

Records of Oedemeridae (Insecta: Coleoptera) species from Strandzha Mountain (Bulgaria and Turkey)

OGNYAN SIVILOV

Department of Zoology and Anthropology, Sofia University "St. Kliment Ohridski", Faculty of Biology, 8 Dragan Tsankov Blvd., 1164 Sofia, Bulgaria, osivilov@gmail.com

Abstract. A list of 16 species from 5 genera of the family Oedemeridae and their localities in Strandzha Mountain was presented, five from which were reported for the first time to this mountain.

Key words: Oedemeridae, Strandzha Mountain, faunistic list.

Introduction

Oedemeridae is a small family group of beetles with only 110 species and subspecies listed in Europe (Švihla 2008). The species of this region are largely known and not many new species are expected – only 4 new species are described from Europe after the World War II (Švihla 2006a, 2006b). However, the actual distribution of many species are still poorly known and needs of additions and corrections are obvious.

This faunistic study is a part of a three-year field research of Strandzha Mountain on various groups of invertebrates. Strandzha Mountain (in Turkish: Yıldız/Istranca) is located in the border areas of Southeastern Bulgaria and Northwestern Turkey near the west coast of the Black Sea. It is mostly covered by relatively low altitude and mostly humid deciduous forests, and some dry ericoid formations and coastal habitats near the sea.

There are no any publications with exactly pointed localities of species of the family Oedemeridae regarding the area studied. Vázquez (2002) presented distribution maps of the European species showing a presence of 21 species in the Strandzha Mountain. However, they are not proved by any other faunistic data published. According to the maps of Vázquez 10 of this species do exist in Strandzha, although our study did not register them: 6 widely spread throughout the mountain (*Chrysanthia viridissima* (Linnaeus, 1758), *C. varipes* Kiesenwetter, 1861, *Anogcodes rufiventris* (Scopoli, 1763), *A. melanurus* (Fabricius, 1787), *A. seladonius turcicus* (W. Schmidt, 1846) and *Ischnomera cinerascens reitteri* Ganglbauer, 1881) and 4 only in the Turkish part of the mountain (*Ischnomera haemorrhoidalis* (W. Schmidt, 1846), *Oedemera* (s. str.) *barbara* (Fabricius, 1792), *O.* (s. str.) *rufofemorata euboica* Pic, 1902 and *O.* (s. str.) *atrata* W. Schmidt, 1846).

Material and Methods

Several collecting methods were used: sweeping, collecting with hands and forceps, beating, light trapping and soil trapping. The material collected was preserved in the Department of Zoology and Anthropology, Faculty of Biology, Sofia University. Totally, 1195 specimens were examined. Some of them were mounted on cardboard pieces and, if

necessary, for identification the genitalia were extracted. Specimens from the collection of the National Museum of Natural History in Sofia (NMNHS) were also studied and included in the list.

The following data are provided for each species: literature source (if available); collecting period; specimens collected; collecting method. Detailed information for the localities is given in Table 1 (with coordinates, if available). The numbers in column 1 correspond the numbers of the species from the list. The systematic is combined after Vázquez (2002) and Švihla (2008).

Results

Sixteen species from five genera of the family Oedemeridae with their localities in Strandzha Mountain were recorded. Five of these species were reported for the first time to the mountain.

1. *Sparedrus testaceus* (Andersch, 1797)

10-11.VI; 2 specimens; light.

2. *Nacerdes (Nacerdes) melanura* (Linnaeus, 1758) (Fig. 1)

30-31.V; 10 specimens; sweeping, hands & forceps in rotten wood on the beach.

3. *Anogcodes ustulatus* (Scopoli, 1763)

29.V-13.VI; 4 specimens; sweeping, in rotten wood of *Populus* sp. with hands & forceps.

4. *Anogcodes ruficollis* (Fabricius, 1781)

Strandzha Mts. (Vázquez, 2002). New data: 22.V-13.VI; 33 specimens; sweeping.

5. *Ischnomera sanguinicollis* (Fabricius, 1787)

17.IV; 6 specimens; beating.

6. *Ischnomera cyanea* (Fabricius, 1792)

Strandzha Mts. (Vázquez, 2002). New data: 17.IV-31.V; 27 specimens; beating, sweeping.

7. *Ischnomera caerulea* (Linnaeus, 1758)

Strandzha Mts. (Vázquez, 2002). New data: 17.IV-31.V; 8 specimens; beating.

8. *Oedemera (Oncomera) flavicans* (Fairmaire, 1860)

Strandzha Mts. (Vázquez, 2002). New data: 03.VII-14.VIII; 2 specimens; light.

9. *Oedemera (Oedemera) croceicollis* Gyllenhal, 1827

Strandzha Mts. (Vázquez, 2002). New data: 23.V-26.VI; 24 specimens; sweeping.

10. *Oedemera (Oedemera) flavipes* (Fabricius, 1792)

Strandzha Mts. (Vázquez, 2002). New data: 23.V-27.VI; 95 specimens; sweeping.

