

Narcis MRŠIĆ*

DIPLOPODA

(MYRIAPODA, ARTHROPODA)

ABSTRACT – *Mršić, N.*, Biološki inštitut Jovana Hadžija, ZRC SAZU, YU-61000 Ljubljana, Novi trg 5. – THE FAUNA OF DURMITOR, 3: *Diplopoda* (*Myriapoda*, *Arthropoda*). Crnogorska akademija nauka i umjetnosti, Posebna izdanja, knjiga 23, Odjele-nje prirodnih nauka knj. 14, Titograd, 1990.

The author presents complete data of three-year investigations dedicated to the diplopod fauna of Durmitor Mountain; 26 species belonging to 16 genera, 8 families, 5 orders and 2 subclasses are recorded; 6 species are endemic for Montenegro and 5 are known only from Durmitor.

IZVLEČEK – Avtor je podal podatke triletnih raziskav favne dvojnog Durmito-ra, v periodu od 1983 do 1986.

Diplopoda, Durmitor, Yugoslavia

CONTENTS

1. INTRODUCTION
2. LIST OF LOCALITIES
3. TAXONOMIC SURVEY
4. PRESENTATION OF THE RESULTS
5. INDEX TO TAXA
6. REFERENCES

P o v z e t e k

1. INTRODUCTION

The diplopod fauna of Durmitor has so far been studied by three authors only: ATTEMS (1927), GULIČKA (1969) and MRŠIĆ (1988). ATTEMS described a new species, *Microiulus durmitorensis* (presently the genus *Xestoiulus*), although without more precise statement of localities (his data are restricted exclusively to "Durmitor"). GULIČKA described two new species, *Orobainosoma lacusnigri* (presently the

* Dr. Narcis Mršić, Biološki inštitut Jovana Hadžija, ZRC SAZU, YU-61000 Ljubljana, Novi trg 5.

genus *Haasia*) and *Heterolatzelia durmitorensis*, both from Crno jezero on Durmitor, and finally MRŠIĆ described the new species and subgenus *Polydesmus (Absurdodesmus) novaki* from Obla glava, as well as the new species *Craspedosoma montenegrina* recorded from different of localities on Durmitor.

Investigations on diplopods Durmitor were carried out during the years 1983, 1985 and 1986.

2. LIST OF LOCALITIES

Aluge, 1840 m, CN57	Poljanak, 1530 m, CN48
Barno jezero, 1480 m, CN48	Prutaški do, 2050 m, CN37
Bosača, 1540 m, CN48	Savin Kuk, 2500 m, CN47
Crepuljna poljana, 1650-1740 m, CN47	Sedlo, 1800-1940 m, CN37
Crna Poda, 850 m, CN76	Šareni pasovi, 2150 m, CN37
Crno jezero, 1420 m, CN47	Tara, 900 m, CN67, CN66
Donja Počivala, CN47	Tepca, 960 m, CN48
Duško Valje, 1900 m, CN37	Todorov do, 1880 m, CN37
Durđevića Tara, 1300 m, CN67	Valoviti do, 2000 m, CN47
Gornja Počivala, 1340 m, CN48	Valovito jezero, 1680 m, CN47
Govedji Do, 2000 m, CN37	Virak, 1480 m, CN47
Jablan jezero, 1810 m, CN48	Vrelo CN?
Kanjon Sušice, 1120-1200 m, CN38	Zminje jezero, 1580 m, CN48
Obla Glava, 2100 m, CN47	

3. TAXONOMIC SURVEY

In this survey data collected on Durmitor, according to the distribution of these species in Yugoslavia, are stated along with their general distribution types.

In cases where the author did not collect the material by himself, the name of the collector (leg.) is stated in the check-list. The following list presents a complete taxonomic survey of the Diplopods of Durmitor, compiled on the basis of HOFFMAN's system (1979).

- 3A - subclass **PENTAZONIA**
- 3A. 1. superordo **ONISCOMORPHA**
- 3A. 1. 1. ordo **GLOMERIDA**

3. 1. **GLOMERIDAE**

3. 1. 1. **GLOMERINAE**

1. **Glomeris (Eurypleuromeris) hexasticha** Brandt, 1833

Savin Kuk, 12.8.1983; No. 1909. Valoviti Do, 1985, No. 1248. Gornja Počivala, 25.8.1986, No. 1806. Tepca, 21.8.1986, No. 1844.

The species has been recorded throughout Yugoslavia. It is also spread in Central and Southeast Europe.

