Catalogue of the millipedes (Diplopoda) in the Hoffer's collection at the National Museum in Prague, Czech Republic

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Abstract. The present catalogue lists data from a total of 239 specimens from 23 species of the millipede collection by the Czech entomologist Augustin Hoffer (1910-1981) housed in the National Museum in Prague. The material was collected during 1932-1936 in the modern-day Czechia, Slovakia and Montenegro.

Abstrakt. Katalog mnohonožek (Diplopoda) z Hofferovy sbírky v Národním muzeu v Praze (Česká republika). Tento katalog obsahuje údaje o 239 jedincích mnohonožek ze sbírky českého entomologa Augustina Hoffera (1910-1981) uložené v Národním muzeu v Praze. Materiál, čítající 23 druhů, byl sebrán v letech 1932-1936 na území dnešního Česka, Slovenska a Černé Hory.

Keywords. Faunistics, historical records, Moravia, Slovakia, Montenegro

1. Introduction

Dr. Augustin Hoffer (20 April 1910 - 21 August 1981) was a famous Czech entomologist working mainly on hymenopterans (FÁRA 1965). He did not focus only on the fauna of the Czech Republic, but also studied insects from the Palearctic area as a whole, selflessly also collecting invertebrates for his colleagues (KWIETON 1980). During his studies at Masaryk University in Brno (1930-1935), he collected myriapods from the South Moravian Region. Augustin Hoffer began a systematic investigation of more than 50 caves in the Krivošije Mts. (Montenegro) accompanied first by Dr. Josef Kratochvíl in 1935, and then by Dr. Vladimír Šilhavý in 1936 (ŠILHAVÝ 1936). During the course of his work he visited the Balkan Peninsula a total of six times (TESAŘ 1982). An example of results from these expeditions were descriptions of new cave species, described either by A. Hoffer or named in his honour: centipedes (Chilopoda) *Bothropolys magnificus* Hoffer, 1935 [now a synonym of *Eupolybothrus gloriastygis* (Absolon, 1916)], *Strandiolus jugoslavicus* Hoffer, 1937 [now *Lithobius jugoslavicus* (Hoffer, 1937)], harvestmen (Opiliones) *Abasola hofferi* Šilhavý, 1936 and many insect species (KOLEŠKA 1982).

Hoffer's millipede collection contains 239 specimens, representing 23 species from the orders Glomerida, Polyzoniida, Chordeumatida, Julida, and Polydesmida. The juliform millipedes were among the historical material deposited in the National Museum, where it was deposited probably by A. Hoffer

himself when he was working there from 1938 to 1945 (PFEFFER 1970). However, the glomerids were accidentally discovered by the first author in 2015 in the collection of isopods at the Charles University in Prague.

In addition to material from former Czechoslovakia (including south-eastern part of today Ukraine), the millipede collection of the National Museum contains also historical material from various countries all over the world. More numerous collections come from the Balkan Peninsula, Borneo, Brazil, Cameroon or Ceylon. Recent material was collected in the Dominican Republic and New Zealand. The National Museum also hosts some private millipede collections by the arachnologist František Miller, whose collection was partly catalogued (KOCOUREK & DOLEJŠ 2016), and by myriapodologists Karl W. Verhoeff and Bohumil Němec. The latter collections include the syntypes of *Craspedosoma rawlinsi simplex* Němec, 1896 [considered as *nomen nudum* (BEZDĚK 2011); inventory No. P6E 4090] and *Julus coerulans* Němec, 1896 [junior synonym of *Kryphioiulus occultus* (C. L. Koch, 1847); inventory No. P6E 4095]. The collection of Augustin Hoffer is thus an important part of the series of collections that have belonged to distinguished personalities.

2. Material and Methods

All millipede specimens are preserved in 80% ethanol. Almost all of them (with the exceptions given below) were sexed and identified by the second author. The nomenclature and arrangement of orders follow those of KOCOUREK et al. (2017). Genera and species are sorted alphabetically.

The data are arranged as follows: Inventory number: Loc. = number of Hoffer's locality (details on localities are given in Tab. 1) – number and sex of specimens.

The present administrative divisions of Europe are used. The grid squares for Czechia and Slovakia (Fig. 1) follow BUCHAR (1982) and PRUNER & MÍKA (1996). Images of selected specimens were made using an Olympus SZX12 stereomicroscope equipped with an Olympus E-510 camera.

