

A new genus and species of the family Issidae (Hemiptera: Fulgoroidea) from Oman

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Abstract. A new genus and species *Caepovultus deemingi* gen. & sp. nov. is described from Oman. *Caepovultus* gen. nov. is closely related to the genus *Quadriva* Ghauri, 1965.

Key words. Hemiptera, Fulgoroidea, Issidae, taxonomy, new genus, new species, Oman

Introduction

During a study of the unidentified accessions in the National Museum of Wales (Cardiff) a new genus and new species of the family Issidae was discovered. This new genus differs from all other West Palaearctic issid genera in having an onion-shaped metope, which resembles the genus *Syrgis* Stål, 1870 (Issidae, Thioniini) or the family Cixiidae. This similarity may be treated as a convergence, because the new genus clearly belongs to the tribe Issini of the family Issidae according to other external morphological features such as fore wing venation and the structure of hind wings. It is closely related to the genus *Quadriva* Ghauri, 1965 (= *Hysterodus* Dlabola, 1980) basing on the shape of penis and style (DLABOLA 1980: Figs. 67-100).

The genus *Quadriva* is characterized by the following features (GNEZDILOV 2003): elongate, parallel-sided metope, coryphe quadrate or transverse with convex anterior margin, fore wings without hypocostal plate, sometimes brachypterous, radius of fore wings not branching right from basal cell, cubitus anterior simple, hind wings rudimentary. The new genus described below differs from *Quadriva* as follows: onion-shaped metope, coryphe elongate and narrow, with anterior and posterior margins acutely angulate, fore wings with narrow hypocostal plate, radius of fore wings branching right from basal cell, cubitus anterior bifurcate, hind wings well developed.

The new genus described below is a first record of the family Issidae *sensu stricto* from Oman. Up to now only three issid species were recorded from the Arabian Peninsula as

a whole: *Kovacsiana abyssinica* Synave, 1956, from Yemen (LINNAVUORI 1970), and *K. khamis* (Dlabola, 1979) and *Kivupterum saudicum* (Dlabola, 1979) from Saudi Arabia (DLABOLA 1979). Other species of *Kovacsiana* Synave, 1956, and *Kivupterum* Dlabola, 1985, are distributed in Northeastern and Eastern Africa while *Quadriva* species are distributed from Pakistan to Spain and mostly in Iran (GNEZDILOV et al. 2004).

Material and methods

Morphological terminology follows GNEZDILOV (2003). The genital segments of the examined specimen were macerated in 10% KOH and illustrated in glycerine jelly using a light microscope. Photographs of the specimen were made using Leica MZ8 with JVC video camera KY F70B; the images were produced using the software Synoptics Automontage.

The type specimen of the new species is deposited in the Hemiptera collection of the National Museum of Wales (Cardiff, UK).

Taxonomy

Caepovultus gen. nov.

Type species. *Caepovultus deemingi* sp. nov.

Diagnosis. Coryphe narrow, with strongly keeled lateral margins, anterior and posterior margins acutely angulate (Fig. 1). Metope onion-shaped (narrow apically and enlarged before clypeus, Fig. 3), with strong median keel reaching through postclypeus and sublateral keels developed only in its basal part. Pronotum and scutellum without keels. Anterior margin of pronotum rightly angulate. Fore wings oval, with narrow hypocostal plate (Fig. 2). Radius bifurcate (branching right from basal cell), median single, cubitus anterior bifurcate; longitudinal veins keeled, transverse veins weak. Hind wings well developed, reaching apices of fore wings. Hind tibia with two lateral teeth distally. Metatarsomere I with five intermediate socle setae.

Etymology. The generic name is derived from the Latin nouns ‘caepe’ – onion and ‘vultus’ – face. The gender is masculine.

Caepovultus deemingi sp. nov.

(Figs. 1-9)