3. 2. TRACHYSPHAERIDAE

2. *Trachysphaera costata* (W a g a, 1857)

Tepca, 21.8.1986, No. 1843.

The species has registered throughout Yugoslavia. It is spread also in Central and Southeast Europe.

3A. 2. superordo M E R O C H E T A

3A. 2. 1. ordo POLYDESMIDA

3A. 2. 1. 1. subordo P a r a d o x o s o m a t i d e a

3. 3. PARADOXOSOMATIDAE

(syn. = *Strongylosomatidae* C o o k, 1895; *Strongylosomidae* A t t e m s, 1914)

3. *Strongylosoma pallipes* (O l i v i e r, 1972)

Vrelo, 12.8.1980, (leg. Štangelj), No. 1256. Kanjon Sušice, 26.8.1986, No. 1831, 1839.

The first finding for the diplopod fauna of Montenegro. The species has been found throughout Yugoslavia. It is distributed in most parts of Europe.

3A. 3. 1. 2. subordo P o l y d e s m i d e a

a) POLYDESMOIDEA

3. 4. POLYDESMIDAE

4. *Polydesmus (Polydesmus) complanatus illyricus* V e r h o e f f, 1893

Jablan jezero, 25.9.1985, No. 1113. Poljanak, 9.6.1983, No. 1238. Crno jezero, 7.6.1983, 21.9.1985, No. 1243, 1252. Zminje jezero, 16.8.1980, No. 1418. Gornja Počivala, 25.8.1986, No. 1809. Kanjon Sušice, 26.8.1986, No. 2100. Tara, 22.8.1986, No.1959.

The species is distributed in Scandinavia, Central Europe, the Balkan Peninsula and Near East. It has been recorded in all Yugoslav republics.

5. *Polydesmus (Polydesmus) ignoratus* C e u c a, 1964

Crno jezero, 21.9.1985, No.1251. Kanjon Sušice, 26.8.1986, No.1843.

The first finding on Montenegro. The species is also spread in Serbia.

6. *Brachydesmus (Brachydesmus) subterraneus* H e l l e r, 1857

Bobotov Kuk, 14.9.1984, No. 1418. Tara, 12.8.1980, (leg. Štangelj), No. 1419.

The species is registered in Northeast Italy, Austria, Slovenia, Croatia and Southern of the Sava river, in Bosnia - Herzegovina, Montenegro and Albania.

7. *Brachydesmus (Stylobrachydesmus) polydesmoides* V e r h o e f f, 1895

Kanjon Sušice, 24.8.1986, No.1771, 1836.

The first finding for Montenegro.

The species is distributed in Yugoslavia (Bosnia, Serbia) and Bulgaria.

8. **Brachydesmus (Absurdodesmus) novaki** (Mršić, 1988)

Loc.typ.: Obla Glava, near Ledena pećina.

Endemic species, found on Durmitor Mountain only.

3B. – subclass **HELMINTHOMORPHA**

3B. 1. superordo **COELOCHETA**

3B. 1. 1. ordo **CHORDEUMATIDA**

3B. 1. 1. 1. subordo **Chordeumatidea**

b) **BRANNEROIDEA**

3. 6. **HETEROLATZELIDAE**

9. **Heterolatzelia cornuta** Gulička, 1968

GULIČKA (1968): Crno jezero.

Endemic species, found on Durmitor Mountain only.

10. **Heterolatzelia durmitorensis** Gulička, 1968

GULIČKA (1968): Obla Glava, near Ledena pećina.

Crno jezero, 7.6.1983, 24.9.1986, No. 973, 1115. Barno jezero, 23.9.1985, No. 1106. Near Ledena pećina, 23.9.1985, No.1105. Kanjon Sušice, 24.8.1986, No. 1772. Prutaški Do, 23.8.1986, No. 1719.

Endemic species, found on Durmitor Mountain only.

c) **HAASEOIDEA**

3. 7. **HAASEIDAE**

3. 7. 1. **HAASEINAE**

11. **Haasea (Brachybainosoma) lacusnigri lacusnigri** (Gulička, 1968)

Gulička (1968): Crno jezero.

Crno jezero, 7.8.1983, No. 2103. Kanjon Sušice, 25.8.1986, No. 2104, 2105. Tepca, 25.8.1986, No. 2106.

Endemic species, found on Durmitor Mountain only.

d) **CRASPEDOSOMATOIDEA**

3. 8. **CRASPEDOSOMATIDAE**

3. 8. 1. **CRASPEDOSOMATINAE**

12. **Craspedosoma montenigrina** Mršić, 1987

Loc.typ.: kanjon Sušice.