11. *Oedemera (Oedemera) podagrariae podagrariae* (Linnaeus, 1767)

Strandzha Mts. (Vázquez, 2002). New data: 22.V-29.VI; 111 specimens; sweeping, hands & forceps, beating.

12. *Oedemera (Oedemera) penicillata* W. Schmidt, 1846

Strandzha Mts. (Vázquez, 2002). New data: 31.V-26.VI; 14 specimens; sweeping.

13. *Oedemera (Oedemera) lurida lurida* (Marshall, 1802)

Strandzha Mts. (Vázquez, 2002). New data: 05.V-24.VI; 532 specimens; sweeping, hands & forceps, beating, soil traps.

14. *Oedemera (Oedemera) crassipes* Ganglbauer, 1881

Strandzha Mts. (Vázquez, 2002). New data: 07.V-13.VI; 43 specimens; sweeping, hands & forceps.

15. *Oedemera (Oedemera) pthysica* (Scopoli, 1763) (Fig. 2)

05.V-03.VII; 165 specimens; sweeping, hands & forceps, beating.

16. *Oedemera (Oedemera) femorata* (Scopoli, 1763)

Strandzha Mts. (Vázquez, 2002). New data: 23.V-04.VII; 119 specimens; sweeping, hands & forceps.

Table 1. Species and their localities (BG = Bulgaria; TR = Turkey).

Number of species from the list	Locality	Altitude (m)	GPS coordinates
13	BG, Ahtopol	-	-
14	BG, Ahtopol	15	N42°06'07.72" E27°56'45.85"
10, 13	BG, Balgari vill.	-	-
5, 6, 7, 11, 13, 15, 16	BG, Bliznak vill., Bataka place	325	N42°11'37.25" E27°19'35.82"
15	BG, Brashlyan vill.	290	N42°04'21.39" E27°24'43.83"
13, 15	BG, Brashlyan vill., Vitanovo reserve	285	N42°01'23.00" E27°27'23.00"
11, 14	BG, Brodilovo vill.	-	-
16	BG, Brodilovo vill., hunting shelter	15	N42°05'22.53" E27°50'13.48"
6, 10, 11, 13, 15, 16	BG, Brodilovo vill., Papiya peak	335	N42°06'23.68" E27°50'36.13"
11, 13, 15, 16	BG, Golyamo Bukovo vill.	305	N42°13'03.35" E27°08'56.30"
6, 7, 11, 13, 15, 16	BG, Izgrev vill., Marina reka place	250	N42°07'03.76" E27°45'56.89"
13	BG, Kalovo vill.	330	N42°08'11.18" E27°32'11.48"
13	BG, Kalovo vill.	260	N42°07'24.36" E27°31'39.65"
4, 12, 13, 16	BG, Kiten	5	N42°14'59.00" E27°45'05.00"
13, 16	BG, Kondolovo vill.	310	N42°05'39.57" E27°41'22.31"
10, 11, 12, 13, 15, 16	BG, Kondolovo vill., Byalata prast place	330	N42°05'58.44" E27°40'02.95"
7, 11	BG, Kosti vill.	-	-
4, 6, 11, 13, 16	BG, Kosti vill., Sveti Iliya place near Veleka river	40	N42°03'32.35" E27°45'47.00"
13	BG, Malko Tarnovo	640	-
13, 16	BG, Malko Tarnovo	320	N41°59'21.41" E27°31'28.80"
15	BG, Malko Tarnovo	380	N41°59'56.14" E27°34'28.33"
1, 13, 15, 16	BG, Malko Tarnovo, Propada place	400	N41°58'49.59" E27°29'25.75"
13, 15	BG, Malko Tarnovo, road to Propada place	360	N41°59'11.00" E27°30'25.00"
13	BG, Maslen nos cape	-	-
4, 6, 7, 11, 13, 14, 15, 16	BG, Mladezhko vill., near Mladezhka river	225	N42°09'05.23" E27°21'47.86"
13, 14, 15	BG, near the road to Stoilovo vill.	290	N42°00'24.02" E27°30'14.14"
6, 13	BG, near Tsarevo on the road to Brodilovo vill.	60	N42°09'02.00" E27°51'20.00"
11, 12	BG, Papiya peak near Brodilovo vill.	-	-
6, 16	BG, Primorsko	-	-
10, 13, 16	BG, Primorsko, Beglik Tash place	135	N42°18'39.95" E27°45'58.64"
10, 16	BG, Primorsko, dunes near Arkutino lake	5	N42°19'52.16" E27°43'54.71"
9, 13	BG, Primorsko, Dyavolska reka river	5	N42°15'32.00" E27°43'52.00"
11, 13, 16	BG, Primorsko, Maslen nos cape	10	N42°18'27.00" E27°47'26.00"
2, 4, 6, 7, 9, 10, 11, 12, 13, 16	BG, Primorsko, Perla place	2	N42°17'10.16" E27°45'13.59"
10, 11, 13, 16	BG, Rezovo vill.	-	-

