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Research paper

A Catalogue of the Geophilomorpha Species (Myriapoda: Chilopoda) of Romania

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Abstract. A commented list of 42 centipede species from order Geophilomorpha present in Romania, is given. This comes to complete the annotated catalogue compiled by Negrea (2006) for the other orders of the class Chilopoda: Scutigeromorpha, Lithobiomorpha and Scolopendromorpha. Since 1972, when Matic published the first monograph on epimorphic centipeds from Romania in the series "Fauna României" as the results of his collaboration with his student Cornelia Dărăbanțu, the taxonomical status of many species has been debated and sometimes clarified. Some of the accepted modifications were included by Ilie (2007) in a checklist of centipedes, lacking comments on synonymies. The main goal of this work is, therefore, to update the list of known geophilomorph species from taxonomic and systematic point of view, and to include also records of new species.

Key words: Chilopoda, Geophilomorpha, Romania, taxonomy.

INTRODUCTION

Among centipedes, the Geophilomorpha order is the richest in species number, with 40% of all known species, distributed all over the world (with some exceptions, Antartica and Artic regions) (Bonato et al., 2011a). From the approx. 1250 geophilomorph species, a number of 179 valid species in 37 genera were recently acknowledged to be present in Europe, following a much needed critical review of taxonomic literature (Bonato & Minelli, 2014).

With 116 species, Romania ranks among the European countries with a high number of species (Fig. 1), being surpassed only by Italy (Minelli & Foddai, 2007). Although Romania, compared to other countries or regions from Europe, has been benefiting from a published monograph by Matic (1972), the outdated taxonomy is much in need of complementing work (Negrea, 2006; Bonato et al., 2014). Following taxonomical reviews on type specimens from collections or based on original descriptions of different species and subspecies, authors like Bonato (2008–2014), Christian (1996), Dányi (2006–2010), Minelli (2007–2014), Stoey (2002), Spelda (2005), Zapparoli (2002–2012), made valuable updates towards clarifying the taxonomical status, as well as distribution, of some geophilomorph species that are present in Romania. This includes also reassignments of taxa to other genus, acceptance or rejection of synonymies for species, including taxa described by Matic or Căpușe. Some of these changes were taken into account by Ilie (2007) in a checklist of centipedes published within a larger work on Romanian fauna, without making any comments on synonymies. For three orders from Chilopoda (Scutigeromorpha, Lithobiomorpha and Scolopendromorpha), Negrea (2006) published a first thorough review, with comments on taxonomic value of present species and needs of re-

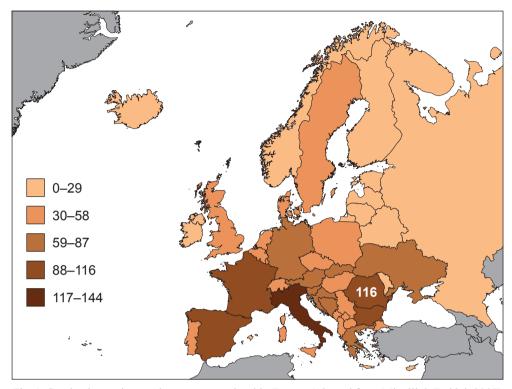


Fig. 1. Centipede species number, at country level in Europe (adapted from Minelli & Foddai, 2007)

evaluation of different material from collections. Later on, he reviewed some species from Lithobiomorpha, and published two more papers (Negrea, 2010a, b). However, since the monograph on epimorphic centipedes (Matic, 1972), almost nothing has been made to update the knowledge on order Geophilomorpha in Romania. In the last decades, several papers regarding the fauna of centipedes in different areas in the country were published, some containing confirmations of species presence, others accounting new species for Romanian territory (Dányi, 2006, 2007, 2010; Gava, 2004).

Considering all these aspects, and the need to establish a base of knowledge for further faunistic and ecological research in the country, the main goal of this work is to make an annotated catalogue of geophilomorph species, meant to complete the work of Negrea.

MATERIALS AND METHODS

Literature published from 1847 (Koch) to present was used to collect all species records from Romania. Based on the most recent available taxonomical publications, the status of these species and synonymies were updated. The catalogue presents all the species recorded on the territory of Romania, in alphabetical order. Uncertain species, from taxonomical point of view or species with doubtful presence are also included, together with specific explicit remarks.

All species, belonging to six families from the order Geophilomorpha, are presented in a similar structure as published by Negrea (2006). The following type

of information is provided for each species: first report in Romania, the way it was presented by Matic (1972), taxonomical status, chorotype and remarks on nomenclature, taxonomy and whether the material needs to be revised (for more details see Negrea, 2006). Classification of species follows Bonato & Minelli (2014). Due to the uncertainty in species identifications in Daday work, when the first report was found in one of his monographs (Daday, 1889a, b), a second report is also presented. Also, when first report is referring to an historical area that is now included in Romania, but also in other neighbouring countries (for example "Hungaria orientalis"), the same solution was applied. Chorology and other notes on general distribution were obtained, when available, from Dányi (2008b), Stoev (2002), Zapparoli (2002) and Zapparoli & Iorio (2012), or were derived based on chorotypes classification proposed in Taglianti et al. (1999).

RESULTS AND DISCUSSIONS

From the screening, a list of 42 geophilomorph species reported from Romania was obtained. *Geophilus arenarius* Meinert, 1870, a species present only in the Algerian coast, was excluded, as all European records are considered doubtful. The *carpophagus* species complex, to which this species belongs, is a "widespread Western Palaearctic species—complex whose internal taxonomy is still largely unresolved" (Bonato & Minelli, 2011). Ten species from the list were subject of nomenclatural changes or synonymies. Some of them need confirmation as their presence in Romania is doubtful, while for others, the taxonomic value is still uncertain and review is needed. Four new species were recently added to Romanian fauna.