Endemic species, found on Durmitor only.

3B. 2. superordo **DIPLOCHETA**

3B. 2. 1. ordo **JULIDA**

3. 9. **JULIDAE**

3. 9. 1. JULINAE

3. 9. 1. 1. Leptoiulini

13. **Leptoiulus (Proleptoiulus) trilineatus** (K o c h, 1847)

Crno jezero, 7.8.1983, 21.9.1985, No.973, 1118. Savin Kuk, 12.9.1983, No.983. Near Ledena pećina, 23.9.1985, No.1109: Jablan jezero, 25.9.1985, No. 1114. Barno jezero, 22.9.1983, No.1123. Valoviti Do, 22.9.1985, No. 1249. Kanjon Sušice, 26.8.1986, No.1833. Šareni pasovi, 23.8.1986, No.1830. Crna poda, Kanjon Tare, 22.9.1986, No. 1855. Duško valje, 23.8.1986, No.1856. Govedji Do, 23.8.1986, No. 1859. Virak, 21.8.1986, No. 2115. Bosača, 27.8.1986, No. 2116.

The species is spread throughout Yugoslavia, Southern Austria (Carinthia and Tyrol), Northeast Italy, Albania and Bulgaria.

14. **leptoiulus (Leptoiulus) sarajevensis** V e r h o e f f, 1898

Crno jezero, 21.9.1985, No. 1253. 24.9.1986, No. 1242, 1129, 1245. 21.9.1983, No. 1129. Valoviti Do, 22.9.985, No. 1249. Poljanak, 9.6.1983, No. 1239. Barno jezero, 8.6.1983, No.1239. 22.9.1985, No.1126. Sedlo, 15.9.1983, No.1254. Bobotov kuk, 14.9.1984, No. 2211.

The species is spread in Eastern parts of Yugoslavia (Bosnia – Herzegovina, Serbia, Montenegro), as well as in Bulgaria.

15. **Xcstoiulus (Xcstoiulus) durmitorius** (A t t e m s, 1927)

ATTEMS (1927): "Durmitor".

Endemic species, found on Durmitor only.

16. **Xcstoiulus (Xcstoiulus) laetadorsalis** (V e r h o e f f, 1898)

Barno jezero, 8.8.1983, No. 1240. Gornja Počivala, 27.8.1986, No.1807.

Endemic species, found in Herzegovina and Montenegro.

3. 9. 1. 2. Cylindroiulini

17. **Allajulus (Brachymesius) bolcti** K o c h, 1847

Crna poda, 22.8.1986, No. 1854.

The species, representing a Central and Southeast European faunistic element, is spread throughout Yugoslavia.

18. **Leptophyllum nanum** (L a t z e l, 1884)

Kanjon Sušice, 24.8.1986, No.1774.

The first finding for Montenegro.

The species has been recorded in Central and Southwest parts of Yugoslavia (Bosnia – Herzegovina, Croatia, and Slovenia). It represents a Central and Southeast European faunistic element.

3. 9. 1. 3. Brachyiulini

19. **Chromatoiulus podabrus podabrus** (L a t z e l, 1884)

Kanjon Sušice, 26.8.1986, No. 1841. Đurđevića Tara, 22.8.1986, No.1847.

Tara, 22.8.1986, No.2230. Virak, 21.8.1986, No. 22131.

The species is distributed in Croatia (Dalmatia), Herzegovina, Montenegro, Serbia, and Macedonia. In addition to Yugoslavia, it also lives in Albania, Greece, and Bulgaria.

20. **Megaphyllum bosniense** (V e r h o e f f, 1897)

Valovito jezero, 15.9.1983, No. 1255. Zminje jezero, 24.9.1985, No. 1250. Crno jezero, 21.9.1985, No. 1247, 1245, 1112. Crepuljna poljana, 9.8.1983, No. 1237. Todorov Do, 23.8.1986, No. 1696. Prutaški Do, 23.8.1986, No. 1810. Kanjon Sušice, 26.8.1986, No. 1840. Aluge, 21.8.1986, No.1846. Duško Valje, 23.8.1986, No. 1957. Govedji Do, 23.8.1986, No. 1859. Virak, 21.8.19986, No. 2232. Barno jezero, 27.8.1986, No. 2233. Near Ledena pećina, 23.9.1985, No. 1111.

The species is spread throughout Yugoslavia, as well as in Albania and Bulgaria.

