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# Horse Flies (Diptera: Tabanidae) of Vrachanska Planina Mountains

## DIANA GANEVA

**Abstract.** Original and published data suggest the existence of 13 tabanid species up to now in the region. The species *Chrysops viduatus* (Fabricius, 1794), *Tabanus bifarius* Loew, 1858 and *Tabanus exclusus* Pandellé, 1883 are new records for the Vratchanska Planina Mountains. The total species registered represent 16.88% of the known Bulgarian tabanid fauna (77 tabanid species).

Key words: tabanids, fauna, Vrachanska Mountains, Bulgaria.

### Introduction

The only data regarding the variety of tabanid species in Vrachanska Planina Mts. are published by Nedyalkov (1912) and Drensky (1929). On the basis of a study on the Bulgarian dipteral entomofauna, Nedyalkov (1912) reports the existence of 5 tabanid species in the region of Vratsa town [Chrysops caecutiens (Linnaeus, 1758), Tabanus bromius Linnaeus, 1758, T. cordiger, T. spodopterus, and T. tergestinus Egger, 1859]. Later, Drensky (1929) notes that 8 of the identified for Bulgaria, 52 species and 13 subspecies of tabanids, are reported for the Vrachanska Mts. as well. Five of them [Chrysops flavipes Meigen, 1804, Hybomitra pilosa (Loew, 1858), Tabanus miki Brauer, 1880, Tabanus sudeticus Zeller, 1842 and Philipomyia graeca (Fabricius, 1794)] are reported for the first time for this region (Drensky 1929). The reported by Nedyalkov (1912) and Drensky (1929) a total of 10 tabanid species represent 12.78% of the known up to now for Bulgaria, 77 tabanid species (Ganeva 2008).

The scarce data regarding the composition of the tabanid fauna in Vrachanska Mts. and the lack of research on the group in the region for more than eight decades predetermined the objective of the current study.

### **Material and Methods**

The composition of the tabanid fauna in Vrachanska Mts. was studied using material from two field research (08.07.2014 and 30.07.2014). The material was collected from 6 localities during a route collection from Ledenika Hut to Purshevitsa Hut. Due to the extremely unfavourable, meteorogical conditions during the whole active season of the tabanids in year 2014, only 10 specimens were collected and processed.

#### **TABANIDAE**

The captured specimens were processed in laboratory conditions and were identified according to Chvála *et al.* (1972) and Olsufjev (1977).

Lists of the studied localities and of the tabanid species are presented. The list of localities indicates the altitude, coordinates, collection dates and total number of collected specimens from each locality. The altitude and geographical coordinates were obtained by a Garmin GPS receiver, model Etrex Vista HCx.

The localities – new or based on published data - as well as the number, gender of the captured specimens, and the dates of the catches were indicated for each species. The serial number of the localities is presented in the List of species in brackets []. The sequence of species` arrangement was done according to the Catalogue of Palaearctic Diptera (Chvála 1988).

### List of localities:

- 2. Biotope near the road to the Parshevitsa Hut, 1100 m a.s.l., 43°17282 N; 23°48620 E, 8.07.2014, 1  $\circlearrowleft$ .
- 3. Vicinity of the Parshevitsa Hut, 1221 m a.s.l., 43°15115 N; 23°47515 E, 30.07.2014, 2 \; \;
- 4. Beech forest near the road between Parshevitsa Hut and Forest Home Hut, 1221 m a.s.l.,  $43^{\circ}15779 \text{ N}$ ;  $23^{\circ}47487 \text{ E}$ , 8.07.2014,  $1 \degree$ .
- 5. Area of fountain "Friendship" under the Recreation Complex of NPP "Kozloduy", 1059 m a.s.l.,  $43^{\circ}17587$  N;  $23^{\circ}47577$  E, 30.07.2014, 1  $\updownarrow$ .
- 6. Biotope right of the road towards the town of Vratsa, 608 m a.s.l.,  $43^{\circ}19029$  N;  $23^{\circ}50813$  E, 30.07.2014, 3  $\bigcirc$ .