Family Dignathodontidae Cook, 1896 Dignathodon microcephalus (Lucas, 1846)

- 1. Verhoeff (1899: 3) as *Dignathodon microcephalum* Lucas; one site: one male under the rocks on the Slimnic river side, in Shilea, Râmnicul–Sărat county (now Vrancea county);
- 2. Matic (1972: 132) as Dignathodon microcephalum (Lucas, 1846);
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: Mediterranean MED;
- 5. Remarks: very rare species, present in warm, rocky forests. Since Matic (1972), it was never published again; we found it recently in a deciduous forest in Muntenia (S. Romania);

Henia bicarinata (Meinert, 1870)

- 1. Daday (1889a: 85) as *Scotophilus bicarinatus* Meinert; sites: Moldova Veche and Sicheviţa from Caraş–Severin county;
- 2. Matic (1972: 127) as Henia bicarinata Meinert;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: Mediterranean MED;
- 5. Remarks: Matic (1972) considers the presence of the species in Romania uncertain and probable mistaken with *Henia pulchella* Meinert 1870. However, the later one's actual taxonomic value is still uncertain (Bonato & Minelli, 2014). Daday's reports for the species in present territory of Hungary (Daday, 1889a) are also considered questionable by Dányi (2008a) taking into account that in the past 75 years it was not once again found.

This situation is similar to Romania, so, only new collected material could confirm its presence.

Henia illyrica (Meinert, 1870)

- 1. Daday (1889a: 85) as *Scotophilus illyricus* Meinert; sites: Baziaş, Becheni, Dej, Orşova, Plavişeviţa (now destroyed, due to the construction of the Iron Gate Hydroelectric Power Plant), Sfânta Elena, Sviniţa. Only Becheni and Dej are mentioned in Daday (1889b); Verhoeff (1899: 3); sites: Shilea, Râmnicul–Sărat county, Comana forest;
- 2. Matic (1972: 129) as Henia illyrica Meinert;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: S-European SEU. În Romania, it is common.

Henia vesuviana (Newport, 1845)

- 1. Daday (1889a: 84) as *Chatechelyne vesuviana* Newport; sites: Coronini/ Pescari (Caraș—Severin), Dej (Cluj), Maramureș, Moldova Veche (Caraș—Severin), Pir (Satu Mare);
- 2. Matic (1972: 135) as Chatechelyne vesuviana Newport;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: S-European SEU;
- 5. Remarks: The specie is reported for Romania only by Daday (1889a) and Matic repeats one of the sites Moldova Veche (1971, 1972). Matic collected centipede material from this site but does not state that he had identified the species (1971). Daday identifications are rather unreliable (Dányi, 2008b), so the presence is doubtful until new records will be available.

Family Geophilidae Leach, 1815 *Clinopodes carinthiacus* (Latzel, 1880)

- 1. Dărăbanțu (1971: 108) as *Clinopodes trebevicensis* Verhoeff, 1898; site: Feleac (Cluj);
- 2. Matic (1972: 91) as Clinopodes trebevicensis (Verhoeff, 1898);
- 3. Bonato et al. (2011b: 180): new status at species rank of *G. flavidus var. carinthiacus* (Latzel, 1880), according to the principle of priority over *C. trebevicensis* (Verhoeff, 1898) with the synonyms "*Geophilus flavidus trebevicensis* Verhoeff, 1898: n. syn.", "*Geophilus rodnaensis strasseri* Verhoeff, 1938: n. syn.", "*Geophilus balcanicus* Kaczmarek, 1972: n. syn."; 1 ♀, holotype; from "Kärnten" = Carinthia, Austria;
- 4. Chorotype: S–European SEU;
- 5. Remarks: Dărăbanţu (1971): 3 ♀♀ material needs to be re–examined, as no other records were made for this species in Romania since, and it is outside the species range. Until then, we consider the presence in Romania doubtful, unless other material is collected and identified.

Clinopodes escherichii (Verhoeff, 1896)

- 1. Attems (1929: 204) as *Geophilus flavidus escherichii* Verhoeff, 1896; one site: Dobrogea. Dărăbanţu & Matic (1969a: 104) reported it from over 10 sites from Banat and Transylvania, as *Clinopodes escherichii* (Verhoeff, 1896);
- 2. Matic (1972: 81) as Clinopodes escherichii Verhoeff;

- 3. Bonato et al. (2011b: 186) after studying specimens confirms it as a distinct species from *Clinopodes flavidus* (former *Geophilus flavidus*) supporting Matic (1972) opinion;
- 4. Chorotype: East Mediterranean EME.

Clinopodes flavidus C.L. Koch, 1847

- 1. Koch (1847: 184) as *Clinopodes flavidus*; one site: Oraviţa, Banat;
- 2. Matic (1972: 76, 79) as *Clinopodes flavidus* C.L. Koch and *Clinopodes polytrichus* (Attems 1903);
- 3. Bonato et al. (2011b: 188): valid; conserved over senior synonym *Arthronomalus hopei* Newport, 1845 (ICZN 1999: Art. 23.9); 1 ♀, holotype; from "Oravitza" = Oravita, Romania;
- 4. Chorotype: Turano-European TUE;
- 5. Remarks: Matic (1972) does not take into account the older published data for Romania, as he claims uncertainty over cited subspecies identity. Zapparoli (2002) was first to propose synonymy of *Clinopodes polytrichus* with *C. flavidus*, accepted by Dányi (2008a) for Hungarian fauna. As the holotype of *G. flavidus polytrichus* seems lost (Ilie, et al. 2009), Bonato & Minelli (2014) discuss the identity of the two species based on the original description and subsequently identified specimens.

Clinopodes intermedius Dărăbanțu & Matic, 1969

- 1. Dărăbanţu & Matic (1969a: 104) as *Clinopodes intermedius* Dărăbanţu & Matic; one site Măcin, Romania;
- 2. Matic (1972: 86) as Clinopodes intermedius Dărăbanțu & Matic;
- 3. Bonato et al. (2011b: 190) and Bonato & Minelli (2014): "taxonomic value uncertain", "maintained here provisionally as distinct species";
- 4. Chorotype: endemic species to Dobrogea END;
- 5. Remarks: for confirmation, it is necessary to be found again; male description from terra typica is also mandatory.

Clinopodes rodnaensis (Verhoeff, 1938)

- 1. Verhoeff (1938: 342): as *Geophilus (Clinopodes) rodnaensis*; sites: Bistriţa, Braşov, Culmea Codrului (north to Bicaz–Maramureş) Sighişoara, Valea Vinului;
- 2. Matic (1972: 88) as Clinopodes rodnaensis Verhoeff;
- 3. Bonato et al. (2011b: 191): valid;
- 4. Chorotype: endemic species to Romania END;
- 5. Remarks: Verhoeff (1938) also described a subspecies and a variety, later synonymised. Bonato et al. (2011b) stated "Geophilus rodnaensis strasseri Verhoeff, 1938: n. syn." for Clinopodes carinthiacus (Latzel, 1880), and Bonato & Minelli (2014) recognized, based on the original description, that "Geophilus (Clinopodes) rodnaensis strasseri var. fiumaranus" belongs to C. rodnaensis. The male described as fiumaranus by Verhoeff was collected from near Rijeka, Croatia, but this old record is, to our knowledge, the only one outside Romania.