21. **Megaphyllum dentatum** (V e r h o e f f, 1898)

Crno jezero, 24.9.1985, No. 1116. Bosača, 23.8.1986, No.1860.

The first finding for Montenegro. The species has been recorded from Bosnia, Southern Serbia and Macedonia. It lives also in Albania and Bulgaria.

22. **Megaphyllum carniolense** (V e r h o e f f, 1897)

Near Ledena pećina, 23.9.1985, No. 1110. Crno jezero, 23.9.1985, No. 1129, 1244. Savin kuk, 12.9.1983, No. 1234.

The species is distributed in Central and Western Yugoslavia (Slovenia, Croatia, Bosnia – Herzegovina and Montenegro).

3. 9. 1. 4. **Pachyiulini**

23. **Pachyiulus cattarensis** (L a t z e l, 1884)

Tara, 22.8.1986, No. 1948.

The species is distributed in the Southern parts of Yugoslavia (Dalmatia, Montenegro, Serbia and Macedonia), as well as in Albania, Greece and Bulgaria.

24. **Pachyiulus hungaricus** (K a r s c h, 1881)

Tepca, 25.8.1986, No. 1845. Vrelo, 11.8.1980 (leg. Štangelj), NO.1257. Donja Počivala, 25.8.1986, No. 1808. Crna pada, 22.8.1986, No. 1853.

The species is distributed in the Southern parts of Yugoslavia (Dalmatia, Montenegro, Serbia and Macedonia), in Albania and Bulgaria.

25. **Pachyiulus fuscipes** (K o c h, 1847)

Crno jezero, 1.7.1971, No. 1258.

The species is distributed throughout Yugoslavia and in Albania.

3B. 2. superordo O M A T O P H O R A

3B. 2. 1. ordo P O L Y Z O N I I D A

3B. 2. 1. 1. subordo P o l y z o n i i d e a

3. 10. **POLYZONIIDAE**

26. ***Polyzonium germanicum*** Brandt, 1831

Kanjon Sušice, 26.8.1986, No. 1776.

The first finding for Montenegro. The species is distributed in Slovenia, Croatia, Serbia and Macedonia.

4. PRESENTATION OF THE RESULTS

A total of 26 species are registered for the fauna of Durmitor, representing 47% of the diplopod fauna of Montenegro. Among them 6 species are endemic, of which 5 are known only on Durmitor.

The following six species were found for the first time in Montenegro: *Strongylosoma pallipes* (Olivier, 1872), *Polydesmus ignoratus* Ceuca, 1962, *Brachydesmus (Stylobrachydesmus) polydesmoides* Verh., 1895, *Megaphyllum dentatum* (Verh., 1898) *Leptophyllum nanum* (Latzel, 1884) and *Polyzonium germanicum* Brandt, 1831.

5. INDEX TO TAXA²⁾

- | | |
|---|--|
| (Absurodesmus) 8 | durmitorius, Xestoiulus (Xestoiulus) 15 |
| Allajulus 17 | Euryleuromeris 1 |
| boleti, Allajulus (Brachymesius) 17 | fuscipes, Pachyiulus 25 |
| bosniense, Megaphyllum 20 | GLOMERIDA 3A. 1. 1. |
| (Brachybainosoma) 11 | GLOMERIDAE 3. 1. |
| Brachyiulini 3. 9. 1. 3. | GLOMERINAE 3. 1. 1. |
| (Brachymesius) 17 | Glomeris 1 |
| Brachydesmus 6, 7, 8 | germanicum, Polyzonium 26. |
| BRANNEROIDEA 3B. b) | Haasea 11 |
| carniolense, Megaphyllum 22 | HAASEIDAE 3. 7. |
| cattarensis, Pachyiulus 23 | HAASEINAE 7.1. |
| COELOCHAETA 3B. 1. | HAASEOIDEA 3B. c) |
| CHORDEUMATIDA 3B. 1. 1. | HELMINTHOMORPHIA 3B. |
| Chordeumatidea 3B. 1. 1. 1. | HETEROLATZELIDAE 3. 6. |
| Chromatoiulus 19 | Heterolatzelia 9, 10 |
| complanatus, Polydesmus (Polydesmus) 4. | hexasticha, Glomeris (Euryleuromeris) 1. |
| cornuta, Heterolatzelia 9. | hungaricus, Pachyiulus 24 |
| costata, Trachysphaera 2. | ignoratus, Polydesmus (Polydesmus) 5 |
| Craspedosoma 12 | illyricus, Polydesmus (Polydesmus) complanatus 4 |
| CRASPEDOSOMATIDAE 3. 8. | JULIDA 3B. 2. 1. |
| CRASPEDOSOMATINAE 3. 8. 1. | JULIDAE 3. 9. |
| CRASPEDOSOMATOIDEA 3B. d) | JULINAE 3. 9. 1. |
| Cylindroiulini 3. 9. 1. 2. | lacusnigri, Haasea (Brachybainosoma) 11 |
| dentatum, Megaphyllum 21 | laetedorsalis, Xestoiulus (Xestoiulus) 16 |
| DIPLOCHETA 3B. 2. | novaki, Brachydesmus (Absurdodesmus) 8 |
| durmitorensis, Heterolatzelia 10 | Leptoiulini 3. 9. 1. 1. |

