

A new species of clearwing from north west Pakistan ... 227

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## A NEW SPECIES OF CLEARWING MOTHS FROM NORTH WEST PAKISTAN - *DIPCHASPECIA CHITRALA* SP. N. (LEPIDOPTERA, SESIIDAE)

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A new species, *Dipchasphecia chitrala* sp. n., is described. It is similar to the *Dipchasphecia naumanni* Špatenka, 1991 described from western Afghanistan and Baluchistan province in Pakistan. The new species is collected on several localities in Chitral province (North West Pakistan) using pheromone trap. Bionomics and host plant are unknown.

*Key words:* *Dipchasphecia chitrala* sp. n., Sesiidae, Lepidoptera, Chitral, Pakistan.

### INTRODUCTION

Genus *Dipchasphecia* Căpușe, 1973 is probably the most intriguing group of species within Palearctic clearwing moths. The species from this genus are very homogenous morphologically, with poorly known biology. The recorded host plants are from plant families Coryophyllaceae and Plumbaginaceae (Špatenka et al., 1999). Altogether 17 species are known to date, mostly described from Middle and Central Asia. The common morphological character is very distinct type of crista sacculi of the valvae, forming a sclerotized projection covered with fluff of setae in the medial part of inner surface of valva. Homogeneity in external morphology as well as in genital morphology lead to difficulties in species recognition, especially in bad preserved specimens. The distribution centre of the genus *Dipchasphecia* is in Central Asia, with the range of one species, *D. lanipes*

(Lederer, 1863), extending into south-eastern Europe. Description of new species from this genus in this paper is based on material collected during several surveys carried out by lepidopterologist Jérôme Pagés (Rennes, France) in North-western Pakistan between 1994 and 2004.

***Diphasphecica chitala* sp. n.**

**M a t e r i a l .** Holotypus, male, North West Pakistan, Col de Shandur, Chitral, 3800 m, 23-24.07.1998, lgt. Jérôme Pagés, in collection of MNHN (Muséum National d'Histoire Naturelle, Paris, France). Paratypes: 1 female, North West Pakistan, Birmoghiasht, 3300 m, Chitral, 24.07.1994; 1 male, North West Pakistan, Birmoghiasht, 3500 m, Chitral, 23.06.2004; 1 male, North West Pakistan, Birmoghiasht, 3200 m, Chitral, 6/7.07.1997; 1 male, Zani pass, 3800m, Chitral, 28/29 07.1996; 5 males, Tirich Mir, 3300 m, Shagrome; all North West Pakistan, all lgt. Jérôme Pagés, in collection of J. Pagés (Rennes, France) and I. Toševski (Novi Beograd, Serbia).

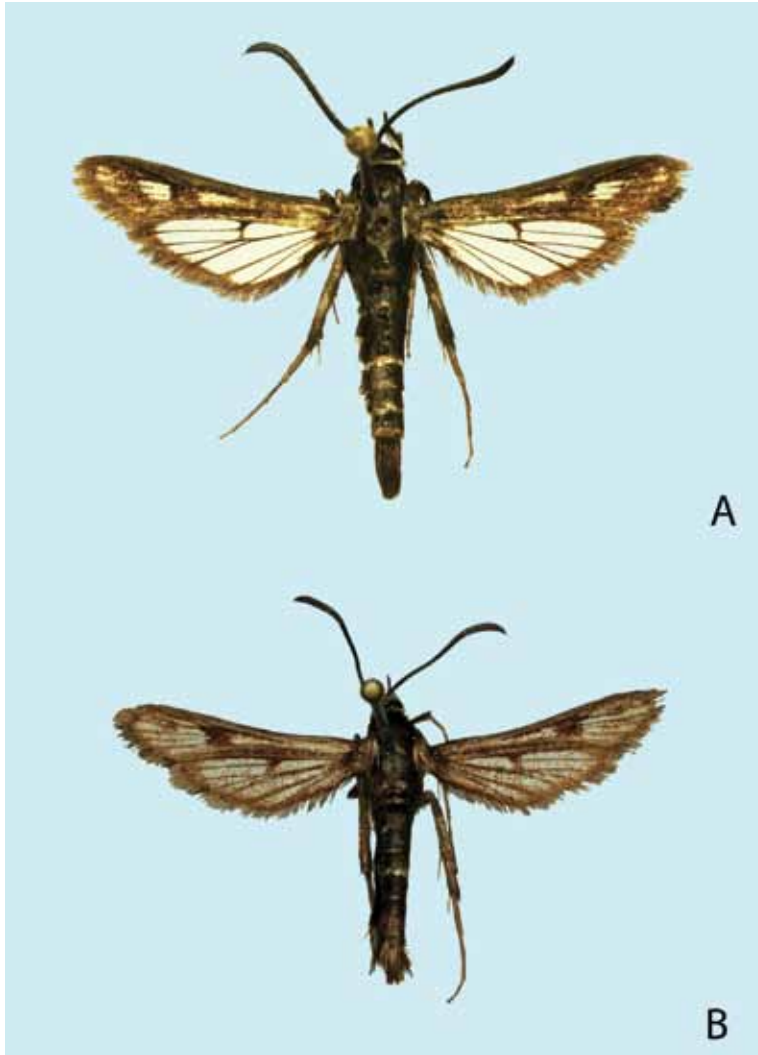
Description of Holotype, (Picture 1A). Alar expanse 24 mm, body length 14 mm, forewing length 10 mm, antenna 7 mm.