#### **Results and Discussion**

Ten tabanid specimens were collected and identified as a result of the conducted study. Six species from 3 genera were registered: *Chrysops* (1 species), *Tabanus* (4 species) and *Philipomyia* (1 species).

The species *Chrysops viduatus* (Fabricius, 1794), *Tabanus bifarius* Loew, 1858 and *Tabanus exclusus* Pandellé, 1883 were new records for the Vrachanska Mts..

The summarized data from the studies of Nedyalkov (1912) and Drensky (1929) show that a total of 10 species are known for the region of Vrachanska Mts.. The current study confirms the existence of 3 tabanid species and reports 3 new species as part of the tabanid fauna of the studied region. After present study a total of 13 tabanid species are known for the Vrachanska Mts..

List of the species

#### Family Tabanidae

Subfamily Chrysopsinae

Genus Chrysops Meigen, 1803

Chrysops (Chrysops) caecutiens (Linnaeus, 1758)

Published data: Vratsa (Nedyalkov 1912).

#### **TARANIDAE**

## Chrysops (Chrysops) flavipes Meigen, 1804

Published data: Iskar Gorge (Drensky 1929).

# Chrysops (Chrysops) viduatus (Fabricius, 1794)

New data: [1], 8.07.2014, 1 ♀.

## Genus Hybomitra Enderlein, 1922

# Hybomitra pilosa (Loew, 1858)

Published data: Cherepish Monastery (Drensky 1929).

# Genus Tabanus Linnaeus, 1758

### Tabanus bifarius Loew, 1858

New data: [1], 8.07.2014,  $1 \circ$ . **Tabanus bromius Linnaeus, 1758** 

Published data: Vratsa (Nedvalkov 1912).

## Tabanus cordiger Meigen, 1820

Published data: Vratsa (Nedyalkov 1912; Drensky 1929).

### Tabanus exclusus Pandellé, 1883

New data: [3], 30.07.2014, 1  $\circlearrowleft$ ; [5], 30.07.2014, 1  $\circlearrowleft$ .

### Tabanus miki Brauer, 1880

Published data: Vratsa (Drensky 1929).

# Tabanus spodopterus Meigen, 1820

Published data: Vratsa (Nedyalkov 1912; Drensky 1929).

### Tabanus sudeticus Zeller, 1842

Published data: Cherepish Monastery (Drensky 1929).

New data: [4], 8.07.2014, 1 ♀.

### Tabanus tergestinus Egger, 1859

Published data: Vratsa (Nedyalkov 1912; Drensky 1929). New data: [3], 30.07.2014, 1  $\updownarrow$ ; [6], 30.07.2014, 3  $\updownarrow$ .

# Genus Philipomyia Olsufjev, 1964

### Philipomyia graeca (Fabricius, 1794)

Published data: Vratsa (Drensky 1929).

New data: [2], 8.07.2014,  $1 \circ$ .

#### Conslusions

The route collection in Vrachanska Planina Mts. on July 2014 resulted of 6 tabanid species identified on the basis of only 10 collected specimens. This fact suggests the existence of a significant variety of species of tabanids in Vrachanska Planina and the need of detailed studies in this region.

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# Конски мухи (Diptera: Tabanidae) от Врачанска планина

# ДИАНА ГАНЕВА

(Резюме)

Въз основа на литературни и оригинални данни са установени 13 вида табаниди във фауната на Врачанска планина. Видовете *Chrysops viduatus* (Fabricius, 1794), *Tabanus bifarius* Loew, 1858 и *Tabanus exclusus* Pandellé, 1883 се съобщават за първи път от района на изследването. Установените видове представляват 16.88 % от известните, за България, 77 вида табаниди. Регистрираните 6 вида, само въз основа на 10 събрани екземпляра свидетелстват за значително видово разнообразие на табанидната фауна във Врачанска планина, което изисква да бъдат продължени проучванията в района.