²⁾ Synonymes in *italic*

Leptoiulus 13, 14	polydesmoides, Brachydesmus (Stylobrachydesmus) 7
Leptophyllum 18	Polydesmus 4, 5
M E R O C H E T A 3A. 2.	(Polydesmus) 4, 5
Megaphyllum 20, 21, 22	POLYZONIIDA 3B. 2. 1.
montenigrina, Craspedosoma 12	POLYZONIIDAE 3. 10.
nanum, Leptophyllum 18	P o l y z o n i i d e a 3B. 2. 1. 1.
O M A T O P H O R A 3B. 2.	Polyzonium 26
O N I S C O M O R P H A 3A. 1.	(Proleptoiulus) 13
P a c h y i u l i n i 3.9. 1. 4.	Strongylosoma 3
Pachyulus 23, 24, 25	<i>Strongylosomidae</i> 3. 3.
pallipes, Strongylosoma 3.	<i>Strongylosomatidae</i> 3. 3.
P a r a d o x o s o m a t i d e a 3A. 2. 1. 1.	Stylobrachydesmus 7
PARADOXOSOMATIDAE 3A. 3.	sarajevensis, Leptoiulus (Leptoiulus) 14
PENTAZONIA 3A	subterraneus, Brachydesmus (Brachydesmus) 6
pódabrus, Chromatoiulus 19	TRACHYSphaERIDAE 3. 2.
POLYDESMIDA 3A. 2. 1.	Trachysphaera 2
POLYDESMIDAE 3. 4.	trilineatus, Leptoiulus (Proleptoiulus) 13
Polydesmidea 3A. 3. 1. 2.	Xestoiulus 15, 16
POLYDESMOIDEA 3A. a)	(Xestoiulus) 15, 16

6. REFERENCES

- A t t e m s, C. (1927): Über paläarktische Diplopoden. - Arch.Naturg. 92 (1926) A, (1/2) : 1 - 256.
- G u l i č k a, J. (1968): Neue Diplopoden aus dem Durmitor - Gebirge. - Annot. Zool. Bot., Bratislava, 45 : 1 - 5.
- H o f f m a n, R. (1979): Classification of the Diplopoda. - Mus. Hist. Nat. Genève, 1-237.
- M r š i ć, N. (1988): Description of a New Subgenus and Two New Species of the Genus *Polydesmus* Latreille 1802 (Diplopoda). - Biol. vestn., 36 (2) : 25 - 30.

DVOJNONOGE (DIPLOPODA, MYRIAPODA)

Narcis MRŠIĆ

Povzetek

Avtor je podal podatke triletnih raziskav favne dvojnog Durmitora. Do sedaj so favno dvojnog Durmitora omenjali samo trije avtorji v svojih delih: ATTEMS (1927), GULIČKA (1969) in MRŠIĆ (1988). V taksonomskem pregledu je dan popolni taksonomski pregled in navedeni so drugi podatki o najdenih vrstah na Durmitoru (lokaliteta, datum, podatek za UTM kvadrant in številka materiala v zbirki). Sedaj je za favno Durmitora registriranih 26 vrst, kar predstavlja 47% celotne registrirane favne dvojnog Črne Gore. Med temi je tudi 6 novih vrst za favno dvojnog Črne Gore: *Strongylosoma pallipes* (O l i v., 1872), *Polydesmus ignoratus* C e u c a, 1962; *Brachydesmus (Stylobrachydesmus) polydesmoides* V e r., 1895; *Megaphyllum dentatum* (V e r h., 1898) *Leptophyllum nanum* (L a t z e l, 1884) in *Polyzonium germanicum* B r a n d t, 1831. Od 26 je 6 endemnih vrst za Crno Goro, od katerih je 5 znanih samo z Durmitora.

(Priljeno u redakciji: 15. 12. 1988)