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Description of a new horned jumping spider species Thorelliola mahunkai (Araneae: Salticidae)

> from New Guinea T. SZŰTS

Abstract: A horned jumping spider species, Thorelliola mahunkai sp. n. is described from New Guinea. The type species of the genus is also illustrated.

Key words: Salticidae, Thorelliola, new species, Papua New Guinea

## **INTRODUCTION**

The genus Thorelliola was established by Strand in 1942 for Thorellia ensifera (the previous name of the genus - Thorellia Keyserling, 1882 was preoccupied). The genus contains now eight nominal species, mainly described by Berry et al. (1997) and Gardzinska & Patoleta (1997). During cataloguing the jumping spider collection of the Hungarian Natural History Museum, I found a few tubes identified by Kálmán Szombathy, labelled as Thorellia, and several indet., in the Balogh collection. This peculiar genus is easy to recognise, as the males have "horns" on the clypeus. The specimens definitely belong to the genus Thorelliola, but do not correspond with any hitherto known species.

#### MATERIALS AND METHODS

The specimens were examined by methods set in Wanless 1978. The drawings were made with camera lucida, all the measurements are given in millimetres. The photographs were made by Nikon Coolpix digital camera, attached to the stereomicroscope.

The specimens are deposited in the Soil Zoological Collection (former Arachnoidea Collection) of the Hungarian Natural History Museum, Budapest (curator Sándor Mahunka).

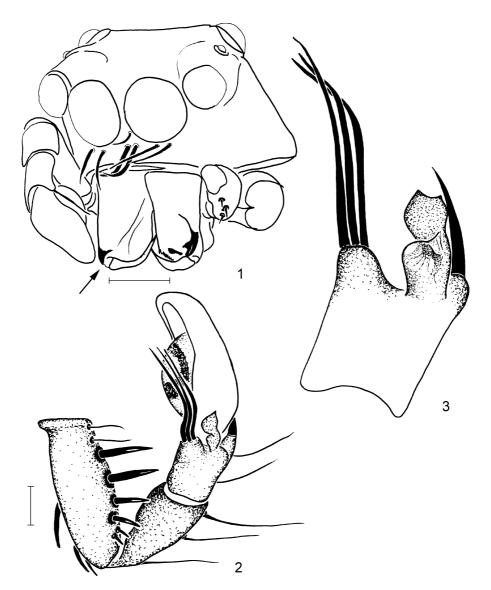
Abbreviations: AEW: anterior eye width, AME: anterior median eye, hI-II: central setae on the clypeus - composing the horn, PEW: posterior eye width, PLE: posterior lateral eye, sI-IV: lateral setae on the clypeus.

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pp. 17-22.

# Thorelliola mahunkai sp. n.

Diagnosis – The males can easily be recognised by the three tibial apophyses of the palp: retrolateral apophysis with three strong setae, prolateral apophysis with a robust spine, dorsal apophysis crisped, of specific shape (Figs 2, 3, 5, 6).



**Figs 1–3.** The male of *Thorelliola mahunkai* sp. n.: 1 = carapace, scale: 0.5 mm, 2 = whole palp, retrolateral view, scale: 0.2 mm, 3 = Palpal tibia retrolateral view

Description – Holotype male: Carapace (Figs 1, 9): brown, with scattered brown hairs. Ocular area: with strong setae. Eyes: with black surroundings. Clypeus: brownish, somewhat paler than the rest of the face, with seven setae (Figs 1, 8) – hI–II in median position, composing the "horn", sI–II, sIII–IV in lateral position, below of ALE-s. The seventh (smaller) seta situated between AME-s (Fig. 1). Chelicerae: with the typical lateral teeth near to the fangs (Fig. 1, marked with an arrow). Maxillae and labium: brown. Sternum: heart shaped, pale brown, with several brown hairs. Abdomen: oval, paler pattern on a brownish background. Spinnerets: grey.

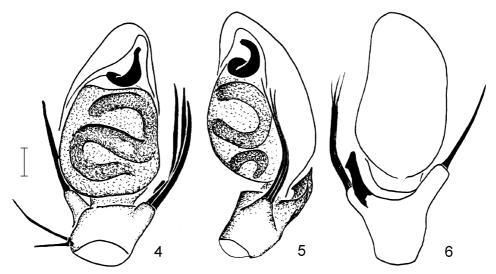
Leg segments: tarsi and metatarsi pale yellow, other leg segments dark brown.

