



A CONTRIBUTION TO THE STUDY OF THE BULGARIAN TABANID FAUNA (DIPTERA, TABANIDAE)

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Abstract: A route collection of tabanids in Eastern Predbalkan and Eastern Stara planina mountain (Vurbishki pass) resulted in the capture and identification of 140 ♀ specimens from 7 species, pertaining to 4 genera *Chrysops* (1 species), *Hybomitra* (2 species), *Tabanus* (3 species) and *Philipomyia* (1 species). The species *Hybomitra bimaculata* (Macquart, 1826) was reported for the first time as part of the Bulgarian tabanid fauna. Its discovery increased the number of the known for Bulgaria species to a total of 77.

Key words: tabanids, fauna, new species, Eastern Predbalkan, Eastern Stara planina Mnt, Bulgaria

INTRODUCTION

The geographical location, landscape diversity and climate peculiarities, observed on the territory of Bulgaria, create good preconditions for development of a rich variety of tabanid species. The analysis of the published data, along with the results from our studies on the composition and distribution of the tabanid species in Bulgaria, led to identification of 74 species and subspecies, belonging to 12 genera (GANEVA, 2005).

Furthermore, a study on the tabanid fauna of Strandja (GANEVA, in press) and Belassitsa (GANEVA, submitted) mountains resulted in the identification of the species: *Tabanus obsolescens* Pandelle, 1883 (captured in Strandja) and *Tabanus paradoxus* Jaenncke, 1866 (captured in Belassitsa), which are considered new for the Bulgarian fauna.

Despite the already identified up until now 76 species, we tend to believe that the diversity of tabanid species in Bulgaria is still not sufficiently researched. Quite scarce or almost missing were the data on the tabanid fauna in most of the Bulgarian

mountains, the Danube plain and the Black sea coast. Thus, our studies have set the objective to investigate the diversity of tabanid species in precisely these, not studied regions.

MATERIALS AND METHODS

The study of the tabanid species existing in the area of Veliki Preslav – Vurbishki pass – Petoluchkata road fork is considered as part of the research on the diversity of tabanids in Stara planina mountain.

The material was collected by means of an entomological net from 4 localities in Eastern Predbalkan (2 localities) and Eastern Stara planina mountain (2 localities) at the end of June, 2008. The captured specimens were processed in laboratory conditions and were identified according to (CHVÁLA *et al.*, 1972) and (OLSUFJEV, 1977). The sequence of species' arrangement was done according to the Catalogue of Palaearctic Diptera (CHVÁLA, 1988).

A list of the localities, arranged in accordance with the sequence of material collection during the study, is provided. The data indicates the altitude, the dates of collection, and the overall number of specimens, captured from each locality. The serial number of the localities is presented in the List of species in brackets [].

List of localities:

1. 4 km South of Veliki Preslav town (Eastern Predbalkan), direction Vurbishki pass, 150 m, 29.06.08., 21 ♀.

2. Region of Ticha dam, 2 km before the road fork for Sushina village (Eastern Predbalkan), 220 m, 29.06.08., 11 ♀.

3. Region of Vurbishki pass chalet (Eastern Stara planina mountain), 770 m, 29.06.08., 104 ♀.

4. 1 km north of the road fork for Kotel town (Eastern Stara planina mountain), 300 m 29.06.08., 4♀.

RESULTS AND DISCUSSION

The route collection of tabanid species in Eastern Predbalkan and Eastern Stara planina mountain resulted in the identification of 140 ♀ specimens. Their determination led to the establishment of 7 species, pertaining to 4 genera: *Chrysops* (1 species), *Hybomitra* (2 species), *Tabanus* (3 species) and *Philipomyia* (1 species). The identified 7 tabanid species were reported for the first time in the studied territories.

Five species from 3 genera were captured in the region of Eastern Predbalkan (localities 1 and 2, table.1): *Chrysops* (1 species), *Tabanus* (3 species) and *Philipomyia* (1 species). Slightly more, 7 species from 4 genera, were collected in the region of Eastern Stara planina mountain (localities 3 and 4, table 1): *Chrysops* (1 species), *Hybomitra* (2 species), *Tabanus* (3 species) and *Philipomyia* (1 species).

Table 1. Species composition of Tabanidae (Diptera) from Eastern Predbalkan and Eastern Stara planina Mnt.

Species	Locality 1	Locality 2	Locality 3	Locality 4	Totally specimens	% of total number of specimens
<i>Chrysops caecutens</i> L	1♀	---	3♀	---	4♀	2.86
* <i>Hybomitra bimaculata</i> Macq.	---	---	1♀	---	1♀	0.71
<i>Hybomitra ciureai</i> Seg.	---	---	1♀	---	1♀	0.71
<i>Tabanus glaucopis</i> Mg.	1♀	---	1♀	1♀	3♀	2.14
<i>Tabanus maculicornis</i> Zett.	3♀	---	21♀	1♀	25♀	17.86
<i>Tabanus tergestinus</i> Egg.	3♀	4♀	22♀	---	29♀	20.71
<i>Philipomyia graeca</i> F.	13♀	7♀	55♀	2♀	77♀	55.00
Totally specimens	21♀	11♀	104♀	4♀	140♀	99.99
Totally species	5	2	7	3	7	

* New species in the fauna of Bulgaria

The species *Hybomitra bimaculata* (Macquart, 1826) was reported for the first time for the tabanid fauna of Bulgaria. One ♀ such specimen was captured in the region of Vurbishki pass chalet (Eastern Stara planina mountain) at 18.30 h, on 29.06.08. The locality is situated on the North-Western side of first class route № 7, in the area of Vurbishki pass. The species is already known for all parts of Europe (CHVÁLA, 1988), however, this was the first time it was reported for Bulgaria as well. The identification of this new species marks the increase of the known for the Bulgarian fauna species to a total of 77.