Antenna: dark brown with discrete bronze sheen. Head: dark brown with and retrocephalic corona of whitish-pale brown hairs like scales. Frons brown almost throughout with few gray-brown scales posteriorly; labial palpus ventrally brown, dorsally white.

Thorax: dark brown, tegula with narrow pale yellowish-white inner margin; metathorax dark brown; mesothorax dark brown with brown hairlike scales dorso-laterally. Legs: entirely black with discrete bluish sheen. Thorax grayish brown laterally, mixed with individual white scales. Fore coxa dark brown with individual grayish brown scales; hind tibia dark brown with a narrow whitish central ring, spurs whitish.

Abdomen: brown black; tergites 2, 4, 6 and 7 dorsally with a narrow whitish posterior margins; brown black ventrally with discrete row of whitish scales on sternites 4, 5, 6 and 7 posteriori; anal tuft brown black with few whitish scales laterally.

Forewing: dark brown with transparent areas almost opaque dense covered with dark brown scales; discal spot widely brown black; ATA (anterior transparent area) opaque with narrow triangular spot towards discal spot covered with white scales. PTA (posterior transparent area) entirely opaque, covered with dark brown scales; ETA (exterior transparent area) opaque, small, triangular, divided into four white opaque cells; apical area dark brown, with rare whitish scales between veins exteriorly; costal margins of the forewing ventrally whitish-gray; fringes pale brown.



**Picture 1** - A - *Dipchasphecia chitrana* sp. n. , Holotypus, male, North West Pakistan, Col de Shandur, Chitral, 3800 m, 23-24.07.1998, lgt. Jérôme Pagés; B - female, Paratypus, North West Pakistan, Birmoghiasht, 3300 m, Čitral, 24.07.1994, lgt. Jérôme Pagés

**Slika 1** - A - *Dipchasphecia chitrana* sp. n. , Holotip, mužjak, severozapadni Pakistan, Col de Shandur, 3800 m, 23-24.07.1998, lgt. Jérôme Pagés; B - ženka, Paratip, severozapadni Pakistan, Birmoghiasht, 3300 m, Čitral, 24.07.1994, lgt. Jérôme Pagés.

Hindwing: transparent with brown and narrow discal spot; ventrally, costal margin brown black.

Female (Picture 1B): Alar expanse 25 mm, body length 13.5 mm, forewing length 11 mm, antenna 7 mm. Similar to male but hind wings diffusely suffused with brown scales. Abdomeninal tergites 2, 3, 4, 5 and 6 with narrow white margin posteriori.

G e n i t a l i a of the holotype (Picture 2). Scopula androconialis very long well developed. Lateral leaves of crista gnathi very narrow; crista medialis in form of rudimental fold, practically missing. Valva trapezoid in shape. Crista socculi simple, with characteristic fluff of setae in the medial part.

Differential diagnosis: *Dipchasphecia chitrala* sp.n. is distinct species which can be easily recognized from the related species. The most similar species, which is also geographically closely related, is *D. naumanni* Gorbunov, 1991 described from Afghanistan and Pakistan. The new species can be easily separated by possessing white broad bands on tergites 2, 4, 6 and 7, while in *D. naumanni* broad white band is present only on 4<sup>th</sup> abdominal tergite. Scopula androconialis is very short in *D. naumanni*, while very long and well developed in *D. chitrala* sp. n. In addition, both wings in the female are diffusely covered with brown scales which is character not present in other *Dipchasphecia* species.

Etymology. The new species is named after Chitral district in the Khyber-Pakhtunkhwa province of NW Pakistan.



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

**Slika 2** - *Dipchasphecia chitrata* sp. n., genitalije mužjaka:  
uncus-tegumen sa aedeagusom (levo), valva (desno).

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**NOVA VRSTA STAKLOKRILCA IZ SEVEROZAPADNOG PAKISTANA  
- *DIPCHASPHECIA CHITRALA* SP. N. (LEPIDOPTERA, SESIIDAE)**

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**REZIME**

U ovom radu prikazan je opis vrste *Dipchasphecia chitrala* sp. n. Novoopisana vrsta je slična vrsti *Dipchasphecia naumanni* Špatenka, 1991 koja je opisana iz Avganistana i Belučistan provincije u Pakistanu. Primerci novoopisane vrste su sakupljeni na nekoliko lokaliteta u provinciji Čitral (severozapadni Pakistan). Biologija i biljka domaćin su nepoznati.

*Ključne reči:* *Dipchasphecia chitrala* sp. n., Sesiidae, Lepidoptera, Chitral, Pakistan.

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