4, 10, 13, 14	BG, Rezovo vill., near the Turkish border	5	N41°58'54.44" E28°01'29.64"
6	BG, Rosen vill. near Sozopol	-	-
4, 7, 9, 10, 11, 13, 15, 16	BG, Sinemorets vill., Butamyata place	15	N42°03'11.20" E27°59'15.21"
4, 6, 11, 13, 14, 15	BG, Sinemorets vill., Lipite place	15	N42°02'55.12" E27°59'25.51"
10, 11, 12, 13, 14, 15, 16	BG, Sinemorets vill., Silistar place	15	N42°01'28.39" E28°00'24.79"
2, 3, 4, 8, 10, 13, 14, 16	BG, Sinemorets vill., Veleka estuary	5	N42°03'48.14" E27°58'10.27"
11, 12, 13, 15, 16	BG, Slivarovo vill.	330	N41°58'11.89" E27°39'31.10"
10, 11, 12, 13, 15, 16	BG, Slivarovo vill., near Rezovska river	225	N41°57'37.76" E27°39'34.82"
11, 13, 14, 15, 16	BG, Stoilovo vill., Sredoka reserve	215	N42°01'51.12" E27°30'50.13"
11, 13	BG, Tsarevo	-	-
13, 14, 15, 16	BG, Varovnik vill., Fakiyska river	120	N42°13'26.13" E27°11'34.43"
8, 11, 13	BG, Varvara vill.	50	N42°06'49.10" E27°53'18.89"
1, 12, 13	BG, Zvezdets vill., Kovach place near Veleka river	185	N42°04'55.00" E27°25'54.00"
11, 13, 14, 15	BG, Zvezdets vill., Petrova niva place	195	N42°03'41.90" E27°31'58.89"
11, 13, 14, 15	TR, Avclar vill.	185	N41°53'44.00" E27°51'55.00"
6, 10, 13	TR, between Beypinar vill. and Hacifakılı	445	N41°45'52.00" E27°28'14.00"
9, 13, 14	TR, Celepköy, Duru Göl	5	N41°22'49.26" E28°30'47.70"
13, 15	TR, Demirköy, Kadınkule	655	N41°47'43.00" E27°44'13.00"
13, 16	TR, İğneada, Hamam Gölü	15	N41°49'10.00" E27°57'48.00"
9	TR, İğneada, Mert Gölü	5	N41°51'27.42" E27°57'32.18"
10, 11, 13, 15	TR, Kışlacık vill.	200	N41°39'43.00" E27°55'26.00"
10, 13	TR, Kıyıköy vill.	25	N41°39'25.00" E28°05'08.00"
4, 13	TR, Kıyıköy vill.	60	N41°37'42.00" E28°04'04.00"
13, 15	TR, Kızılağaç vill.	415	N41°43'50.50" E27°50'07.02"
10, 13, 15	TR, Kızılağaç vill.	140	N41°41'02.01" E27°52'51.45"
13, 15, 16	TR, Sardere, Dupnisa cave	350	N41°50'27.12" E27°33'25.70"
13, 15	TR, Sardere, Southern of Dupnisa cave	425	N41°50'01.70" E27°33'24.60"
11, 15	TR, Sarpdere vill.	340	N41°52'20.00" E27°37'06.00"
13	TR, Sergen vill.	835	N41°44'37.00" E27°42'24.85"
11, 13	TR, Sivrililer vill.	430	N41°44'48.00" E27°50'38.00"
13, 14	TR, Vize	360	N41°35'06.13" E27°47'41.51"
10, 13	TR, Yalıköy vill.	10	N41°29'27.67" E28°16'39.99"



Fig. 1. *Nacerdes melanura*,
Veleka estuary, 30.05.2010.



Fig. 2. *Oedemera pthysica*,
Bataka place, 09.06.2009.

Acknowledgements

The author thanks to all the people involved in collecting the material: A. Gjonova, I. Gjonov, R. Bekchiev, R. Kostova; and also Dr. B. Gueorguiev for providing material from the collection of NMNHS. This study was funded partially by project DO 02-159/16.12.08 (Bulgarian Ministry of Education and Science).

References

- Švihla, V. (2006a) Revision of *Chitona* species (Coleoptera: Oedemeridae) from eastern Mediterranean. *Acta Entomologica Musei Nationalis Pragae*, 46: 107-121.
- Švihla, V. (2006b) New species of the genus *Sparedrus* (Coleoptera: Oedemeridae) from Bulgaria. *Acta Entomologica Musei Nationalis Pragae*, 46: 123-125.
- Švihla, V. (2008) Family Oedemeridae. In: Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera. Vol. 5. Tenebrionoidea*. Apollo Books, Stenstrup, Denmark, pp. 353-369.
- Vázquez, X. A. (2002) *European Fauna of Oedemeridae*. Argania editio, Barcelona, 176 pp.