

The first description of the female of the water mite genus *Sterkspruitia* Cook, 2003 (Acari: Hydrachnidia, Hygrobatidae)

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ABSTRACT — The first female of the genus *Sterkspruitia* is described. It differs from males of the genus in the number of dorsal and ventral platelets. Therefore, an emendation of the diagnosis of the genus is given.

KEYWORDS — Systematics; Afrotropical region; South Africa

ZOOBANK — [AEFD34C7-7A7D-487B-99FF-D8340C9EC3A4](https://doi.org/10.24349/20174188)

INTRODUCTION

The water mite genus *Sterkspruitia* Cook, 2003 is known from one species from South Africa (Cook 2003) and one species from the Comoros (Pešić et al. 2015). All three known specimens were males. In this paper the first female is described. This female differed strongly from the male. Therefore the diagnosis of the genus has to be emended.

MATERIALS AND METHODS

The material is collected by the author. Lengths of palp and leg segments are dorsal lengths. The following abbreviations are used: asl – above sea level; alt. – altitude; cxgl-4 – coxoglandularia 4; I-leg-4 – fourth segment of first leg; P1 – palp segment 1; RMNH – Naturalis Biodiversity Center, Leiden. All measurements are in μm .

SYSTEMATICS

Family Hygrobatidae Koch, 1842

Genus *Sterkspruitia* Cook, 2003

Sterkspruitia ovalis Cook, 2003 (Figures 1A-E)

Material examined — One female, main stream Mount Sheba, S of Pilgrimsrest, Mpumalanga Province, South Africa, 24° 56.446 S 30° 42.194 E, alt. 1630 m asl, 8-xi-2016 (RMNH).

Description — Female: Idiosoma colour orange, dorsally 753 long, ventrally 818 long and 680 wide. Dorsal and ventral shields present. Dorsum (Figure 1A) with eight pairs of platelets, all with one pair of glandularia; postocularia near anterior margin of second pair of dorsal platelets. Eyes in small capsules. Gnathosoma fused with the first coxae. Coxae (Figure 1B) as in male, but cxgl-4 in the middle of fourth coxae. Genital field (Figure 1C) with three pairs of acetabula, each pair fused with