Clinopodes verhoeffi Bonato, Iorio & Minelli 2011

- 1. Dărăbanţu & Matic (1969a: 104) as *Clinopodes porosus* (Verhoeff, 1934); sites: Baia de Arieş, Ceahlău, Cheile Turzii, Cluj, Făget, Hoia, Lacul Sf. Ana, Pădurea Neagră, Satu–Mare, Scărișoara–Belioara, Traniş, Valea Nucsoarei;
- 2. Matic (1972: 83) as Clinopodes porosus Verhoeff;
- 3. Bonato et al. (2011b: 192): "Clinopodes verhoeffi n. nom." as Geophilus flavidus porosus Verhoeff, 1934 is a primary junior homonym of Geophilus porosus Porat, 1894;
- 4. Chorotype: Turano-European TUE;
- 5. Remarks: the status of this species (described as a subspecies of *Geophilus flavidus*) was long debated. Matic (1972) considered *Clinopodes porosus* as a valid species, different from *C. flavidus*. Even after the renaming, Bonato & Minelli (2014) consider the validity of the species still uncertain.

Geophilus alpinus Meinert, 1870

- 1. Attems (1929: 356): as *Geophilus insculptus* Attems, 1895; Romania, no site;
- 2. Matic (1972: 113) as Geophilus insculptus Attems;
- 3. Dányi (2008b: 193) considers explicitly *G. insculptus* as junior synonym of *Geophilus alpinus* Meinert, 1870. Spelda (2005) was the first to take into account the identity between the two species, without introducing a formal synonymy, which was further discussed and accepted by Bonato & Minelli (2014); syntype: Razzes (Italy);
- 4. Chorotype: European EU;
- 5. Remarks: in the case of the species group *G. alpinus* (*insculptus*) *G. proximus G. oligopus* existed a various number of conflicting views between authors, regarding both nomenclature and description. After a series of reviews and redescriptions (Jeekel, 1999; Christian, 1996; Spelda, 2005), the synonymy between *G. insculptus* and *G. alpinus* was accepted. There is a need of a review of the material cited for Romania, after the current accepted description of the species;

Geophilus carpophagus Leach, 1815

- 1. Dărăbanțu et al. (1969: 154) as *Geophilus carpophagus* Leach; sites: Gura Dobrogei, Casian;
- 2. Matic (1972: 109) as Geophilus carpophagus Leach;
- 3. Bonato & Minelli (2014): valid species;
- 4. Overall range of the *carpophagus* complex includes Middle and Near East, most part of Europe, Maghreb and Macaronesia;
- 5. Remarks: three species have been clearly distinguished, *G. carpophagus* s. str., *G. easoni* Arthur, Foddai, Kettle, Lewis, Luczynsky & Minelli, 2001, both from Great Britain, and *G. arenarius* Meinert, 1870, from Algeria (see Bonato & Minelli, 2011 and references included). For continental Europe, taxonomic diversity is still unsolved within the *Geophilus carpophagus* species complex, so different authors group all records for a certain region/country, within the generic species *G. carpophagus* (*sensu lato*), (Zapparoli & Iorio, 2012; Dányi, 2008a). Until further development, we choose to do the same, with the exception of the records for *G. arenarius*,

for which Bonato & Minelli (2011) stated that it could be misidentified with *G. electricus*.

Geophilus electricus (Linnaeus, 1758)

- 1. Tömösváry (1879a: 154) as Geophilus electricus L; site: Cluj;
- 2. Matic (1972: 111) as Geophilus electricus Linne;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: European EU. In Romania, it is rare.

Geophilus flavus (De Geer, 1778)

- 1. Tömösváry (1879a: 154) as Geophilus hortensis Leach; site: Deva;
- 2. Matic (1972: 101, 168, 170) as *Necrophloeophagus longicornis* (Leach, 1814); *Pachymerium tristanicum* Attems, 1928 and *Pachymerium folkmanovae* Dobroruka. 1966:
- 3. The valid name for *Geophilus hortensis* C.L. Koch, 1838 and *Geophilus longicornis* Leach, 1815 is *Geophilus flavus* (De Geer, 1778) (Stuxberg, as cited in Bonato & Minelli, 2014);
- 4. Chorotype: Sibero–European SIE;
- 5. Remarks: the validity of *Pachymerium tristanicum* Attems, 1928 was long debated, but after Tuf & Laška (2005) the synonymy was established, while further remarks on the morphological diagnostic character were made by Bonato & Minelli (2014). In the same paper, "*Pachymerium flavum* Folkmanová, 1949 = *Geophilus flavus* (De Geer, 1778) new syn." which implicates the synonymizing of *Schizotaenia folkmanovae* Dobroruka, 1966. With these synonymies, the knowledge about species distribution in Romania increased.

Geophilus oligopus (Attems, 1895)

- 1. Dányi (2007) as *Geophilus oligopus* (Attems, 1895); site: Maramureş, Munții Piatra (Piatra Mts.), Săpânța (Szaplonca), near Cabana Colibi;
- 2. Matic (1972) did not report G. oligopus;
- 3. Christian (1996): valid species; syntype; Austria, Mount Hochschwab;
- 4. Chorotype: Central–European CEU;
- Remarks: recently known in Romania (only one male). Being a very small species, the extent of distribution is unknown, due to lack of records, "caused by the difficulties of its collecting and identifying" (Dányi, 2007).

Geophilus promontorii Verhoeff, 1928

- 1. Dărăbanțu cited by Matic (1972: 116) as Geophilus promontorii Verhoeff;
- 2. Matic (1972: 116) as Geophilus promontorii Verhoeff;
- 3. Bonato et al. (2011b: 190) and Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: unknown;
- 5. Remarks: in France, terra typica, it has not been found again and Geoffroy & Iorio (2009) consider that it is a possible junior synonym of *Geophilus insculptus*. Possible presence in Slovenia (Kos, 1992). Until further study, we consider it doubtful species in Romania.