The study of GANEVA (2005a) on the tabanid fauna of Stara planina mountain led to identification of 23 species, captured from 13 localities in the Eastern part of the mountain (Slivenska mountain). Five of the species (*Chrysops caecutiens*, *Hybomitra ciureai*, *Tabanus glaucopis*, *Tabanus maculicornis* and *Tabanus tergestinus*) were also reported in the course of the current study, but at other localities in the region of Vurbishka mountain. In addition, the species *Hybomitra bimaculata* and *Philipomyia graeca* were reported for the first time for the region of Eastern Stara planina mountain. *Hybomitra bimaculata* is considered new not only for the region of Eastern Stara planina mountain, but for Bulgaria as a whole; whereas, *Philipomyia graeca* is new only for the studied region.

Thus, the studies on the tabanid fauna of Eastern Stara planina mountain resulted in the determination of 25 species. The newly discovered *Hybomitra bimaculata* (Macquart, 1826) makes the known for the Bulgarian tabanid fauna species a total of 77.

List of the established species from Eastern Predbalkan and Eastern Stara planina Mountain:

Family Tabanidae
Subfamily Chrysopsinae
Genus *Chrysops* Meigen, 1803

Chrysops (Chrysops) caecutiens (Linnaeus, 1758)

Published data: Eastern Stara planina Mnt: Chukata, 06.08.04, 1♀, (GANEVA, 2005a).

New data: [1], 1♀, 29.06.08; [3], 3♀, 29.06.08.

Subfamily Tabaninae
Genus *Hybomitra* Enderlein, 1922

**Hybomitra bimaculata* (Macquart, 1826)

New data: [3], 1♀, 29.06.08.

* New species in the fauna of Bulgaria.

Hybomitra ciureai (Séguy, 1937)

Published data: Eastern Stara planina Mnt: Asenovets' dam, 04.07.04, 1♀; Ablanovo, 13.08.04, 1♀, (GANEVA, 2005a).

New data: [3], 1♀, 29.06.08.

Genus *Tabanus* Linnaeus, 1758

Tabanus glaucopis Meigen, 1820

Published data: Eastern Stara planina Mnt: Ichera, 03.08.04, 47♀; 11.08.04, 55♀; 12.08.04, 9♀; Chukata, 05.08.04, 5♀; 06.08.04, 29♀; Ablanovo, 08.08.01, 3♀; 06.08.04, 3♀; 13.08.04, 22♀; Katunishte, 12.08.04, 8♀; NP "Sinite kamuni", 12.08.04, 58♀; 13.08.04, 14♀; Nejково, 12.08.04, 22♀; Vratnik, 12.08.04, 1♀; Byala, 13.08.04, 108♀, 1♂; res. "Kutelka", 13.08.04, 1♀, (GANEVA, 2005a).

New data: [1], 1♀, 29.06.08; [3], 1♀, 29.06.08; [4], 1♀, 29.06.08.

Tabanus maculicornis Zetterstedt, 1842

Published data: Eastern Stara planina Mnt: Ablanovo, 13.08.04, 1♀, (GANEVA, 2005a).

New data: [1], 3♀, 29.06.08; [3], 21♀, 29.06.08; [4], 1♀, 29.06.08.

Tabanus tergestinus Egger, 1859

Published data: Eastern Stara planina Mnt: Karandila, 24.06.03, 3♀; "Asenovets" dam, 04.07.04, 4♀; Ablanovo, 06.08.04, 1♀; 13.08.04, 5♀; Chukata, 06.08.04, 3♀; Ichera, 11.08.04, 1♀; Katunishte, 12.08.04, 3♀; Nejково, 12.08.04, 3♀; Byala, 13.08.04, 2♀, (GANEVA, 2005a).

New data: [1], 3♀, 29.06.08; [2], 4♀, 29.06.08; [3], 22♀, 29.06.08.

Genus *Philipomyia* Olsufjev, 1964

Philipomyia graeca (Fabricius, 1794)

New data: [1], 13♀, 29.06.08; [2], 7♀, 29.06.08; [3], 55♀, 29.06.08; [4], 2♀, 29.06.08.

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ПРИНОС КЪМ ПРОУЧВАНЕТО НА БЪЛГАРСКАТА ТАБАНИДНА ФАУНА (DIPTERA, TABANIDAE)

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(Резюме)

При маршрутен сбор на табаниди в Източен Предбалкан и Източна Стара планина (Върбишки проход), България са събрани и определени 140 ♀ екземпляра, от 7 вида, които принадлежат на 4 рода: *Chrysops* (1 вид), *Hybomitra* (2 вида), *Tabanus* (3 вида) и *Philipomyia* (1 вид). За първи път за фауната на България се съобщава видът *Hybomitra bimaculata* (Macquart, 1826). С регистрирания нов вид, табанидната фауна на България е представена от 77 вида.