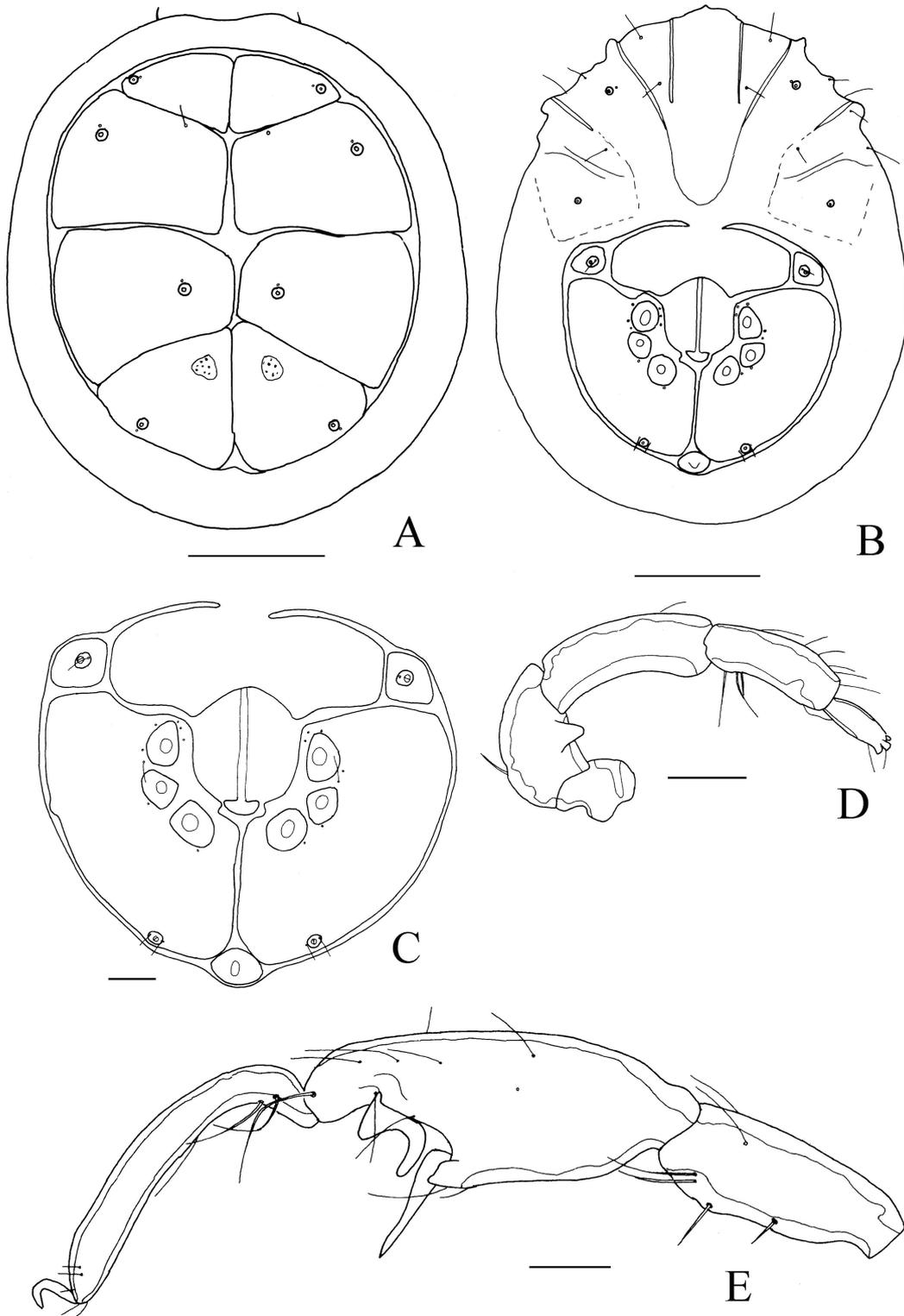


FIGURE 1: *Sperspruitia ovalis* Cook, female: A – dorsum; B – venter; C – genital field; D – palp; E – I-leg-4-6. Scale bars: A-B = 200 μ m, C-E = 50 μ m.

a platelet; on these platelets a pair of glandularia. Gonopore 120 long, anteriorly of gonopore a large platelet which is fused with ventral shield, laterally of this platelet a pair of small platelets each with a glandularium. Excretory pore on a small platelet. Palp (Figure 1D) as in male. Lengths of P1-P5: 40, 94, 116, 110, 50. First leg (Figure 1E) as in male, modified. Length of I-leg-4-6: 208, 251, 162 (till tip of segment). Length of IV-leg-4-6: 219, 251, 212 (till tip of segment). Legs II-IV not modified, legs without swimming setae.

Discussion — Because of the similarity of the palp and first leg the female described here is assigned to *S. ovalis*. The female of *S. ovalis* is larger than the male, the latter is ventrally 577-580 long and 426-441 wide. Other important differences are the number of dorsal platelets, eight in the female and six in the male. The coxae of the female are similar to the male, only cxgl-4 is located near the middle instead of near the anterior margin. The venter of the male posterior to the coxae differs strongly from that of the female. The male has only one rounded plate with the genital field and one pair of glandularia fused, while laterally to the excretory pore there is a pair of glandularia platelets. In the female the pair laterally of the excretory pore is fused with the large genital plate, the pair anteriorly of the

genital field is on a separate platelet. Therefore the diagnosis of the genus has to be emended: Dorsum with six pairs of large platelets in the male, eight pairs in the female. Genital field of male on one platelet, genital field of female on two platelets.

Cook (2003) collected *S. ovalis* in a tributary of the Sterkspruit River near Lydenburg. Mount Sheba lies some 30 km NE of that location.

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