Geophilus proximus C.L. Koch, 1847

- 1. Daday (1889a: 87) as *Geophilus proximus* C.L. Koch; sites: Cluj, Dej, Gherla, Oraviţa, Pir, Vlădeasa; and Verhoeff (1901: 175) site: Grecului valley (Azuga);
- 2. Matic (1972: 116) as *Geophilus proximus* C.L. Koch, 1847;
- 3. Bonato & Minelli (2014): for *G. proximus* (belonging to a problematic *G. alpinus* (*insculptus*) *G. proximus G. oligopus* group see also *G. alpinus*) the original description is "too vague to allow fixing the actual identity of this nominal species and the type material is most probably lost". The use of the name is maintained provisionally;
- 4. Chorotype: European EU;
- 5. Remarks: Dányi (2008a) revised the Daday specimen from Pir and Gherla, which turned to be *G. flavus*. This is a good example for the fact that all Daday's data must be questioned, if not confirmed by revision (Dányi 2008a, *in litt.*). Taking into account that there is only one record (Azuga) for the species except Daday's, the presence in Romania is doubtful, unless other material is collected and identified.

Geophilus pygmaeus Latzel, 1880

- 1. Ion (unpublished data) as *Geophilus pygmaeus* Latzel, 1880; site: Balotești (15.06.2007), Ștefănești (Ilfov) (29.11.2012);
- 2. Matic (1972) did not report G. pygmaeus;
- 3. Bonato & Minelli (2014): valid species; syntypes; Austria, "Kärnten (Loiblthal)" missing from Natural Hisory Museum in Vienna collection (Ilie et al., 2009), Slovenia, "österr. Küstenlande (Tarnowaner Wald)";
- 4. Chorotype: Central–European CEU;
- 5. Remarks: reports on the species are very rare, in Hungary it was not found during the last decades (Dányi, 2008a), while in Czech Republic it was collected in 2007 from Hodonín, this being the second record for the Czech Republic after 100 years (Riedel, 2008). Taking into account that site locations from Romania are in periurban forests, in order to confirm the presence of a population, it is necessary to find more individuals, a difficult task due to the minute size and rarity of the species.

Pachymerium antipai Căpușe, 1968

- 1. Căpuşe (1968: 716): as *Pachymerium antipai* Căpuşe, 1968; site: Ciucea (16.08.1964);
- 2. Matic (1972: 166) as Pachymerium antipai Căpușe;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: endemic species to Romania END–RO;
- 5. Remarks: since its description, it was cited again only once, from Meledic (Buzău) salt karst area (Nitzu et al., 1999) but no remarks were made on the taxonomic validity.

Pachymerium atticum Verhoeff, 1901

- 1. Căpuşe (1968: 708): as *Pachymerium atticum* Verhoeff, 1901; site: Valea Cernei (01.07.1964) Ciucea (16.08.1964);
- 2. Matic (1972: 164) as Pachymerium atticum Verhoeff;
- 3. Bonato & Minelli (2014): valid species;

- 4. Chorotype: unknown;
- 5. Remarks: based on the analysis of the European species descriptions, Bonato & Minelli (2014) reject the synonymy with *P. ferrugineum* (Zapparoli, 2002). However, it was not found again in Romania.

Pachymerium ferrugineum (C.L. Koch, 1835)

- 1. Tömösváry (1880: 619) as *Geophilus paradoxus* from "Hungaria orientalis"— Eastern Hungarian Kingdom; Daday (1889a: 88) as *Geophilus ferrrugineus* Koch; site Cluj, Gherla, Pui, Şimişna, Traniş, Vârghiş; and Verhoeff (1901: 175) sites: Chitila, Mogosani;
- 2. Matic (1972: 160, 172) as *Pachymerium ferrugineum* Koch and *Pachymerium tabacarui* Căpușe, 1968;
- 3. Bonato & Minelli (2014): valid species; also "*Pachymerium tabacarui* Căpușe, 1968 = *Pachymerium ferrugineum* (C.L. Koch, 1835) new syn.";
- 4. Chorotype: West–Palaeartic WPA;
- 5. Remarks: it is a common species with wide distribution. Recently, *P. tabacarui* described from Scroviştea was treated as a synonym for *P. ferrugineum*. The same authors commented and considered correct synonymies those proposed by Matic (1972) for two subspecies *Pachymerium ferrugineum helveticum* Verhoeff, 1902 and *Pachymerium ferrugineum insulanum* Verhoeff, 1902, with *P. ferrugineum* (Bonato & Minelli, 2014).

Stenotaenia linearis (C.L. Koch, 1835)

- 1. Tömösváry (1879a: 154) as *Stenotaenia linearis* Koch; site: Retezat, and Tömösváry (1879b: 246) as *Geophilus foveolatus* Bergsøe & Meinert; site: Cluj;
- 2. Matic (1972: 93, 100, 122) as *Clinopodes linearis* Koch and *Nesogeophilus ormanyensis* Attems, 1903, and *Insigniporus acuneli* Căpuse, 1968;
- 3. Bonato & Minelli (2008): valid species, and also "= *Geophilus ormanyensis* Attems, 1903 syn. nov., after lectotype designation; = *Insigniporus acuneli* Căpușe, 1968 syn. nov.)";
- 4. Chorotype: European EUR;
- 5. Remarks: quite rare, forest species. Bonato & Minelli (2008) commented on the morphology of *Insigniporus acuneli* and *Geophilus ormanyensis* (both described from Romania) and based on the description made by the authors they considered them to be synonyms with *Stenotaenia linearis*. However, from the two *G. ormanyensis* syntypes, only the female is designated as lectotype, while the male is considered "probably closer to other nominal species, such as *S. antecribellata* or *S. cribelliger*" (see also *S. rhodopensis*);

Stenotaenia rhodopensis (Kaczmarek, 1970)

- 1. Dányi (2010: 1028) as *Stenotaenia rhodopensis* (Kaczmarek, 1970); site: Runcu (Oltenia);
- 2. Matic (1972) did not report Stenotaenia rhodopensis;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain" due to unclear differences between this species and two others: *S. antecribellata* or *S. cribelliger*; type male specimen it seems to be lost (Dányi, 2010); Devin in the Rhodope Mts.;

