

**A new species of the genus *Brachypogon* from Poland
(Diptera: Ceratopogonidae)**

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ABSTRACT. *Brachypogon* (*B.*) *sudowicus* sp. n. from N.E. Poland is described and illustrated. This is the third species of the subgenus known from Europe and Poland.

KEY WORDS: Diptera, Ceratopogonidae, *Brachypogon*, new species, Poland.

INTRODUCTION

Brachypogon KIEFFER is a genus of predaceous biting midges of the tribe Ceratopogonini, which currently is divided into three subgenera *Brachypogon* s. str., *Isohelea* KIEFFER, and *Sarissohelea* DEBENHAM. *Brachypogon* s. str. is a small subgenus (45 extant species) of nearly worldwide distribution. Six species are known from the Palaearctic region. They are described, illustrated and keyed by SZADZIEWSKI & HAVELKA (1984). In Europe and Poland two species of the subgenus occur, i.e. transpalaearctic *B. (B.) vitiosus* (WINNERTZ) (widely distributed from Japan to Algeria), and European *B. nieves* HAVELKA (Poland, Germany, Spain) (SZADZIEWSKI & HAVELKA 1984, SZADZIEWSKI 1991).

Among the materials collected on umbelliferous flowers in NE Poland I found further unknown species of the subgenus, which is described below. This is the third species of the subgenus in Poland and Europe and seventh in the Palaearctic. For diagnosis of *Brachypogon* (*B.*) and terminology see SZADZIEWSKI & HAVELKA (1984).

DESCRIPTION

***Brachypogon* (*B.*) *sudowicus* sp. n.**

Diagnosis

The species is characteristic in having hooked setae on hind basitarsus, fourth palpal

segment with a single seta, tip of costa and radial veins not infuscated, and unique male genitalia.

Description

Male. Very small biting midge. Body brown with paler tarsi and yellow halteres. Eyes pubescent, contiguous. Flagellum 400 μm long, flagellomeres 2-11 fused, two last ones free (Fig. 1); first flagellomere with one sensillum coeloconicum. Palpus 5-segmented (Fig. 2); third palpal segment 28 μm long, slender, two times longer than its greatest breadth; fourth palpal segment bearing one long seta.

Scutellum with two submedian and two lateral long setae. Wing length 0.67 mm, costal ratio (CR) 0.49; anterior wing margin from tip of costa to vein M1 not thickened; both radial cells completely obliterated, vein M2 absent; tip of costa and radial veins pale, not infuscated (Fig. 3). Haltere knob yellow. Palisade setae of first tarsomere of hind leg with six hooked setae on distal half. Tibial comb composed of 8 spines. Tarsal ratio (TR) of fore leg 1.5, mid leg 2.0, hind leg 1.9. Katepisternal setae not visible.

Genitalia (Figs. 4, 5). Gonocoxite with broad mesobasal lobe armed with long and pointed apical process. Gonostyle long and slender, evenly curved, with pointed apex. Tergite IX longer than gonocoxite, almost square on distal half; apex slightly concave, apicolateral angles evenly rounded and each bearing small single seta. Cerci reduced. Aedeagus as long as gonocoxite, slender; distal portion more slender, with apex directed ventrally; basal arch very low, lateral arms well sclerotized and long. Parameres heavily sclerotized and fused on basal half, their free and pointed apices divergent (Fig. 5).

Female. Unknown.

