydrachnidia, Spermontidae) from a stream in the Himalaya Mountains (Himachal Pradesh State, Northern India) is described. Type material is deposited in the collection of the Naturhistorisches Museum Basel.

Key words: Acari, water mites, new species, running waters, India.

**Новый вид водного клеща (Acari, Hydrachnidia, Spermontidae) из Гималаев (Северная Индия).** Пешич В., Герекке Р. – Описан водный клещ *Spermont ivonae* Pesic et Gerecke, sp. n. (Acari, Hydrachnidia, Spermontidae) из потока в Гималаях. Типовой материал хранится в Музее естественной истории Базеля.

Ключевые слова: Acari, водные клещи, новый вид, поток, Индия.

### Introduction

Water mites of the genus *Spermont* Kramer, 1877 are presently known from all biogeographic regions except for Australia and Antarctica (Cook 1974). Five species have been recorded from India (Cook, 1967; Kumar et al., 2007): *Spermont hirsutus* Cook, *S. ootacamundis* Cook, *S. nilgiris* Cook, *S. indicus* Kumar N., Kumar K. et Pesic, 2007, and *S. garhwalensis* Kumar N., Kumar K. et Pesic, 2007. During a survey of unstudied material in the collection of Prof. Dr. Jürgen Schwoerbel (Radolfzell, Germany), an additional undescribed species was found. Its description is given in this paper below.

### Material and Methods

Water mites were collected by hand netting and sorted on the spot from the living material, preserved in Koenike's fluid and dissected for slide mounting (Schwoerbel pers. comm.). The holotype and paratype of the new species will be deposited in the collection of the Naturhistorisches Museum Basel (NHMB). All measurements are given in  $\mu\text{m}$ . The following abbreviations are used: Ac-1 = first acetabulum, Cx-1 = first coxae, Cxgl-4 = coxoglandularae 4, Dc-1-4 = dorsocentralia 1-4, Dgl = dorsoglandularae, %L = relative length, I-L-6 = Leg 1, sixth segment, P-1 = palp, first segment, Vgl = ventroglandularae, V = ventralia.

### *Spermont ivonae* Pesic et Gerecke, sp. n. (fig. 1, 2)

**Material.** Type. Holotype  $\sigma$ , dissected and slide-mounted in Hoyer's fluid, India: ind. 33/90 Himachal Pradesh State, Lahul ("11 km hinter Keylong, Str. Richtung Lee, bei Brücke über Seitenbach, überrieselte Moose von Felswand, 23.08.1990, 3300 m asl.") leg. Schwoerbel and Panesar. State of conservation: gnathosoma with both palps and one chelicera laterally under separate cover, right II-L, left III-IV-L and one chelicera missing. Paratypes: one female, same data as holotype, dissected and slide-mounted in Hoyer's fluid. State of conservation: gnathosomal base and one chelicera missing, the other chelicera with both palps laterally under separate cover.