- 4. Chorotype: unknown;
- 5. Remarks: in his review on the species, Dányi remarks that based on the description and locality, the male paralectotype of *G. ormanyensis* (which was not reported again after description) might be *S. rhodopensis*. Also, taking into account the differences reported by Dărăbanţu (1971) for the individuals identified as "*Clinopodes abbreviatus* (Verhoeff, 1925)" (from Romania: Feleac, Ghiriş, Şapca Verde), the same author considers that it could be in fact *S. rhodopensis* and not *Stenotaenia sorrentina* (as it might be after *C. abbreviatus* synonymy with *S. sorrentina*) (Dányi, 2010);

Stenotaenia sorrentina (Attems, 1903)

- 1. Dărăbanțu (1971: 110) as *Clinopodes abbreviatus* (Verhoeff, 1925); sites: Feleac, Ghiriș, Şapca verde;
- 2. Matic (1972: 95) as Clinopodes abbreviatus Verhoeff;
- 3. Bonato & Minelli (2008): valid species, and also "= *Geophilus linearis abbreviatus* Verhoeff, 1925 syn. nov.)";
- 4. Chorotype: unknown;
- 5. Remarks: while the material collected by Dărăbanţu (1971) seems to belong to *S. rhodopensis* (see above), two more sites for *Clinopodes abbreviatus* were published by Gava (2004) from Argeş (Romania). This material needs to be examined, before removing *Stenotaenia sorrentina* from the list of species present in Romania.

Family Himantariidae Bollman, 1893 *Himantarium gabrielis* (Linnaeus, 1767)

- 1. Daday (1889a: 83) as *Himantarium gabrielis* L.; sites: Mehadia, Orşova and Verhoeff (1897: 4) site: Mangalia;
- 2. Matic (1972: 29) as Himantarium gabrielis Linne;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: mediterranean MED;

Family Linotaeniidae Cook, 1899 *Strigamia acuminata* (Leach, 1815)

- 1. Tömösváry (1879a: 154) as *Linotaenia subtilis* C.L. Koch and *Stenotaenia acuminata* Leach; site: Cluj;
- 2. Matic (1972: 146) as Strigamia acuminata Leach;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: European EUR;
- 5. Remarks: a common species in forests. Bonato et al. (2012) states that *Scolioplanes engadinus banaticus* Verhoeff (1935) is a junior synonym of *S. acuminata* (new synonymy), contrary to Matic (1972), who listed it as *S. engadina*.

Strigamia crassipes (C.L. Koch, 1835)

- 1. Daday (1889a: 89) as *Scolioplanes crassipes* C.L. Koch; sites: Cisnădioara, Cluj, Dej, Deva, Gherla, Praid, Suceag (Cluj), Tîrgu Mures, Zalău;
- 2. Matic (1972: 141) as Strigamia crassipes Koch;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: European EUR.

Strigamia crinita (Attems, 1929)

- 1. Attems (1929: 363) as Scolioplanes crinitus; site: Retezat Mts. (Sibiu);
- 2. Matic (1972: 154) as Strigamia crinita Attems;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: endemic species to Romania END–RO;
- 5. Remarks: Matic mentions that it is closely related to *Strigamia acuminata*, from which it differs by the number of leg pairs and setae on trunk metasternites:

Strigamia engadina (Verhoeff, 1935)

- 1. Verhoeff (1935: 15) as *Scolioplanes engadina rodnaensis* Verhoeff; site: Ineu Peak (Rodna Mts.);
- 2. Matic (1972: 150) as Strigamia engadina Verhoeff;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: Central European CEU;
- 5. Remarks: due to the range of variation in the number of leg pairs, Bonato suggested that some records (from Pyrenees, central Appennines, regions in the Balkan Peninsula) are possibly misidentified *S. acuminata* or *S. transsilvanica* (Bonato et al. 2012). This could be possible also in Romania.

Strigamia lutea Matic, 1985

- 1. Matic (1985:12) as *Strigamia lutea* Matic; sites: Retezat Scientific Reserve;
- 2. Matic (1972) did not report Strigamia lutea;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: endemic species to Romania END RO;
- 5. Remarks: it is necessary the review of the material, as it was never cited again. Matic (1985) states its similarity to *S. perkeo* (a synonym of *S. pusilla*), but from the description of both species, it differs by the aspect of the ultimate leg—bearing segment pleuropretergite.

Strigamia paucipora Matic, 1985

- 1. Matic (1985:12) as *Strigamia paucipora* Matic; sites: Retezat Scientific Reserve;
- 2. Matic (1972) did not report Strigamia paucipora;
- 3. Bonato & Minelli (2014): "taxonomic value uncertain";
- 4. Chorotype: endemic species to Romania END RO;
- 5. Remarks: the review of the material is necessary, as it was described from one female and it was never found again.

Strigamia pusilla (Sseliwanoff, 1884)

- 1. Dányi (2006: 44) as *Strigamia pusilla* (Seliwanoff, 1884); sites: Borşa, Romania;
- 2. Matic (1972) did not report Strigamia pusilla;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: unknown;
- 5. Remarks: Bonato et al. (2012) confirms *Scolioplanes perkeo* Verhoeff, 1935 as a synonym to *Strigamia pusilla* Seliwanoff, see also *S. lutea*.

Strigamia transsilvanica (Verhoeff, 1928)

- 1. Verhoeff (1928: 278) as *Scolioplanes transsilvanicus* Verhoeff; site: Sibiu (forest in Sibiu County) Verhoeff (1935: 17) sites: Ineu Peak (Rodna Mts.), Banat, Brasov;
- 2. Matic (1972: 152) as Strigamia transsylvanica Verhoeff;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: S-European SEU;
- 5. Remarks: several subspecies described by Verhoeff, were subsequently ignored by other authors and Matic (1972) listed them as synonyms. Bonato discussed and accepted seven of them, like var. *franconius* cited also from Romania, among others (Bonato & Minelli, 2014). Spelda (2005) stated his doubts on the differences from *S. crassipes*, referring to all records in southern Germany of *S. transsylvanica* to *S. crassipes*;

Family Mecistocephalidae Bollman, 1893 Dicellophilus carniolensis (C.L. Koch, 1847)

- 1. Tömösváry (1880) as *Mecistocephalus hungaricus* Tömösváry, 1880, from "Hungaria orientalis"; Daday (1889a: 90) as *Mecistocephalus carniolensis* Koch; sites: Cluj, Mehadia, Retezat Mts., Seini, Vlădeasa;
- 2. Matic (1972: 66) as Dicellophilus carniolensis Koch;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: Central–European CEU;
- 5. Remarks: in Romania, it is a frequent species mainly in mountain forests, but it was also found in urban habitats (Ion, 2009). Type material of *Mecistocephalus hungaricus* is currently lost (Bonato et al., 2010), making impossible the validation of the synonymy proposed by Daday (1889a);