Material examined

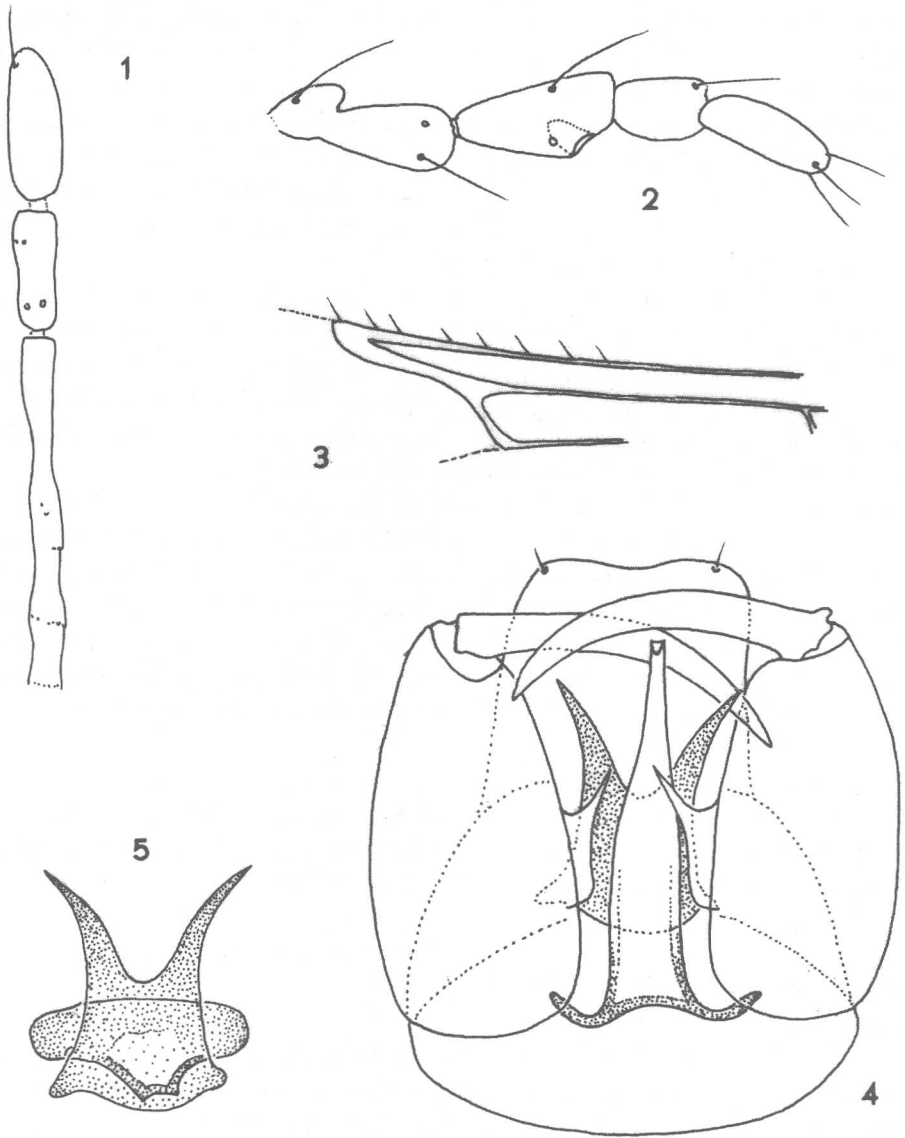
Holotype male, NE Poland, Poszeszupie nr Suwałki, 3 July 1993, flowers of *Chaerophyllum aromaticum* L. (Apiaceae), J. Krzywiński leg. The holotype is deposited in the Department of Invertebrate Zoology, University of Gdańsk.

Etymology

The specific name *sudowicus* refers to the historical name of the region Sudowia or Sudawia where the holotype was collected.

Discussion

The new species described from the male can be easily distinguished from all other species by the unique male genitalia (long gonostyli, long and slender aedeagus, cerci reduced; distal portion of parameres blade-like, divergent; mesobasal lobe present). A mesobasal lobe is absent in other Palaearctic species known from males (*B. kokocinskii* SZADZIEWSKI, *B. vitiosus* (WINNERTZ) and *B. nieves* HAVELKA). A similarly shaped mesobasal lobe is known in *B. delectollei* GROGAN et DE MEILLON from the Afrotropical region (GROGAN & DE MEILLON 1993). That Afrotropical species reported from Senegal, Ivory Coast and Zimbabwe has similarly constructed male genitalia as the new species and this may show that both species are related. Obviously, *B. delectollei* can not be confused with the new species as it differs in stouter gonocoxites, separated parameres, stouter and shorter gonostyli, tergite IX with distinct apicolateral processes.



Figs. 1-5. *Brachypogon (B.) sudowicus* sp. n., male. 1 - distal flagellomeres, 2 - palp, 3 - costal and radial wing veins, 4 - ventral aspect of genitalia, 5 - parameres.

B. (B.) pakistanicus SZADZIEWSKI et HAVELKA (from Pakistan) and *B.(B.) kremeri* SZADZIEWSKI et HAVELKA (from North Korea) described from females differ from the new species in fourth palpal segment lacking setae and hind basitarsus without hooked setae. However, fourth palpal segment with a single seta and hooked setae on distal half of hind

basitarsus has *B. krzeminskii* SZADZIEWSKI et HAVELKA known from females (from North Korea and Japan) (SZADZIEWSKI & HAVELKA 1984). That species differs from *B. sudowicus* in shorter and stouter third palpal segment, distinctly infuscated end of costa plus radial veins, anterior wing margin thickened from tip of costa to vein M1, and yellowish abdomen (SZADZIEWSKI & HAVELKA 1984).

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