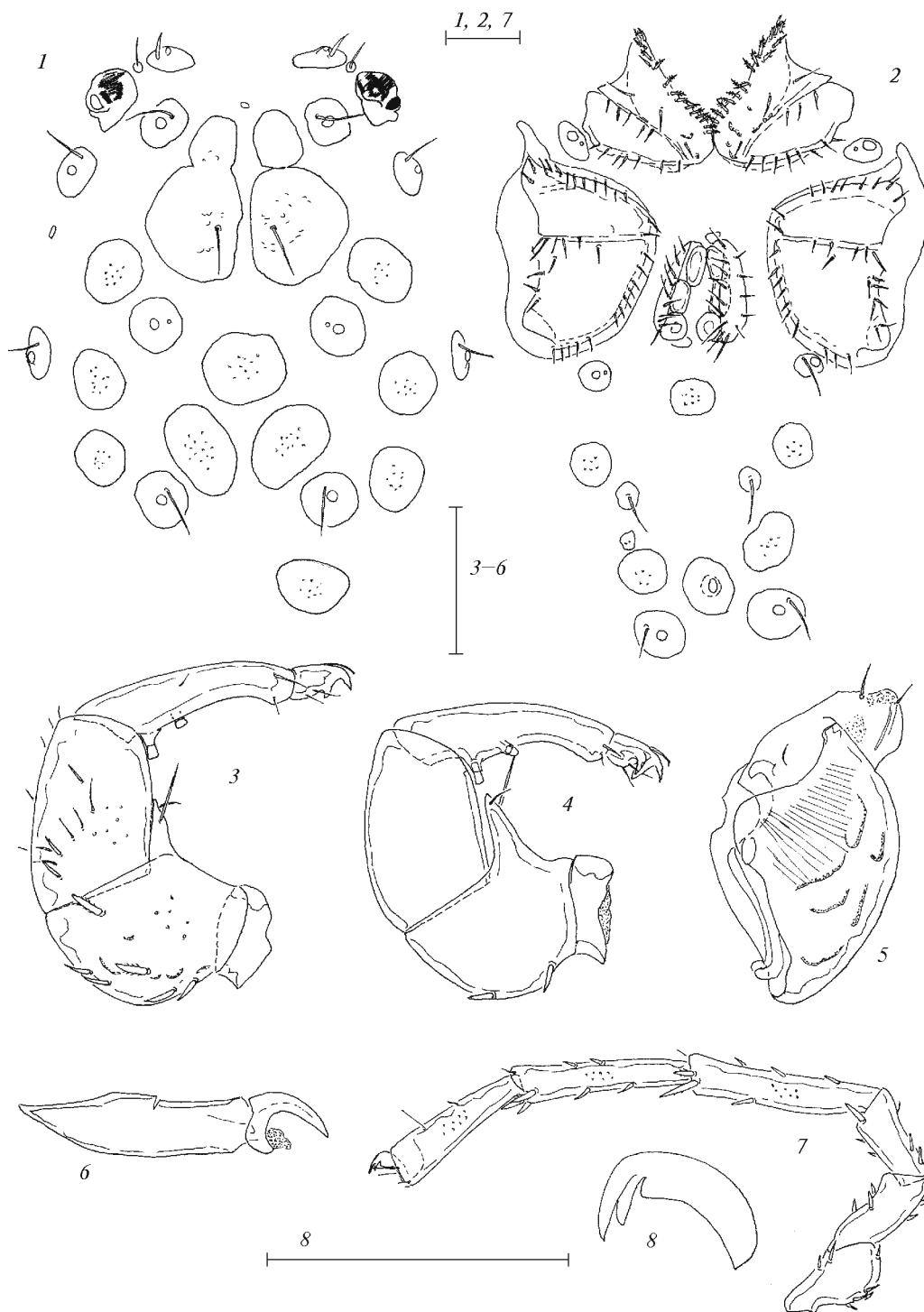


Fig. 1. *Sperchon ivonae*, ♂: 1 – idiosoma, dorsal view; 2 – idiosoma, ventral view; 3, 4 – palp; 5 – gnathosoma; 6 – chelicera; 7 – IV-L; 8 – claw. Scale bars 100  $\mu$ m.

Рис. 1. *Sperchon ivonae*, ♂: 1 – идиосома, вид с дорсальной стороны; 2 – идиосома, вид с вентральной стороны; 3, 4 – пальпы; 5 – гнатосома; 6 – хелицера; 7 – IV-L; 8 – клешня. Масштабная линейка 100 мкм.

**Diagnosis.** P-2 with long ventrodistal projection; P-4 ventral margin in the proximal part of the segment with two well-developed tubercles, bearing enlarged and truncated peg-like setae.

**Description.** Male. Integument reticulated. Setae Dgl-1 thick, almost twice as long as length of sclerites to which they attached. Postocularia on large plates. The two anterior pairs of dorsocentral plates (Dc-1/2) lateral fused to each other on both sides; Dc-3 fused to an unpaired medial platelet.

Anterior coxal plates (Cx-1+2) close to each other, but not fused (fig. 1, 2). Apodemes not distinct. Posterior coxal plates widely separated; Cx-3 without coxoglandularia; distance between anterior edge of Cx-1 and posterior edge of Cx-4 453. Setae Vgl-1 without accompanying glandularia, on very small sclerites. Excretory pore surrounded by a sclerotized ring. Posterior part of the venter with well-developed unpaired postgenital platelet and further two pairs of ventralia.

Genital field between Cx-3+4; length of genital plates 143; L of Ac-1-3: 53-49-38; Ac1-2 longish, Ac-3 roundish.

Gnathosoma (fig. 1, 5) with long rostrum, L 234; chelicera (fig. 1, 6) total L 222, basal segment L 155, claw L 67, ratio basal segment/claw L 2.3; palp (fig. 1, 3-4) total length 469, dorsal length and relative length (in parentheses, given as % of total L): P-1 22 (4.7), P-2 115 (24.5), P-3 137 (29.2), P-4 150 (32.0), P-5 45 (9.6); P-2/P-4 ratio