Family Schendylidae Cook, 1896 Schendyla capusei (Dărăbanțu & Matic, 1969)

- 1. Dărăbanțu & Matic (1969b: 359) as *Brachyschendyla capusei*; site: Comana forest;
- 2. Matic (1972: 55) as Brachyschendyla capusei Dărăbanțu & Matic;
- 3. Bonato & Minelli (2014): *Brachyschendyla capusei* Dărăbanţu & Matic, 1969 = *Schendyla capusei* (Dărăbanţu & Matic, 1969) new comb.;
- 4. Chorotype: endemic in the lower part of the Danubian valley, END-RO;
- 5. Remarks: there is a need of an assessment of its actual distinction from *S. tyrolensis* (Bonato & Minelli, 2014) and/or other specimen to be found in the field.

Schendyla carniolensis Verhoeff, 1902

- 1. Brölemann & Ribaut (1911: 222) as *Schendyla zonalis* Brölemann & Ribaut; general report from Romania, no site. Brölemann, & Ribaut (1912: 149–152) mention Comana (Vlaşca) as site for Romania;
- 2. Matic (1972: 43) as *Schendyla (Echinoschendyla) zonalis* Brölemann & Ribaut, 1911;
- 3. Bonato & Minelli (2014): valid species. The nomenclature for the species is not yet clarified;
- 4. Chorotype: S-European SEU;

5. Remarks: Bonato & Minelli (2014) argument the identity *of Schendyla zonalis* and *S. carniolensis*, the later ignored due to uncertain taxonomic status, but used as valid name for the species (by different authors) in recent papers (e.g. Minelli et al., Stoev, as cited in Bonato & Minelli, 2014).

Schendyla mediterranea Silvestri, 1898

- 1. Dărăbanțu în Matic (1972: 46) as *Schendyla mediterranea* Silvestri, 1898, site: Niculițel (Valea cu Tei) Dobrogea;
- 2. Matic (1972: 46) as Schendyla (Echinoschendyla) mediterranea Silvestri;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: Mediterranean MED;
- 5. Remarks: As Niculițel is the only record for the species, it should be found again to confirm its presence in Romania.

Schendyla monoeci Brölemann, 1904

- 1. Attems (1929: 64) as *Brachyschendyla monoeci* Brölemann; general report from Romania, without site. Dărăbanțu et al. (1969: 153); site: Horia in forest (Dobrogea);
- 2. Matic (1972: 50) as Brachyschendyla monoeci (Brölemann, 1904);
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: unknown;
- 5. Remarks: it should be found again to confirm its presence in Romania.

Schendyla negreai (Dărăbanțu & Matic, 1969)

- 1. Dărăbanţu & Matic (1969b: 361) as *Brachyschendyla negreai*; site: Cetăţuia forest near Luncaviţa (Dobrogea);
- 2. Matic (1972: 57) as Brachyschendyla negreai Dărăbanțu & Matic;
- 3. Bonato & Minelli (2014): taxonomic value is still uncertain because the morphology is inadequately known;
- 4. Chorotype: endemic species to Romania END–RO;
- 5. Remarks: for confirmation, it is necessary a reassessment of type specimen and also to describe the female in terra typical.

Schendyla nemorensis (C.L. Koch, 1837)

- 1. Verhoeff (1899: 3) as Schendyla nemorensis Koch; site: Comana forest;
- 2. Matic (1972: 38) as Schendyla nemorensis Koch;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: European: EUR. Rare in Romania, only in 4 locations. Presence in Romania was considered uncertain by Matic (1972) as well as by Zapparoli (2002), but new records were published by Gava (2004) and Dányi (2006);
- 5. Remarks: Matic (1972) reports *Geophilus tyrolensis* as a synonym for *Schendyla nemorensis*. However, this synonymy was proved erroneous, see more at *S. tyrolensis*.

Schendyla tyrolensis (Meinert, 1870)

- 1. Verhoeff (1899: 3) as Schendyla montana Attems, 1895; site: Comana forest;
- 2. Matic (1972: 52, 55) as *Brachyschendyla montana* (Attems, 1895); Matic (1972) considers the subspecies *herculis* described from Romania and Hungary as a variety;

- 3. Spelda (2005): *G. tyrolensis* (Meinert, 1870) = *S. montana* Attems, 1895 new syn.; Bonato & Minelli (2014) Schendyla montana herculis Verhoeff. 1938 = Schendyla tyrolensis (Meinert, 1870) new syn; Brachyschendyla dobrogica Matic & Dărăbantu, 1970 = Schendvla tvrolensis (Meinert. 1870) new svn.:
- 4. Chorotype; S-European SEU.

Schendyla walachica Verhoeff, 1900

- 1. Verhoeff (1900: 486): as Schendyla walachica; site Comana forest;
- 2. Matic (1972: 41) as Schendyla walachica Verhoeff;
- 3. Bonato & Minelli (2014): valid species;
- 4. Chorotype: S-European SEU;
- 5. Remarks: considered endemic for Romania by Matic in 1972, now known to occur also in Bulgaria, Greece, N–W Turkey (Zapparoli, 2002; Stoey, 2002). In Romania, rare, present in Muntenia and Dobrogea but also in two locations in Transylvania (Dărăbanțu, 1971), not taken into account by Matic (1972). The subspecies Schendyla (Schendyla) walachica rhodopensis Kaczmarek, 1969 is considered a synonym for the species by Bonato & Minelli (2014), hence the larger distribution in Europe:

A total of 42 geophilomorph species are provisionally recognized to be present in Romania. Out of them, 21 species have a clear taxonomic identity and their presence in Romania is certain. For 15 of these species, either the actual taxonomic identity is uncertain, because of incomplete descriptions, or the material reported from Romania might have been misidentified. These are in need of more research. Another six species need confirmation, as their presence in Romania is doubtful or have not been confirmed since the first record.

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REFERENCES

ATTEMS, C. (1929) Geophilomorpha. Das Tierreich, Lief 52, Berlin.

BONATO, L., A. MÍNELLI (2008) Stenotaenia Koch, 1847: a hitherto unrecognized lineage of western Palaearctic centipedes with unusual diversity in body size and segment number (Chilopoda: Geophilidae). Zoological Journal of the Linnean Society, 153: 253–286.