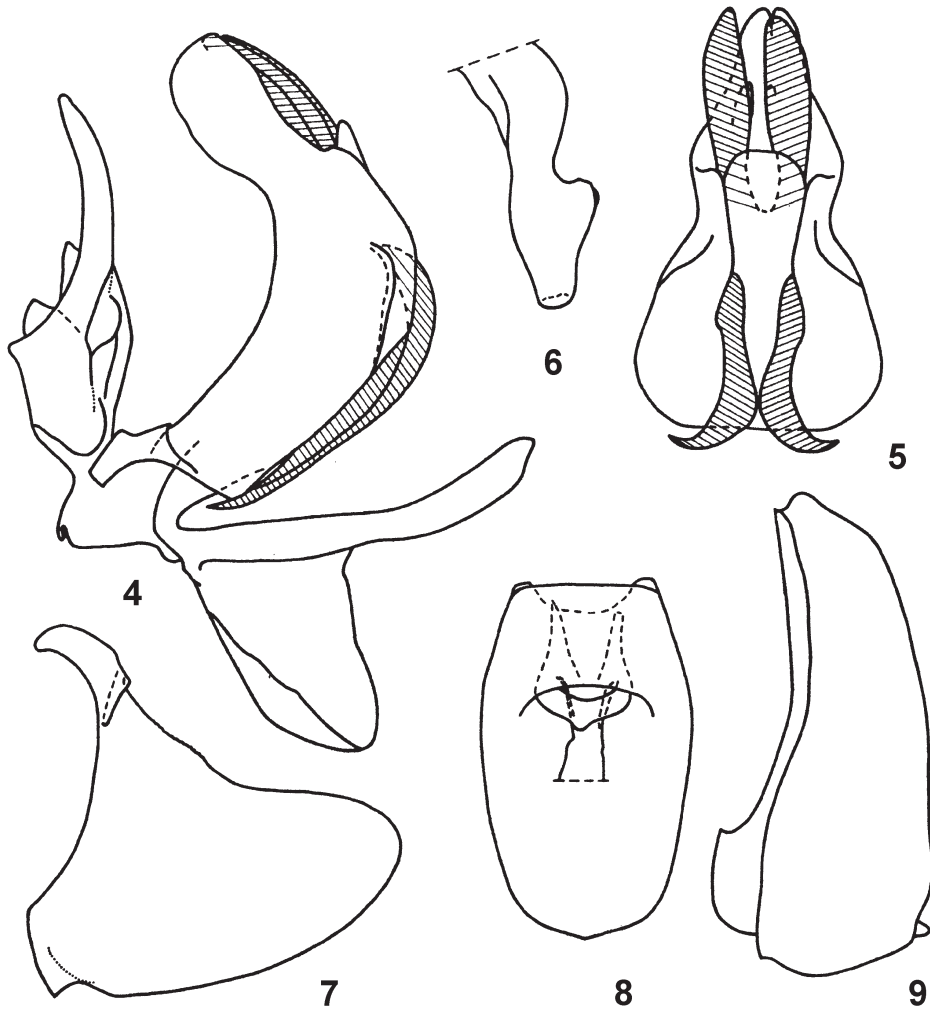
Type material. HOLOTYPE: ♂, OMAN: Wadi Dar Sawda, 23°14'N 57°12'E, 1880 m a.s.l., 2.xi.1990, M. D. Galagher & J. C. Deeming leg., NMW.Z.1981-001.

Description. General coloration light brown to brown. Metope brown yellowish. Fore wings brown with yellowish transverse veins. Hind wings fuscous. Apices of teeth and socle setae of hind legs dark brown.

Male genitalia. Pygofer with straight hind margin (Fig. 9). Anal tube elongate, weakly narrowing apically, apex widely rounded in dorsal view (Fig. 8), turned up in lateral view (Fig. 4). Anal column long. Dorso-lateral phallobase lobes widely rounded apically, with



Figs. 1-3. *Caepovultus deemingi* gen. & sp. nov., holotype, male. 1 – body, dorsal view; 2 – body, lateral view; 3 – head, ventral view.



Figs. 4-9. *Caepovultus deemingi* gen. & sp. nov., holotype, male genitalia. 4 – penis, connective, and anal tube, lateral view; 5 – penis, ventral view; 6 – capitulum of style, dorsal view; 7 – style, lateral view; 8 – anal tube, dorsal view; 9 – pygofer, lateral view.

concave ventral margins distally (Fig. 4). Ventral phallobase lobe short, widely rounded apically (Fig. 5). Aedeagus with a pair of long ventral hooks directed basally and pointed apically. Apical aedeagal processes long, almost reaching apex of phallobase (Figs. 4, 5). Style with weakly concave hind margin, caudo-dorsal angle narrowly rounded (Fig. 7). Capitulum of style narrows apically, apex rounded in dorsal view (Fig. 6), lateral tooth wide, apical tooth well developed.

Body length. 3.6 mm.

Etymology. The species is named for the collector and British dipterologist Dr John C. Deeming.

Acknowledgements

We are sincerely grateful to the Royal Society of London for the financial support to our collaborative study.

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