

Ber. nat.-med. Verein Innsbruck	Suppl. 10	S. 361 – 365	Innsbruck, April 1992
---------------------------------	-----------	--------------	-----------------------

8th International Congress of Myriapodology, Innsbruck, Austria, July 15 - 20, 1990

## **The Distribution of the Centipedes of the Genera *Harpolithobius* and *Eupolybothrus* in Bulgaria**

(Chilopoda, Lithobiomorpha)

by

Georgi RIBAROV

Natural History Department of Regional Museum, Rue de Dzaldeti 2, BG-8600 Jambol, Bulgaria

**Abstract:** An overview on the centipedes of the genera *Harpolithobius* (6 spp.) and *Eupolybothrus* (6 spp.) in the fauna of Bulgaria is given.

### **1. Introduction:**

Taxonomic and zoogeographic data on the genera *Harpolithobius* and *Eupolybothrus* in Bulgaria are still very incomplete. Some species are known from single localities only and data from the northern parts of the country are missing. The works of KACZMAREK (1975) and RIBAROV (1989) suggest that new species and subspecies of *Harpolithobius* and *Eupolybothrus* remain to be discovered in Bulgaria. The present status of the Bulgarian species of these genera is reviewed in this paper.

### **2. Harpolithobius:**

The genus *Harpolithobius* is distributed through Southern and Southeastern Europe and Asia Minor (MATIC 1966, ZALESSKAJA 1978). Some species spread to Central Europe – Austria, Hungary, Poland. Most of the species are found in the Balkan peninsula and in Romania. KACZMAREK (1975) suggested that the centre of the distribution of *Harpolithobius* is probably situated in the central and eastern parts of the Balkan peninsula. There are more endemic species of *Harpolithobius* in this region than elsewhere. Some species are distributed in caves. *H. oltenicus* NEGREA and *H. birsteini* ZALESSKAJA are troglobionts.

Bulgarian *Harpolithobius*: Fig. 1, Tab. 1.

Data for the distribution of *Harpolithobius* in Bulgaria have been reported by NEGREA (1965), KACZMAREK (1975) and RIBAROV (1986, 1987). Apart from *H. folkmanovae* which has high population densities in Southeastern Bulgaria, the Bulgarian species of *Harpolithobius* are rare or very rare.

*H. anodus* is represented in Bulgaria by two subspecies: *H. a. anodus* (LATZEL) and *H. a. dentatus* MATIC. The first occurs in Southwestern Bulgaria and is known also from the Eastern and Western Stara Planina Mts. Its vertical distribution is from about 500 to 1650 m a.s.l. The highest point at which it is found is in the Pirin Mts., around the "Demjanitsa" rest-house, leg. Ribarov 1989. The subspecies *H. a. dentatus* is found in the Western Stara Planina Mts., near Pravets town, 450 m a.s.l. and in vicinity of Rila town in Rila Mts., 600 m a.s.l. This subspecies is distributed in Romania and Jugoslavia and is new to the fauna of Bulgaria. In Western Bulgaria the areas of *H. a. anodus* and *H. a. dentatus* are adjacent (Fig. 1).

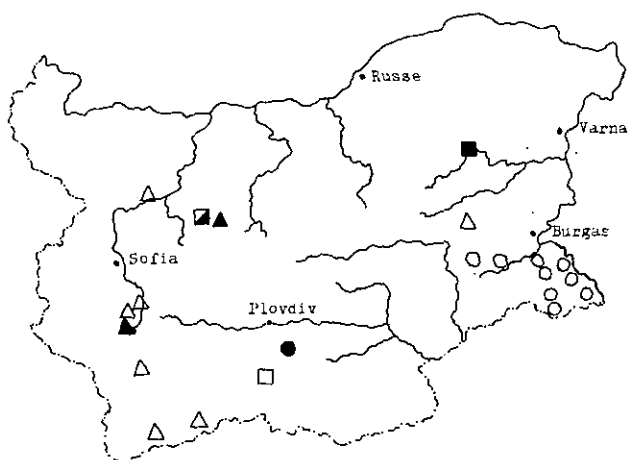


Fig. 1: Distribution of *Harpolithobius* species in Bulgaria.

