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Scientific paper

BEMBECIA BUMBURETA SP.N. - A NEW SPECIES OF CLEARWING MOTHS FROM NORTH-WESTERN PAKISTAN (LEPIDOPTERA, SESIIDAE)

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A new species, *Bembecia bumbureta* sp. n., is described. It is similar to the West Caucasian species *Bembecia syzcjovi* Gorbunov, 1989, and *Bembecia pagesi* Toševski, 1993 described from North India. The new species is collected in North West Pakistan, Chitral province using pheromone trap. Bionomics and host plant are unknown.

Key words: *Bembecia bumbureta* sp. n., Sesiidae, Lepidoptera, Chitral, Pakistan.

INTRODUCTION

The genus *Bembecia* Hübner 1819 is consisted of over 70 species distributed mainly in central and west Palearctic (Špatenka et al., 1999). The larvae are univoltine or biennial. The larvae develop in the roots, rarely in the stems of different plants of the family Fabaceae. Sexual dimorphism is relatively common event in *Bembecia* species, together with absence of transparency of the wings in females, which is a homoplasius character (Laštůvka 1992). The distribution center of the genus *Bembecia* probably lies in the southern parts of the central Palearctic (Špatenka et al., 1999). For this reason it is expected that the list of *Bembecia* species from southern part of central Palearctic will increase in future. The genus *Bembecia* should be divided in several species groups of which the most numerous is *B. ichneumoniformis*-group with over 40 described

species. In addition, several species from this region were described during late 90's (Špatenka, 1997). In this paper, a new species from above mentioned group-species is described. The specimen has been collected using commercial pheromone traps (Wageningen, Netherlands) (in Chitral province (North West Pakistan)).

***Bembecia bumbureta* sp. n.**

M a t e r i a l . Holotypus, male, North West Pakistan, Bumburet, Chitral, 3200 m, 28-31.06.1997, lgt. Jerome Pages, in collection of MNHN (Muséum National d'Histoire Naturelle, Paris, France)

Description of Holotype (Fig. 1 a). Alar expanse 31 mm, body length 18 mm, forewing length 14 mm, antenna 6 mm.



Picture 1 - *Bembecia bumbureta* sp. n. Holotypus, male, North West Pakistan, Bumburet, Chitral, 3200 m, 28-31.06.1997, lgt. Jérôme Pagés,

Slika 1 - *Bembecia bumbureta* sp. n. Holotip, mužjak, Severozapadni Pakistan, Bumburet, Čitral, 3200 m, 28-31.06.1997, lgt. Jérôme Pagés,

Antenna black. Head black with retrocephalic pale yellow hairs like scales; frons pale brown with whitish gray scales above; vertex black, mixed with pale yellow scales posteriorly; labial palpus white, dorsally with black bristle scales among second segment ventrally and laterally.

Thorax black with blue sheen, tegula with broad yellow spot along outer margin; patagia shining black; prothorax and mesothorax black, metathorax black with golden-yellow hair-like scales dorsally and medially. Fore coxa brown black with yellowish scales exteriorly, femur black; tibia black proximally, yellow distally; tarsi yellow with some black scales. Hind coxa black; femur black with whitish scales exteriorly, tibia yellow, black proximally and with distinct black ring distally; spurs yellowish. Tarsi yellow with some black scales.

Abdomen: brown black with extensive blue sheen; tergites 2, 4, 6 and 7 with broad yellow posterior margins, while tergite 5 with yellow scales medially; all sternites with yellow posterior margin; anal tuft black, suffused with yellow scales.

Ground color of forewing pale brown with all three transparent areas well developed; anterior transparent area (ATA) and posterior transparent area (PTA) well developed and transparent along their length; costal margin pale brown, anal margin brown covered with yellow and orange-yellow scales; discal spot dark brown with semilunar orange-red design along outer margin; external transparent area (ETA) large, divided into 5 cells; apical area narrow covered with orange red and brown scales; outer margin black brown, fringes brown. Hind wing transparent, discal spot orange brown, triangularly shaped, reaching conjunction of M_3 - Cu_1 ; outer margin narrow, brown black; fringes brown.

Male genitalia (Fig. 2). Scopula androconialis well developed; gnathos distinct with all crista well developed; medialis crista rounded; external margin of lateral crista gnathi wave-shaped medially. Valva nearly rectangular, crista sacculi straight, obliquely situated, moderately raised above internal valva surface, reaching little more than 1/2 of the valva length. Aedeagus bulbous basally, significantly longer than valva length, somewhat curved proximally.



Picture 2 - *Bembecia bumbureta* sp. n., male genitalia: uncus-tegumen with aedeagus (left), valva (right).

Slika 2 - *Bembecia bumbureta* sp. n., genitalije mužjaka: uncus-tegumen aedeagusom (levo), valva (desno).

Differential diagnosis. Habitually, the new species is very similar to *Bembecia pagesi* Toševski, 1993 described from Northern India and *Bembecia syzcjovi* Gorbunov, 1989, described from Georgia. Both species possess characteristic large ETA area of fore wing and extremely narrow apical area. In *B. bumbureta* sp. n. ETA area is smaller and apical area is distinctly broad. From both species, newly described species clearly differs in genital morphology. *B. pagesi* and *B. syzcjovi* belong to the species from the *Bembecia dispar*-group (Špatenka et al., 1999) while *B. bumbureta* to the *Bembecia ichneumoniformis*-group. From the *B. diamerica* Toševski, 2011 (in press), *B. bumbureta* sp.n. differs by dark brown

fore wings and brown black discal spot and different morphology of crista sacculi which is straight in the former and distally slightly bent in the latter.

Etymology. The new species is named after type locality Bumburet (Chitral district) in the Khyber-Pakhtunkhwa province of NW Pakistan.

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**BEMBEZIA BUMBURETA SP. N.– NOVA VRSTA STAKLOKRILCA
(LEPIDOPTERA, SESIIDAE) IZ SEVEROZAPADNOG PAKISTANA**

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REZIME

U ovom radu prikazan je opis vrste *Bembecia bumbureta* sp. n. Novoopisana vrsta je slična vrsti *Bembecia syzjovi* Gorbunov, 1989 iz zapadnog Kavkaza i vrsti *Bembecia pagesi* Toševski, 1993, koja je opisana iz severne Indije. Nova vrsta je ulovljena na feromonske klopke u Čitral provinciji (severno-zapadni Pakistan). Biologija i biljka domaćin je nepoznata

Ključne reči: *Bembecia bumbureta* sp. n, Sesiidae, Lepidoptera, Chitral, Pakistan.

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