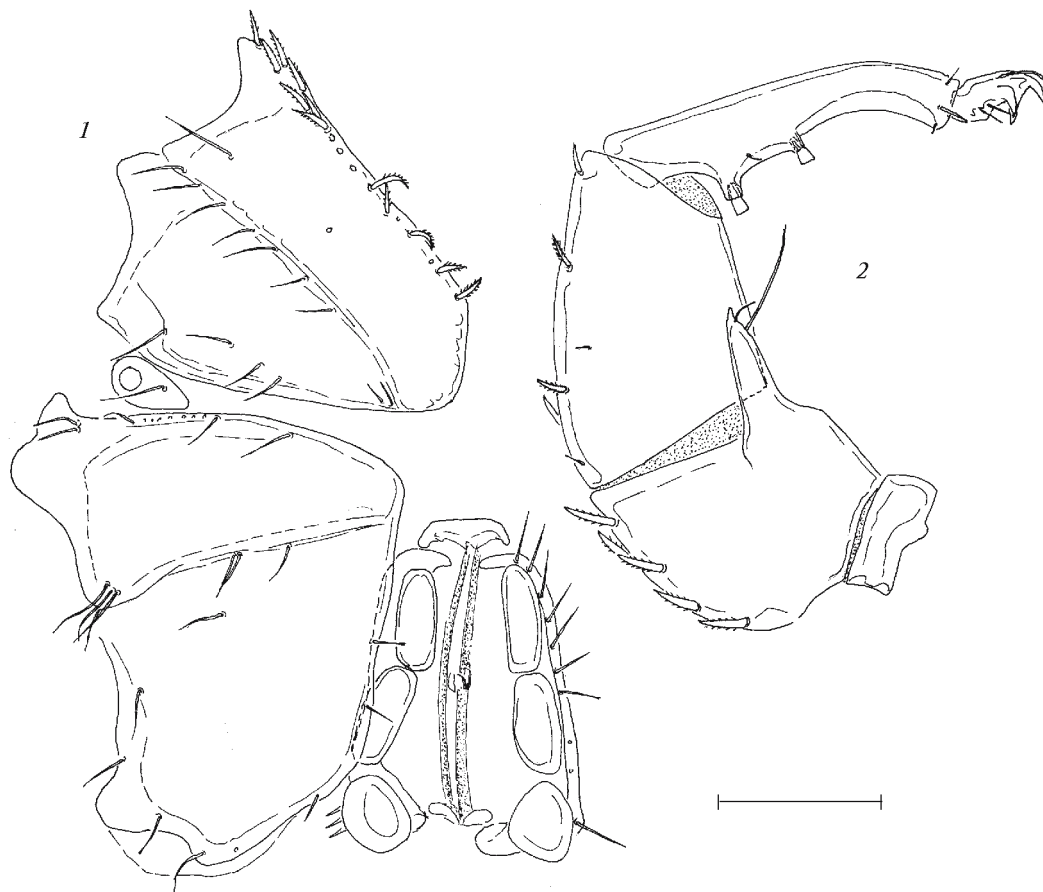


Fig. 2. *Sperchon ivonae*, ♀: 1 – coxal and genital field; 2 – palp. Scale bar 100 µm.

Рис. 2. *Sperchon ivonae*, ♀: 1 – коксальная и генитальная зоны; 2 – пальпа. Масштабная линейка 100 мкм.

0.77; P-2 with long ventrodiscal projection, bearing one long and one short thin seta; P-4 ventral margin in the proximal part of the segment with two well-developed tubercles, each bearing a strong peg-like seta.

Fourth legs with a few short setae, none of which are plumose. Ambulacrum (fig. 1, 8) with weakly protruding claw blade, bearing along dorsal and a short ventral clawlet. Length of segments: I-L-1–6 – 63, 59, 96, 153, 147, 150; IV-L-1–6 – 122, 119, 132, 263, 247, 219.

Female. Coxae, mouthparts and legs as described for the male; distance between anterior end of first coxae and posterior end of fourth coxae 509; length of genital plates 185, L of Ac-1–3: 66–64–49.

Chelicera total L 299, basal segment L 209, claw L 90, ratio basal segment/claw L 2.3; palp (fig. 2, 2) total L 674, dorsal length and relative length (in parentheses, given as % of total length): P-1 28 (4.2), P-2 166 (24.6), P-3 205 (30.4), P-4 222 (32.9), P-5 53 (7.9); P-2/P-4 ratio 0.75. Length of segments: I-L-1–6 – 88, 81, 137, 206, 206, 188; IV-L-1–6 – 156, 150, 175, 319, 313, 250.

Discussion. Due to the reticulated integument, Cx-3 without coxoglandularia and P-2 with a long ventrodiscal projection, the new species is similar to *Sperchon hirsutus* and *S. ootacamundis*. *Sperchon ivonae* differs from both species in the characteristic shape of the P-4 (in *S. hirsutus* and *S. ootacamundis* the ventral tubercles are small and bear short, pointed setae, and the anterior ventral seta is located in the distal part of the segment).

Etymology. The species is named after Ivona Pešić, daughter of the first author.

Distribution. Known only from the type locality in Lahul (India).

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