

## Some remarks on rare and new Palaearctic species of the genus *Zodion* Latreille (Diptera: Conopidae)

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### Abstract

*Zodion hispanicum* spec. nov. is described from Spain (Murcia, Sierra Espuña) and *Zodion hauseri* spec. nov. is described from Kazakhstan (Almaty Province, Charyn Valley). A diagnosis is given for *Zodion andersoni* Kröber, 1936 and *Zodion vsevolodi* Zimina, 1974. *Zodion asiaticum* Becker, 1922 is placed as a junior synonym of *Zodion cinereum* (Fabricius, 1794) (syn. nov.). New faunistic records are presented for *Z. andersoni* and *Z. vsevolodi*.

**Key words:** Thick-headed flies, spec. nov., syn. nov., Europe, Spain, Kazakhstan

### Introduction

The genus *Zodion* comprises 62 valid species worldwide. Twelve of these species occur in the Palaearctic Region. The genus is taxonomically difficult due to the variability of several species and the lack of stable characters to separate them. Mei & Stuke (2008) recently reviewed the European fauna and drew attention to some genitalic characters which help in species identification. Within the last ten years several specimens have come to my attention that either belong to undescribed species or are otherwise of faunistic interest. This paper summarises these records.

### Systematic account

#### *Zodion andersoni* Kröber, 1936

(figs 1–9)

Material examined: MONGOLIA: 1♀, 6.–8.vii.2003, 90 km N Ulanbaar, Segnezer River, 1450 m, leg. J. Halada, coll. Czech University of Life Sciences, Czech Republic, Prague (CULSP); 1♀, 23.vii.2005, Chuluut Gol (river), 1940 m [47°48'N 100°19'E], leg. J. Halada, private collection Stuke, Leer (PJHS); 1♂, 24.vii.2004, Arkhangay, 90 km NE Tsetserleg, 1400 m [48°03'N 102°25,5'E], leg. J. Halada, coll. CULSP; RUSSIA: 1♂, 8.vii.2006, Siberia, Altaya, Ferma, Tyume, 1550 m [50°10'N 87°53'E], leg. J.T. Smit, PJHS.

*Zodion andersoni* is a replacement name erected by Kröber (1936) for *Zodion intermedium* Kröber, 1933. One female syntype is deposited in the collection of the Naturhistoriska Riksmuseet Sweden, Stockholm (NHRS). The second syntype may have been kept in the Kröber collection and was destroyed in the second world war. There are fine photos of the syntype available which confirm my interpretation of the species.

*Zodion andersoni* belongs in a species-group which is distinguished primarily by having a uniformly dusted abdomen, and lacking any blackish spots at the bases of the hairs on either the thorax, abdomen or, where they are present, on the scutellum. In addition radial cell  $r_{4+5}$  is usually open, although this last character is variable. The key given below under *Zodion hauseri* summarises the knowledge concerning the Palaearctic species of this group. *Zodion andersoni* can be recognised by the following combination of characters: Antenna brown to orange-brown but not completely black nor completely orange-brown (fig. 2); pedicel slightly longer than basal flagellomere (fig.

Distribution: *Zodion hispanicum* is to date only known from the locus typicus in the Sierra Espuña (Spain, Región de Murcia).

### ***Zodion vsevolodi Zimina, 1974***

(figs 34–37)

Material examined: Material: JAPAN: 1♂, Paratype, 4.vii.1965, Aomori prf., Aoni, Kuroishi shi, leg. R. Narumi, coll. Moscow State University, Russia (ZMUM); 1♂, 15.v.1974, Honshu, Kuriyagawa, Morloka, Iwate, emerged from host *Ceratina flavipes* Smith, leg. Y. Maeta, PJHS; 1♀, 20.vii.1971, Honshu, Sugadaira, 1000 m, leg. V.S. van der Goot & J.A.W. Lucas, PJHS; SOUTH KOREA: 1♀, 6.–27.vi.2004, Jirisan, Hamyang-gum, Macheon-myon, Samyeong-li [35°20.930'N 127°38.503'E], leg. P. Tripton, PJHS.

*Zodion vsevolodi* can easily be recognised by the combination of the following characters: Antenna almost completely orange-brown; pedicel about as long as basal flagellomere (fig. 36); ocellar triangle short but distinct (posterior view), more-or-less shining brown; frons mainly brown, with several long black hairs; proboscis short (tip of labellum to palps : head height = 0.8–1.1); palp orange-brown, with bristles which are shorter than the length of the palp; scutum covered with long hairs which are more-or-less arranged in lines (fig. 37); dusting pattern on scutum only indistinct, with two submedial lines in the anterior half and hardly visible longer sublateral stripes (fig. 34); dorsal surface of the scutellum without hairs; 2–3 bristles on the posterior margin of the scutellum; wing length 3.9–4.8 mm; veins completely brown; radial cell  $r_{4+5}$  open or closed; legs brown with distinct blackish dusting on femora; abdomen of male (fig. 35) with large brown spots on tergites 1–3, a pair of brown triangular spots on tergite 4 and a pair of small brown spots on tergite 5; abdomen of female with indistinct pattern; abdomen sparsely haired, with more-or-less distinct brown spots at the bases of some hairs; epandrium (♂) or protandrium (♀) brown and therefore not contrasting with the brown abdomen.

*Zodion vsevolodi* has previously only been reported from Japan (Honshu) and Russia (Primorskij Kraj) by Zimina (1976) and Maeta & MacFarlane (1993).

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