△ *H. a. anodus*; ▲ *H. a. dentatus*; ■ *H. radui*; □ *H. banaticus rhodopensis*; ● *H. aseni*; ○ *H. folkmanovae*;  
□ *H. hemusi*.

Table 1: Vertical distribution of the species *Harpolithobius* in Bulgaria.

Species	Altitude (m a.s.l.)					
	0-250	250-500	500-750	900	1450	1650
1. <i>H. a. anodus</i> (LATZEL)	-	-	+	-	+	+
2. <i>H. a. dentatus</i> MATIC	-	+	-	-	-	-
3. <i>H. b. rhodopensis</i> KACZMAREK	-	-	-	-	+	-
4. <i>H. radui</i> MATIC	-	+	-	-	-	-
5. <i>H. aseni</i> KACZMAREK	-	-	+	-	-	-
6. <i>H. hemusi</i> KACZMAREK	-	-	-	+	-	-
7. <i>H. folkmanovae</i> KACZMAREK	+	+	-	-	-	-

*H. aseni* KACZMAREK (1975) is known only from Central Rhodopi near Asenovgrad, 600 m a.s.

*H. banaticus rhodopensis* KACZMAREK (1975) was described from Erkjupria, Central Rhodopi, 1450 m a.s. The nominate subspecies was described from Southwestern Romania by MATIC (1961).

*H. folkmanovae* KACZMAREK (1975) is common in Southeastern Bulgaria but has not yet been recorded from other areas of the country. It is thermophilous, occurring in sites rich in vegetation, and may extend south into Turkey. It is known from 0 up to 500 m a.s.l.

*H. hemusi* KACZMAREK (1975) is known only from central parts of Stara Planina Mts., near Teteven, 900 m a.s.

*H. radui* MATIC was first described from Romania by MATIC (1966) who regarded it as an endemic. In 1975, however, KACZMAREK recorded the species from Northeastern Bulgaria near Shumen, 350 m a.s.l. thus extending its area to south.

### 3. *Eupolybothrus*: Figs 2 - 4, Tab. 2

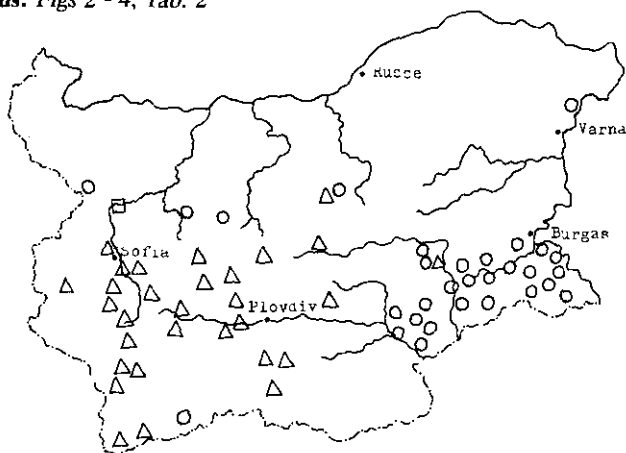


Fig. 2: Distribution of some *Eupolybothrus* species in Bulgaria.

Δ *E. transsylvanicus*; ○ *E. fasciatus*; ◻ *E. andreevi*.

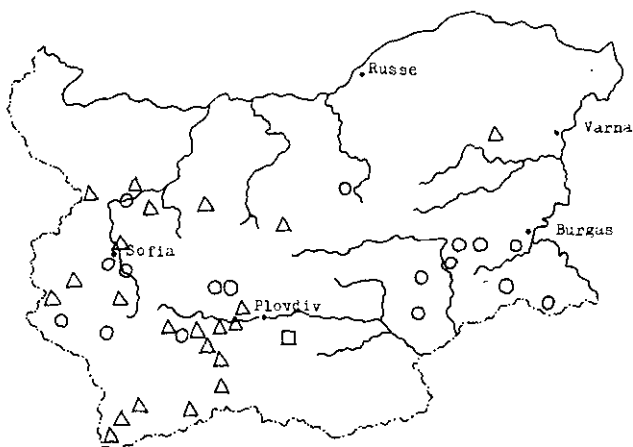


Fig. 3: Distribution of some *Eupolybothrus* species in Bulgaria.