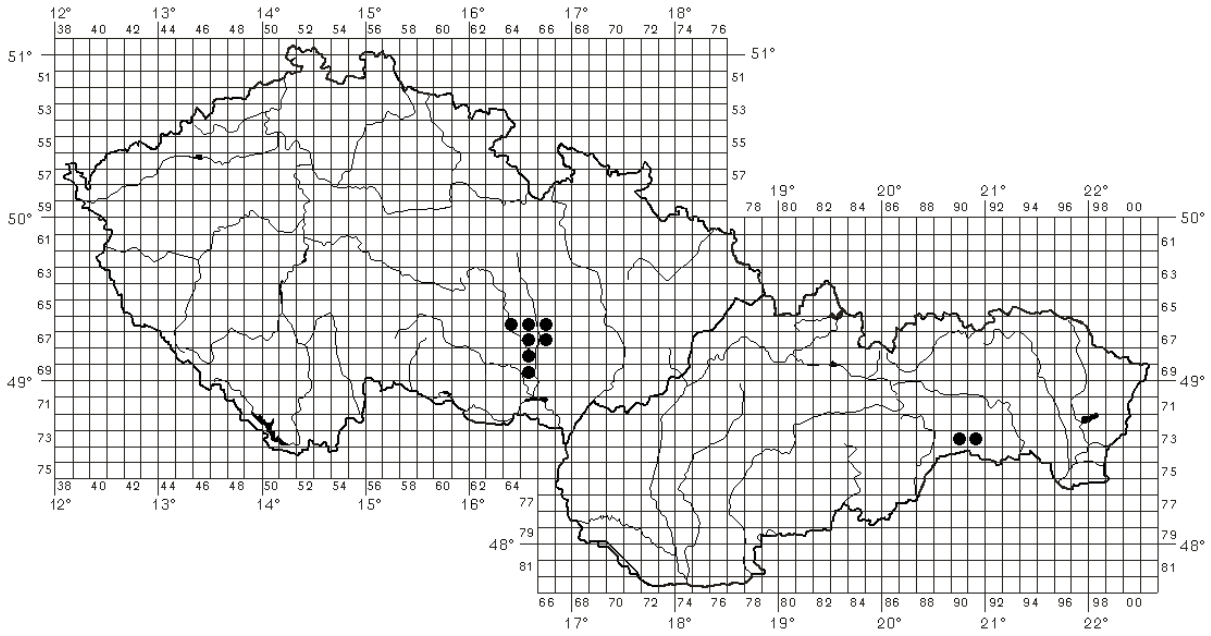

Figure 1: Map of localities where Hoffer collected the millipedes in Czechia and Slovakia (former Czechoslovakia).

Table 1: Characteristics of Hoffer's localities. Abbreviations: CZ = Czechia, MNE = Montenegro, SK = Slovakia.

Locality number	Date	Name of locality	Biotope & collecting	Coordinates	Grid square	Altitude (m)
1	VII.1932	SK – Zádielska dolina Valley (Rožňava District)	under stones	–	7390-7391	–
2	30.XI.1934	CZ – Brno, Řečkovice	sieving in forest	49.251°N; 16.579°E	6765	305
3	07.XII.1934	CZ –Brno, Šumbera Hill	sieving of humus on rocks	49.229°N; 16.685°E	6766	430
4	10.XII.1934	CZ – Tišnov, Hajánky	sieving in a moist slope	49.371°N; 16.469°E	6664	470
5	15.XII.1934	CZ –Tišnov, Železné	sieving of leaves	49.360°N; 16.451°E	6664	320
6	17.XII.1934	CZ – Brno, Ráječek	sieving from a tree stump	49.165°N; 16.643°E	6865	200
7	II.1935	CZ – Habrůvka, Býčí skála Cave	in a cave	49.308°N; 16.695°E	6666	325
8	08.IV.1935	CZ – Tišnov, Výrovka Hill	under stones	49.334°N; 16.405°E	6664	420
9	10.IV.1935	CZ – Brno, Špilberk Castle	under stones	49.194°N; 16.599°E	6865	280
10	14.IV.1935	CZ – Rajhrad, game park	under stones	49.096°N; 16.619°E	6965	200
11	a) 21.IV.1935 b) 12.V.1935	CZ – Tišnov, Květnice Hill	under limestones	49.359°N; 16.415°E	6664	470
12	22.IV.1935	CZ – Tišnov, Klucanina Hill	under stones	49.344°N; 16.443°E	6664	415
13	27.IV.1935	CZ – Adamov, Josefské údolí Valley	under stones	–	6665-6666	–
14	04.V.1935	CZ – Brno, Hády Hill	leg. Josef Kratochvíl	49.222°N; 16.674°E	6766	424
15	a) 1935 b) 1935-1936	MNE – Crkvice (Kotor District), Krivošije Mts.	–	42.560°N; 18.629°E	–	1070

3. Results

Order Glomerida Leach, 1814

Glomeris connexa **C. L. Koch, 1847:** P6E 4246: exact locality unknown ("surrounding of Brno, Adamov and Tišnov, IV.–V.1935") – 1 ♂, 14 ♀♀ (Fig. 2A).

