

## **Additional notes on the genus *Kuzicus* GOROCHOV, 1993 (Meconematinae: Tettigoniidae: Ensifera) from Thailand**

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### **Abstract**

A new species of Meconematinae (*Kuzicus scorpioides* sp. n.) is described and diagnosed. Further records of *K. aspercaudatus* SÄNGER & HELFERT 2006 are presented.

**Key words:** Meconematinae, taxonomy, *Kuzicus*, new species, new records, Thailand.

### **Summary**

Eine neue Meconematinae-Art (*Kuzicus scorpioides* sp. n.) wird beschrieben und diagnostiziert. Weitere Fundorte von *K. aspercaudatus* SÄNGER & HELFERT 2006 werden angegeben.

### **Introduction**

Until quite recently, the genus *Kuzicus* GOROCHOV 1993 was represented by two species in Thailand (OTTE & NASKRECKI 1997, SÄNGER & HELFERT 2004, SÄNGER & HELFERT 2006). Here, we describe and diagnose a further species, which is new to science, and we provide additional records of *K. aspercaudatus* SÄNGER & HELFERT 2006. As we found and examined the specimens shortly before this issue went to print, the results are not integrated into the previous article of SÄNGER & HELFERT 2006.

### **Acknowledgements**

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### **Material and Method**

In the descriptions, body length is fastigium verticis to posterior margin of ultimate tergite, head length is fastigium verticis to clypeal suture. The type specimens were measured using a Wild-Censor in combination with a Wild M5 stereo microscope; morphological structures were recorded with a video camera (Sony CCD-Iris) and processed by Pinnacle PCTV Vision.

The type material is preserved in alcohol and deposited in the collection of the Museum of Natural History, Vienna (Naturhistorisches Museum Wien).

## Results

### *Kuzicus scorpioides* sp. n.

Holotype: ♂, Huay Kha Kaeng Game Reserve (Province Uthai Thani, Thailand), 15°42' N, 98° 53' E; Mixed Deciduous Forest, 24.7.2006.

Paratype: ♀, same locality, same date.

**Etymology:** The name (defined as a noun in apposition) refers to the bladder-like and stinged appendages of the male's ultimate tergite, which resemble the poison sting of a scorpion.

## Description

**Measurements in mm:** Holotype ♂ (paratype ♀ in parentheses). Length of: body 16.0 (17.9); head 2.6 (2.5); pronotum 3.9 (3.7); elytra 17.5 (19.8); alae 21.2 (21.8); metafemur 12.3 (14.5); metatibia 13.9 (15.2); ovipositor 10.3.

Medium-sized Meconematinae (figs. 1-3) Eyes round, protruding. Fastigium verticis conical, small (length about one quarter of scapus), with weak median sulcus. Last joint of the maxillary palpus equal in length to the fourth joint, slightly widened apically. Pronotum in dorsal view slightly more than twice as long as wide, covering the base of elytra, discus flat, transverse sulcus inconspicuous. Anterior margin slightly convex, posterior margin triangularly rounded. Margin of paranota (= lateral lobes of the pronotum) slightly undulated, humeral sinus very weak. Foramen prothoracicum kidney-shaped, fully exposed in both sexes. Parapterous, elytra extending behind the hind knees, alae distinctly longer. Procoxal spur short. Tympana open. Pro- and mesotibiae with 5 outer and 4 inner spines and 1 pair of apical spurs. Metatibiae ventrally and dorsally with numerous outer and inner spines as well as 2 ventral and 1 dorsal pairs of apical spurs.

**Genital segments:** ♂ (figs. 4-7): Ultimate tergite with 2 pairs of very different processes: the median processes long, straight, the distal end with bladder-like appendage, attached at nearly a right angle, bearing one conspicuous spine ("scorpion's poison sting"); the lateral processes, however, simple and much shorter than the median ones. Cerci long, strongly bent inwards in normal position (figs. 4, 5), only the basal parts visible, the distal parts hidden by the median appendages of the ultimate tergite. Cerci proximally with a long, triangular, strongly sclerotised spur on the outer side and more distally with a less sclerotised spur on the inner side. Apex of the cerci with four small sclerotised spines. Phallic complex as typical for the genus, but with distal appendages only. Subgenital plate slightly trapezoid, styli relatively long, filiform.

**Genital segments:** ♀ (figs. 8, 9): Cerci relatively long, spindle-shaped. Ovipositor nearly straight, basis broad, valvae smooth, lower valvae with small hook at apex. Subgenital plate sculptured, distal margin triangular.

**Colouration ex alcohol:** General colour whitish to ochre. Pleurites, sternites and femora white, elytra colourless with brown distal margins, alae hyaline colourless. Fastigium verticis with brown apex, pedicelli and flagella brown. Phallic complex, cerci and ultimate tergite of the ♂ grey. Ovipositor basally grey, distally chestnut with dark-brown apex, cerci of the ♀ white.