Δ *E. ochraceus*; ○ *E. tridentinus*; ◻ *E. valkanovi*.

The first record of a *Eupolybothrus* species from Bulgaria was that of JURINICH (1904). He reported that *E. grossipes* C.L. KOCH, known to him as *Lithobius grossipes*, was widely distributed in Bulgaria. RIBAROV (1989) after examining material in the Chilopoda collection of the National Natural History Museum in Sofia, showed that JURINICH had misidentified some specimens of *E. transsylvanicus* (LATZEL) as *E. grossipes*. There have been no other reports of *E. grossipes* from Bulgaria and RIBAROV (1989) considered that it should be removed from the Bulgarian species list. Nevertheless it is possible that *E. grossipes* will be found in Bulgaria. According to EASON (1982) the species is known from Austria, South Germany and Switzerland and ZAPPAROLI (1984) reported that *E. grossipes* is known from many localities in Greece. Data for the distribution

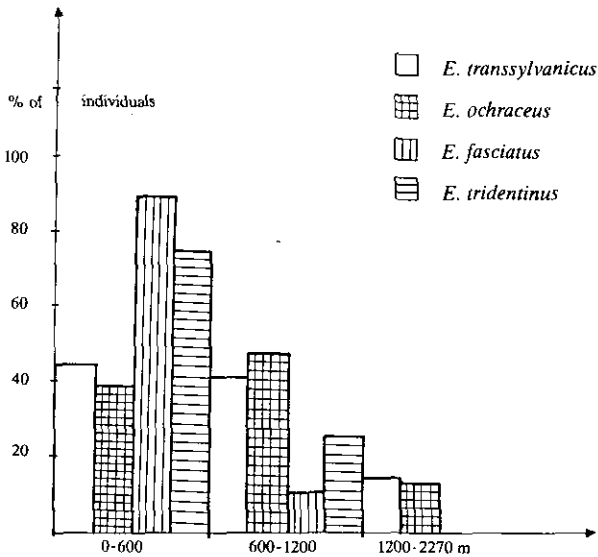


Fig. 4: Vertical distribution of some *Eupolybothrus* species in Bulgaria.

Table 2: Vertical distribution of the species of *Eupolybothrus* in Bulgaria.

Species	Altitude(m a.s.l.)					
	> 300	600	900	ca. 1100	1600	2270
1. <i>E. transsylvanicus</i> (LATZEL)	+	+	+	+	+	-
2. <i>E. fasciatus</i> (NEWPORT)	+	+	+	+	-	-
3. <i>E. tridentinus</i> FANZAGO	+	+	+	+	-	-
4. <i>E. ochraceus</i> (FOLKMANOVA)	+	+	+	+	+	+
5. <i>E. valkanovi</i> (KACZMAREK)	-	+	-	-	-	-
6. <i>E. andreevi</i> (KACZMAREK)	-	+	-	-	-	-

of the species of *Eupolybothrus* in Bulgaria has been given by VERHOEFF (1928), FOLKMANOVA (1936), MATIC and GOLEMANSKY (1965, 1967), KACZMAREK (1973) and RIBAROV (1986, 1987, 1989).

*E. fasciatus* (NEWPORT) is widely distributed in Southeastern Bulgaria. It prefers biotopes at lower altitudes, about 600 m a.s.l. Between 1100 and 1200 m the individuals are much rarer. The highest population densities in Italy are however found between 900 and 2000 m (MINELLI and IOVANE 1987).

*E. transsylvanicus* (LATZEL) is common in Southwestern parts of the country, it is widely distributed in the higher parts of mountains up to 1600 m. It is most common between 500 and 1200 m but in Greece the highest population density is between 1000 and 1600 m (ZAPPAROLI 1984).

*E. tridentinus* (FANZAGO) has dense populations south of the Stara Planina Mts. Like *E. fasciatus* it prefers biotopes at about 600 m a.s.l. It does not occur above 1200 m.

*E. ochraceus* (FOLKMANOVA) like *E. transsylvanicus* is widely distributed in the higher parts of mountains up to 2270 m a.s.l. This species is known only from Bulgaria.