Glomeris hexasticha **Brandt, 1833:** P6E 4247: exact locality unknown ("surrounding of Brno, Adamov and Tišnov, IV.–V.1935") – 1 ♂, 8 ♀♀, 2 juv.

Glomeris pustulata **Latreille, 1804:** P6E 4248: exact locality unknown ("surrounding of Brno, Adamov and Tišnov, IV.–V.1935") – 1 ♂, 8 ♀♀, 8 juv.; P6E 4249: Loc. 14 – 5 ♂♂, 3 ♀♀.

Order Polyzoniida Gervais, 1844

Polyzonium germanicum **Brandt, 1837:** P6E 4250: Loc. 4 – 1 ♂, 1 ♀, 1 juv. (Fig. 2B); P6E 4251: Loc. 13 – 1 ♀.

Order Chordeumatida Pocock, 1894

Craspedosoma transsylvanicum Verhoeff, 1897: P6E 4252: Loc. 6 – 3 ♂♂, 5 ♀♀ (Fig. 2C).

Mastigophorophyllidae gen. sp.: P6E 4253: Loc. 3 – 1 juv.

Order Julida Brandt, 1833

Brachyiulus lusitanus Verhoeff, 1898: P6E 4264: Loc. 9 – 1 ♂, 2 ♀♀ (Fig. 2D).

Cylindroiulus boleti (C. L. Koch, 1847): P6E 4265: Loc. 15a) – 1 ♀ (det. A. Mock).

Enantiulus nanus (Latzel, 1884): P6E 4266: Loc. 2 – 3 ♂♂, 1 ♀; P6E 4267: Loc. 3 – 1 ♀; P6E 4268: Loc. 5 – 1 juv.; P6E 4269: Loc. 8 – 1 ♂; P6E 4270: Loc. 13 – 1 ♂; P6E 4271: Loc. 14 – 1 ♀; P6E 4272: Loc. 11b) – 1 ♂.

Julus curvicornis Verhoeff, 1899: P6E 4273: Loc. 1 – 1 ♀ (Fig. 2E; rev. K. Tajovský).

Julus sp.: P6E 4274: Loc. 6 – 3 juv.; P6E 4275: Loc. 10 – 1 ♀; P6E 4276: Loc. 11b) – 3 ♀♀, 2 juv.

Julinae gen. sp.: P6E 4277: Loc. 15b) – 2 juv.

Kryphioiulus occultus (C. L. Koch, 1847): P6E 4278: Loc. 12 – 11 ♂♂, 11 ♀♀.

Leptoiulus trilobatus (Verhoeff, 1894): P6E 4279: Loc. 13 – 1 ♂, 1 ♀.

Megaphyllum projectum Verhoeff, 1894: P6E 4280: Loc. 3 – 1 juv.; P6E 4281: Loc. 4 – 1 juv.; P6E 4282: Loc. 8 – 2 ♂♂; P6E 4283: Loc. 10 – 3 ♀♀, 1 juv.; P6E 4284: Loc. 13 – 2 ♂♂, 6 ♀♀, 1 juv.; P6E 4285: Loc. 11b) – 1 ♀.

Megaphyllum unilineatum (C. L. Koch, 1838): P6E 4286: Loc. 11a) – 1 ♂; P6E 4287: Loc. 13 – 1 ♂.

Megaphyllum sp. 1: P6E 4288: Loc. 15a) – 2 ♀♀.

Megaphyllum sp. 2: P6E 4289: Loc. 15a) – 3 ♀♀.

Megaphyllum sp. 3: P6E 4290: Loc. 15b) – 8 ♂♂, 3 ♀♀, 4 juv.

Unciger foetidus (C. L. Koch, 1838): P6E 4291: Loc. 12 – 4 ♀♀; P6E 4292: Loc. 13 – 1 ♂, 1 ♀.

Unciger transsilvanicus (Verhoeff, 1899): P6E 4293: Loc. 10 – 3 ♂♂, 1 ♀, 1 juv.; P6E 4294: Loc. 12 – 1 ♂; P6E 4295: Loc. 13 – 1 ♂.

Order Polydesmida Leach, 1815

Brachydesmus superus Latzel, 1884: P6A 4254: Loc. 7 – 1 ♂, 1 ♀, 1 juv. (Fig. 2F); P6A 4255: Loc. 10 – 2 ♀♀.

Polydesmus complanatus (Linnaeus, 1761): P6E 4256: Loc. 6 – 20 juv.; P6E 4257: Loc. 10 – 11 ♂♂, 8 ♀♀, 2 juv.; P6E 4258: Loc. 13 – 1 ♂, 2 ♀♀; P6E 4259: Loc. 11b) – 1 ♂; P6E 4260: Loc. 15a) – 1 ♀ (det. A. Mock).