**Colouration in vivo:** General colour bright green. Fastigium verticis with dark-green marking. Pedicelli, flagella, tarsi and margin of labrum bright brown, in the ♂ coxae and basis of femora white (in the ♀ general colour), sternites white, discus of pronotum with yellow line on the lateral margins. Tergites of abdomen medially dark-



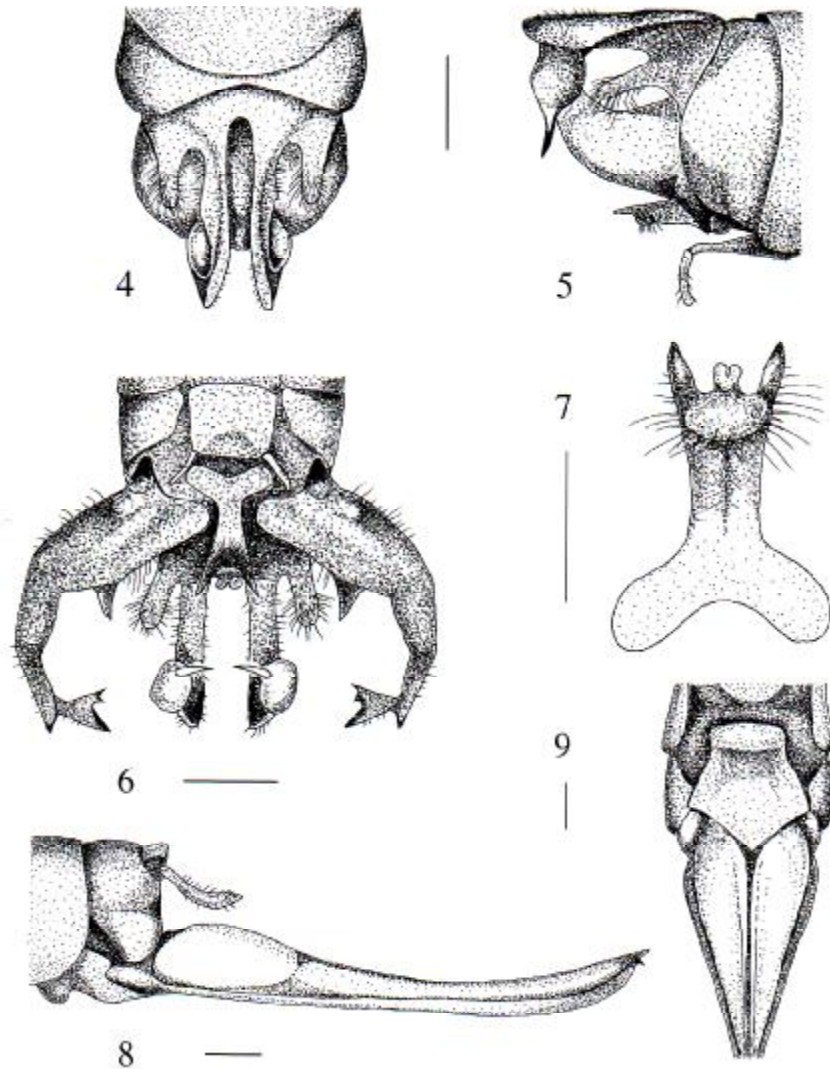
Fig. 1. *Kuzicus scorpioides* sp. n. ♂.



Fig. 2. *Kuzicus scorpioides* sp. n. ♀.



Fig. 3. *Kuzicus scorpioides* sp. n. ♂ and Gordian worm, leaving the host through its anus (insert).



Figs. 4-9 *Kuzicus scorpoides* sp. n. ♂, ♀. - 4) Male ultimate segments in dorsal view; 5) dto. in lateral view; 6) dto. in ventral view (cerci and appendages of the ultimate tergite spread); 7) phallic complex. 8) Female ultimate segments in lateral view; 9) femal subgenital plate in ventral view. - All scale bars = 1mm.

green. Elytra colourless with green veins, distal margins brown; alae hyaline colourless. Genital segments bright green, except for the ovipositor, which is chestnut with dark-brown edges in the distal half.

#### Diagnosis

*K. scorpoides* resembles *Kuzicus uvarovi* GOROCHOV 1993, whose male's ultimate tergite also bears two pairs of appendages, but the shape of these appendages is completely dif-

ferent. Furthermore, *K. uvarovi* has relatively simple cerci. Similarities also exist in the females – the strongly sculptured subgenital plate – but in the new species the hind margin of the subgenital plate is distinctly more triangular-acute than in *K. uvarovi*. Distinct sculptures on the female's subgenital plate are also present in *Kuzicus koeppeli* SÄNGER & HELFERT 2004, but this species otherwise clearly differs in all other characters of both sexes from *K. scorioides*.

The holotype was infested with a dark-coloured Gordian worm, which left the host through its anus while the live male was being photographed (fig. 3, insert); at first sight, the darkish parasite was not visible through the integument (fig. 1).

***Kuzicus aspercaudatus* SÄNGER & HELFERT 2006**

Material: 2 ♂♂ Nam Nao National Park (Province Petchabun, Thailand), 16°43'N, 101°34'E; Mixed Deciduous Forest, 15.7.2006 and 16.7.2006.

The habitat of these specimens entirely corresponds with that of the holotype.

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