BONATO, L., A. MINELLI (2011) Geophilus arenarius, a long-misunderstood species in the still unresolved carpophagus species-complex (Chilopoda: Geophilidae). Zootaxa, 3114: 40-49.

BONATO, L., A. MINELLI (2014) Chilopoda Geophilomorpha of Europe: a revised list of species, with taxonomic and nomenclatorial notes. Zootaxa, 3770: 1–136.

BONATO, L., L. DÁNYI, A. MINELLI (2010) Morphology and phylogeny of Dicellophilus, a centipede genus with a highly disjunct distribution (Chilopoda: Mecistocephalidae). Zoological Journal of the Linnean Society, 158: 501–532

BONATO, L, G. D. EDGECOMBE, M. ZAPPAROLI (2011a) Chilopoda – Taxonomic overview. In:

A. Minelli (Ed.) Treatise on Zoology – The Myriapoda. Volume 1, Brill, Leiden, 363–443. BONATO, L., E. IORIO, A. MINELLI (2011b) The centipede genus Clinopodes C. L. Koch, 1847 (Chilopoda, Geophilomorpha, Geophilidae): reassessment of species diversity and distribution, with a new species from the Maritime Alps (France). Zoosystema, 33: 175–205.

BONATO, L., L. DÁNYI, A. A. SOCCI, A. MINELLI (2012) Species diversity of Strigamia Gray, 1843 (Chilopoda: Linotaeniidae): a preliminary synthesis. Zootaxa, 3593: 1–39.

- BONATO, L., A. MINELLI, M. LOPRESTI, P. CERRETTI (2014) ChiloKey, an interactive identification tool for the geophilomorph centipedes of Europe (Chilopoda, Geophilomorpha). ZooKeys, 443: 1–9.
- BRÖLEMANN, H. W., H. RIBAUT (1911) Diagnoses préliminaire d'espèces nouvelles de Schendylina [Myriap. Geophilomorpha]. Bulletin de la Société entomologique de France, 1911 (10): 219–222.
- BRÖLEMANN, H. W., H. RIBAUT (1912) Essai d'une monographie des Schendylina (Myriapodes, Géophilomorphes). Nouvelles Archives du Muséum d'histoire naturelle, cinquième série, 4: 53–183.
- CĂPUȘE, I. (1968) Contribution à l'étude des espèces appartenant aux genres *Insigniporus* Att. et *Pachymerium* C.L. Koch (Geophilomorpha, Geophilidae). Travaux du Muséum d'Histoire Naturelle "Grigore Antipa", 8: 699–719.
- CHRISTIAN, E. (1996) Die Erdläufer (Chilopoda: Geophilida) des Wiener Stadtgebietes. Verhandlungen der Zoologisch–Botanischen Gesellschaft in Wien. Österreich, 133: 107–132.
- DADAY, J. (1889a) A magyarországi myriopodák magánraja. Myriopoda Regni Hungariae. Kiadja a kir. Magyar természettudományi társulat, Budapest, 126 pp.
- DADAY, J. (1889b) Erdély faunájának Százlábúi. Myriopoda faunae Transsylvanicae. Természentrajzi Füzetek, 12: 85–107.
- DÁNYI, L. (2006) Contribution to the Chilopoda fauna of the Maramureş (Romania). Studia Universitatis "Vasile Goldiş" Seria Ştiinţele Vieţii, 17: 43–46.
- DÁNYI, L. (2007) *Geophilus oligopus* (Attems, 1895) a species new to the fauna of Romania and to the whole of the Carpathian Mountains. Schubartiana, 2: 39–48.
- DÁNYI, L. (2008a) Magyarország százlábúinak (Chilopoda) faunistikai és taxonómiai áttekintése. PhD Dissertation, Eötvös Loránd Tudományegyetem, Állatrendszertani és Ökológiai Tanszék, Budapest, 150 pp.
- DÁNYI, L. (2008b) Review and contribution to the Chilopoda fauna of Maramureş, Romania. Studia Universitatis "Vasile Goldiş", Seria Ştiinţele Vieţii, 18, suppl.: 185–197.
- DÁNYI, L. (2010) A Moesian geophilomorph (Myriapoda: Chilopoda) species from the Carpathians: Review and redescription of *Stenotaenia rhodopensis* (Kaczmarek, 1970). Biologia, 65: 1028–1033.
- DĂRĂBANŢU, C. (1971) Contribuții la studiul geofilomorfelor (Geophilomorpha Chilopoda) din sol. Studia Universitatis Babeș–Bolyai. Biologia, 2: 107–112.
- DĂRĂBANŢU, C., Z. MATIC (1969a) Genul *Clinopodes* C. Koch, 1847 (Geophilidae Geophilomoprha) în fauna României. Studia Universitatis Babeş–Bolyai. Biologia, 2: 101–107. (in Romanian)
- DĂRĂBANŢU, C., Z. MATIC (1969b) Deux nouvelles espèces de Schendylidae (Geophilomorpha—Schendylidae). Revue Roumaine de Biologie, Série de Zoologie, 14: 359–362.
- DĂRĂBANŢU, C., Z. MATIC, Şt. NEGREA (1969) Contribuţie la studiul geofilomorfelor (Chilopoda) endogee din România. Lucrarile Institutului de Speologie "Emil Racoviţa", 8: 147–160. (in Romanian)
- GAVA, R. (2004) Researches concerning the diversity and equitability of the Chilopoda populations from the deciduous forests. Archives of Biological Sciences, Belgrade, 56: 33–37.
- GEOFFROY, J.–J., E. IORIO (2009) The French centipede fauna (Chilopoda): updated checklist and distribution in mainland France, Corsica and Monaco. Soil Organisms, 81: 671–694
- ILIE, V., 2007 Clasa Chilopoda. Pp. 389–391. *In*: O. T. Moldovan, M. Čâmpean, D. Borda, S. Iepure, V. Ilie (eds.), Lista faunistică a României. Specii terestre și de apă dulce. Ed. Casa Cărții de Știință, Cluj–Napoca, 411 pp. (in Romanian)
- ILIE, V., E. SCHILLER, V. STAGL (2009) Type specimens of the Geophilomorpha (Chilopoda) in the Natural History Museum in Vienna. Kataloge des wissenschaftlichen Sammlungen des Naturhistorisches Museums in Wien, 22: 1–75.
- ION, M. (2009) Centipedes from urban environment. *In*: M. Onete (coord.): Species monitoring in the central parks of Bucharest. Ars Docendi, Bucureşti, 79–83.
- JEEKEL, C. A. W. (1999) On the status of the names *Geophilus proximus* C.L.Koch, 1847, *Geophilus insculptus* Attems, 1895, and *Geophilus oligopus* (Attems, 1895). Myriapod Memoranda, 1: 71–79.
- KOCH, C. L. (1847) System der Myriapoden. In: A. Herrich–Schäffer: Kritische Revision der Insectenfauna Deutschlands III. Bändchen. (begründet von Panzer, G.), 1–270.
- KOS, I. (1992) A review of the taxonomy, geographical distribution and ecology of the centipedes of Yugoslavia (Myriapoda, Chilopoda). Berichte des naturwissenschaftlichen-medizinischen Verein Innsbruck, Suppl. 10: 353–360.
- MATIC, Z. (1971) Chilopodele de pe locul viitorului lac de acumulare de la Porțile de Fier. Studia Universitatis Babeș-Bolyai. Biologia, 2: 85-88. (in Romanian)