Strongylosoma stigmatosum (Eichwald, 1830): P6E 4261: Loc. 1 – 2 ♀♀; P6E 4262: Loc. 12 – 1 ♂, 2 ♀♀; P6E 4263: Loc. 13 – 6 ♂♂, 11 ♀♀.

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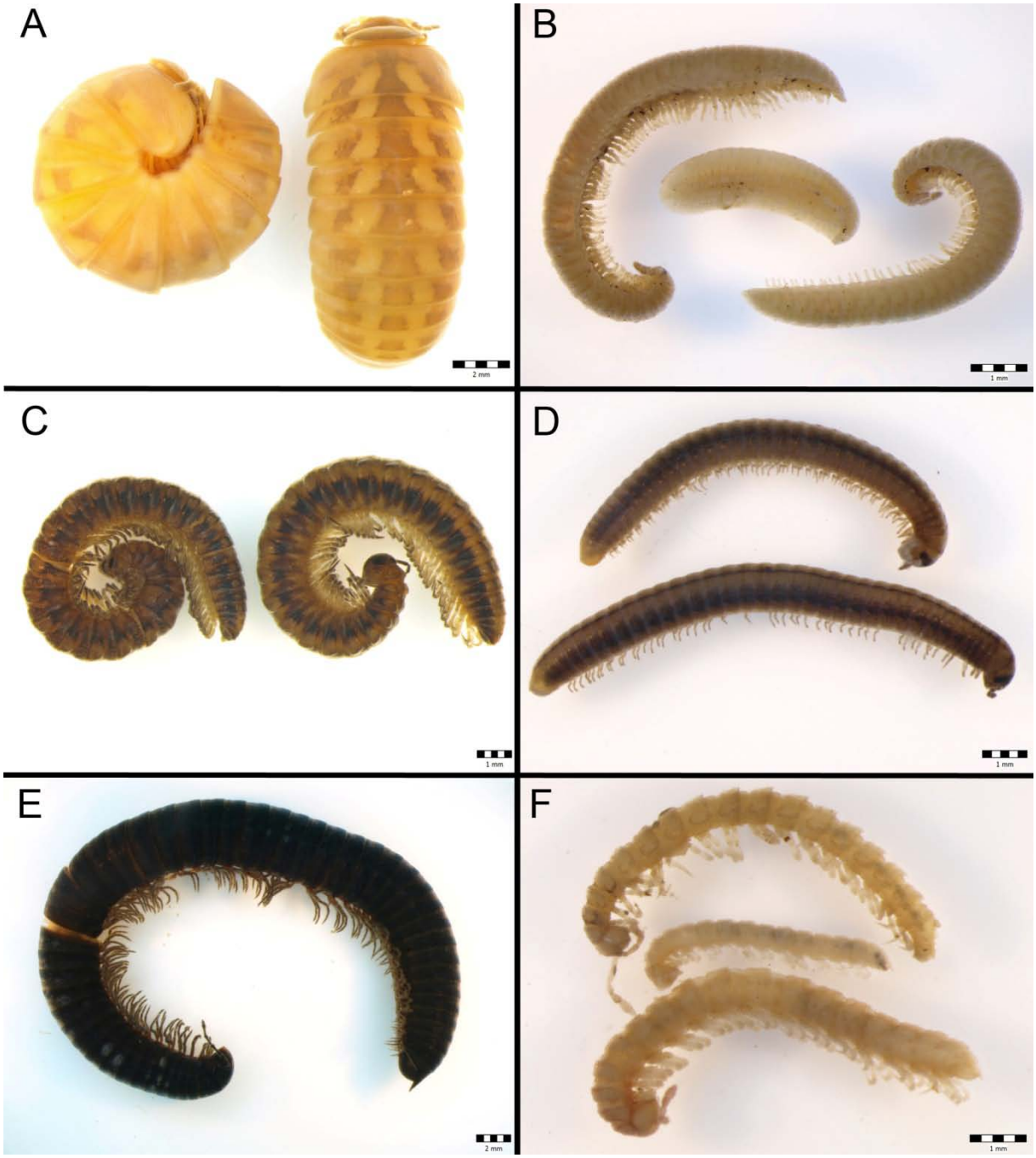

Figure 2: A. *Glomeris connexa*, male and female (P6E 4246). **B.** *Polyzonium germanicum*, male, female and juvenile (P6E 4250). **C.** *Craspedosoma transsylvanicum*, male and female (P6E 4252). **D.** *Brachyiulus lusitanus*, male and female (P6E 4264). **E.** *Julus curvicornis*, female (P6E 4273). **F.** *Brachydesmus superus*, male, female and juvenile (P6E 4254).

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