Color variation: A specimen from Wau differs from the other specimens by the abdominal pattern, and coloration of the legs II–IV. Abdomen with two yellowish anterior spots separated by a whitish stripe, limited by the posterior greyish part. Femora II–IV pale yellow, patellae, tibiae dark brown, metatarsi, tarsi yellow.

Dimensions – Holotype: Total length 3.74, carapace 1.87 long, 1.65 wide at PLE, 1.21 high at PLE. Abdomen length 1.85, width 1.40. AEW 1.55, PEW 1.34. Eye field 1.15 long.

Distribution – SE Papua New Guinea: Madang (former Friedrich-Wilhelmshafen), Giluwe Mt., Wau.

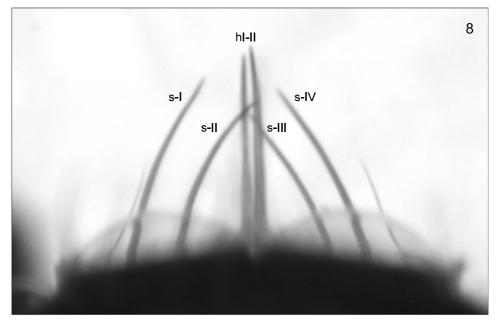
Material examined – Type material – Holotype: 1 male from New Guinea, Giluwe Mt., Hung. Soil Exp. 1969, Nr. NG-G-M19, leg. J. Balogh. Paratypes: 2 males together with the holotype; 1 male



**Figs 4–6.** The copulatory organ of *Thorelliola mahunkai* sp. n.: 4 = palp, ventral view, 5 = palp retrolateral view, 6 = palp, dorsal view. Scale: 0.1 mm

T. Szűts



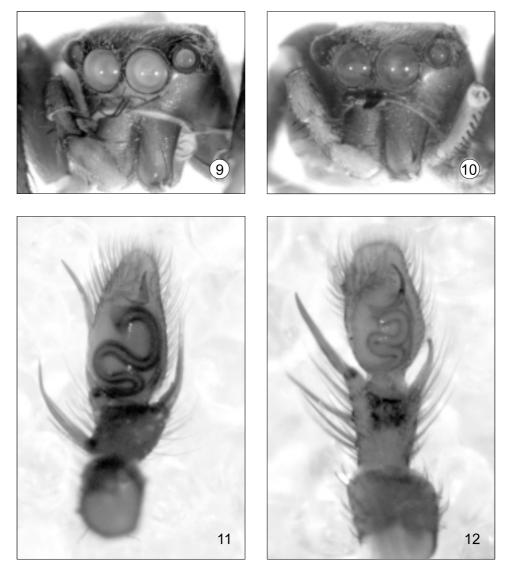


**Figs 7–8.** Digital photos of *Thorelliola mahunkai* sp. n.: 7 = palp, retrolateral view, 8 = male, anterior part of carapace (for the abbreviations see text)

from Wau, Hung. Soil Exp. 1969, NG-W-C9, leg. J. Balogh; 1 male from Friedrich-Wilhelmshafen (current name: Madang), leg. L. Bíró.

Comparative material: 1 male *Thorelliola ensifera* (Thorell, 1887) from India, Singapore, Botanic garden, det. Kálmán Szombathy.

Etymology – This species is dedicated to Sándor Mahunka, oribatid specialist, whom I would thank his valuable help, useful advices during my studies.



**Figs 9–12.** Comparison of *Thorelliola mahunkai* and *Th. ensifera*. 9 = *Th. mahunkai*, face. 10 = *Th. ensifera* male, face. 11 = *Th. mahunkai*, palp, ventral view. 12 = *Th. ensifera* palp, ventral view

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Author's addresses: Tamás SZŰTS

Systematic Zoology Research Group, Hungarian Academy of Sciences and Department of Zoology, Hungarian Natural History Museum H-1088 Budapest, Baross u. 13. Hungary E-mail: tszuts@zoo.zoo.nhmus.hu