- MATIC, Z. (1972) Clasa Chilopoda, Subclasa Epimorpha. In: Fauna RSR, 6 (2), Edit. Academiei RSR. 220 pp. (in Romanian)
- MATIC, Z. (1985) Note sur les Chilopodes du genre Strigamia Gray (Chilopoda: Geophilomorpha) de la réserve scientifique de "Retezat". Revue Roumaine de Biologie (Serie de Biologie Animale), 30: 11-15.
- MINELLI, A., D. FODDAI (2007) Geophilomorpha. In: Enghoff, H. (Ed.), Myriapoda. Fauna Europaea version 1.3. Available from: http://www.faunaeur.org (accessed on 1 February 2015).
- NEGREA, Ş. (2006) A catalogue to the Lithobiida, Scutigerida and Scolopendrida species (Myriapoda: Chilopoda) of Romania. Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa". 49: 93–118.
- NEGREA, Şt. (2010a) On the specimens of *Eupolybothrus* (*Leptopolybothrus*) tridentinus (Fanzago, 1874) (Chilopoda: Lithobiidae) from the "Z. Matic" and "Şt. Negrea" collections (Romania). Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa", 53: 139–147.
- NEGREA, Șt. (2010b) Critical evaluation of the specimens of *Lithobius validus* Meinert species group (Chilopoda: Lithobiidae) from the "Z. Matic" and "Șt. Negrea" collections (Romania). Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa", 53: 125–138.

 NITZU, E., A. GIURGINCA, V. ILIE, L. VĂNOAICA (1999) First note on the edaphic and subterranean
- fauna from the evaporitic karstic regions of Romania. Travaux de l'Institut de Spéologie "Émile Racovitza", 37–38: 143–157.
- RIEDEL, P. (2008) Chilopoda, Diplopoda, and Oniscidea in the City. Master thesis, Palacky University Olomouc, Faculty of Science, Department of Ecology and Environmental Science. 53 pp.
- SPELDA, J. (2005) Improvements in the knowledge of the myriapod fauna of southern Germany between 1988 and 2005 (Myriapoda: Chilopoda, Diplopoda, Pauropoda, Symphyla). Peckiana, 4: 101–129.
- STOEV, P. (2002) A catalogue and key to the centipedes (Chilopoda) of Bulgaria. Sofia, Pensoft, 103 pp. TAGLIÁNŤI, A. V., P. A. AUDISIÓ, M. BIONDI, M. A. BOLOGNA, G. M. CARPANETÓ, A. DE BIASE, S. FATTORINI, E. PIATTELLA, R. SINDACO, A. VENCHI, M. ZAPPAROLI (1999) A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palaearctic Region. Biogeographia 20: 31–59.
- TÖMÖSVÁRY, Ö. (1879a) Adatok a hazánkban előforduló Myriopodákhoz. Természetrajzi Füzetek 3: 152–156, 186–187.
- TÖMÖSVÁRY, Ö. (1879b) Adatok a hazánkban előforduló Myriopodákhoz, II. Természetrajzi Füzetek 3: 244-249.
- TÖMÖSVÁRY, Ö. (1880) Beitrag zur Kenntnis der Myriopoden Ungarns. I. Die Chilopoden. -Zoologischer Anzeiger 3: 617–619.
- TUF, I. H., V. LAŠKA (2005) Present knowledge on centipedes in the Czech Republic: a zoogeographic analysis and bibliography 1820–2003. Peckiana, 4: 143–161.
- VERHOEFF, K. W. (1897) Faune de la Roumanie. Über einige Chilopoden und Diplopoden aus Rumanien: Bulletin de la Société des Sciences de Bucarest – Roumanie, 6: 370–373.
- VERHOEFF, K. W. (1899) Myriapodes récoltés en 1897 et 1898 par M. Jaquet et déterminés par Mr. le Dr. Carl Verhoeff à Bonn, sur le Rhin (in: Faune de la Roumanie par Mr. le Dr. M. Jaquet). Bulletin de la Société des Sciences de Bucarest – Roumanie, 8 (1–2): 126–128.
- VERHOEFF, K. W. (1900) Über Schendyla und Pectinunguis. Zoologischer Anzeiger, 23: 483–486. VERHOEFF, K. W. (1901) Chilopoden und Diplopoden aus Rumänien. Bulletin de la Société des Sciences de Bucharest, 10 (2): 168–177.
- VERHOEFF, K. W. (1928) Geophilomorphen-Beiträge und eine Lithobius-Form. Mitteilungen aus dem Zoologischen Museum in Berlin. 14: 229–286.
- VERHOEFF, K. W. (1935) Über Scolioplanes (Chilopoda). Zoologischer Anzeiger, 3: 8–23.
- VERHOEFF, K. W. (1938) Chilopoden–Studien, zur Kenntnis der Epimorphen. Zoologische Jahrbücher (Systematik), 71: 339–388.
 ZAPPAROLI, M. (2002) Catalogue of the centipedes from Greece (Chilopoda). Fragmenta entomologica,
- 34: 1-146.
- ZAPPAROLI, M., E. IORIO (2012) The centipedes (Chilopoda) of Corsica: catalogue of species with faunistic, zoogeographical and ecological remarks. International Journal of Myriapodology, 7: 15-68.