*E. andreevi* (MATIC) and *E. valkanovi* (KACZMAREK) are known only from their type localities. The former, a troglobiont, from the cave "Vodnata peštera" near Cerovo village, Western Bulgaria, 600 m a.s.l., the latter from Central Rhodopi near Asenovgrad, 600 m a.s.l.

#### 4. Literature:

- EASON, E. (1982): A review of the north-west European species of Lithobiomorpha with a revised key to their identification. — Zool. J. Linn. Soc. **74**: 9 - 33.
- FOLKMANOVA, B. (1936): Über einige von Dr. Jaroslav Storkan in Bulgarien gesammelte Chilopoden. — Izv. tsarsk. Prir. Inst. **9**: 92 - 97.
- JURINICH, S. (1904): [Contribution à la faune des Myriapodes en Bulgarie]. — Sbor. Nar. Umotvor. **20**: 1 - 44 (in Bulgarian).
- KACZMAREK, J. (1973): Beiträge zur Kenntnis bulgarischer Chilopoden. Teil V. Das Genus *Polybothrus*. — Bull. Soc. Amis scien. Poznan (D) **14**: 181 - 182.
- (1975): Beiträge zur Kenntnis bulgarischer Chilopoden. Teil VI (Lithobiomorpha: *Harpolithobius*, *Pleolithobius*, *Monotarsobius*). — Ann. Zool. **33**: 47 - 66.
- MATIC, Z. (1961): Genus *Harpolithobius* (Chilopoda, Lithobiidae) in Fauna Republicii Populare Române. — Studii cerc. Biol. **12**: 73 - 89.
- (1966): Clasa Chilopoda. Subclasa Anamorpha. — Fauna Republicii Socialiste Romania **6** (1): 1 - 272.
- MATIC, Z. & V. GOLEMANSKY (1965): Nouvelle contribution la connaissance des Lithobiides (Chilopoda, Lithobiomorpha) en Bulgarie. — Ann. Univ. Sofia **58** (1): 13 - 25.
- (1967): Matériaux sur la faune des Lithobiides (Chilopoda, Lithobiomorpha) en Bulgarie. — Bull. Inst. Zool. **25**: 17 - 21.
- MINELLI, A. & E. IOVANE (1987): *Habitat preferences and taxocenoses of Italian centipedes (Chilopoda)*. — Boll. Mus. civ. St. nat. Venezia **37**: 7 - 34.
- NEGREA, S. (1965): Contribution à l'étude des Lithobiidae (Chilopoda) de Bulgarie. — Fragm. balcan. Mus. maced. Sci. nat. (Skopje) **5**: 91 - 105.
- RIBAROV, G. (1986): [Contribution à la connaissance de la Lithobiomorpha (Chilopoda) en Bulgarie Sud-est]. — Bull. Mus. Bulg. Sud-est **8**: 217 - 226 (in Bulgarian).
- (1987): [Species list, ecology, distribution and importance of Lithobiomorpha (Chilopoda) from the mountains Strandza and Sakar]. — Stran. sak. Sbor. **4**: 279 - 287 (in Bulgarian).
- (1989): On some Chilopoda species (Myriapoda) published by S. Jurinich and K. Verhoeff. — Hist. nat. bulg. **1**: 34 - 35.
- VERHOEFF, K. W. (1928): Über Chilopoden aus Bulgarien gesammelt von Herrn Dr. Iw. Buresch, I. Aufsatz. — Mitt. Bulgar. Entom. Ges. **4**: 115 - 124.
- ZALESKAJA, N. (1978): [Classification key of the Lithobiomorpha of the USSR.] — Moscow (in Russian).
- ZAPPAROLI, M. (1984): Note su alcune species del genere *Eupolybothrus* della fauna di Grecia (Chilopoda, Lithobiomorpha). — Frag. Entom. (Roma) **17**: 195 - 209.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Berichte des naturwissenschaftlichen-medizinischen Verein Innsbruck](#)

Jahr/Year: 1992

Band/Volume: [S10](#)

Autor(en)/Author(s): Ribarov Georgi

Artikel/Article: [The Distribution of the Centipedes of the Genera Harpolithobius and Eupolybothrus in Bulgaria \(Chilopoda, Lithobiomorpha\). 361-365](#)