



## On the dates of publication of four European species of *Scolopendra* Linnaeus, 1758 described by C. L. Koch (Myriapoda, Chilopoda)

CARLES DOMÉNECH<sup>1</sup> \* & PETER NAGEL<sup>2</sup>

<sup>1</sup>Departament de Ciències Ambientals i Recursos Naturals, Universitat d'Alacant. Carretera de Sant Vicent del Raspeig s/n C.P. 03690, San Vicent del Raspeig, Alacant, Spain. ✉ [carles.domenech.perez@gmail.com](mailto:carles.domenech.perez@gmail.com); 🌐 <https://orcid.org/0000-0003-1890-9434>

<sup>2</sup>University of Basel, Department of Environmental Sciences, Geoecology/Biogeography, Klingelbergstrasse 27, 4056 Basel, Switzerland. ✉ [peter.nagel@unibas.ch](mailto:peter.nagel@unibas.ch); 🌐 <https://orcid.org/0000-0002-2271-2039>

\*Corresponding author: ✉ [carles.domenech.perez@gmail.com](mailto:carles.domenech.perez@gmail.com)

### Abstract

Current studies on European *Scolopendra* Linnaeus, 1758 revealed inconsistencies in the use of the date of publications containing original descriptions by C. L. Koch. These dates are reviewed in the present paper. As a result, the following commonly attributed dates of description have to be amended: *S. clavipes* C. L. Koch, 1847, *S. italica* C. L. Koch, 1837, *S. graeca* C. L. Koch, 1847, and *S. germanica* C. L. Koch, 1837. The work containing the original description of all these taxa was published in 1836 by C. L. Koch as *Heft 9* of the rare series “Deutschlands Crustaceen, Myriapoden und Arachniden”. Two of these taxa were introduced by a short, inconspicuous paragraph and without illustration. The remaining two were wrongly dated short time after their descriptions, which were never questioned and have still being used until today.

**Key words:** Scolopendromorpha, *Cryptops*, Dates of publication, Herrich-Schäffer, Nomenclature

### Introduction

In Europe, the genus *Scolopendra* Linnaeus, 1758 is comprised of seven valid species and subspecies most of which have junior synonyms allocated (Bonato *et al.* 2016). Early studies on European centipedes conducted by the first author, revealed inconsistencies in the use of the publication dates of several taxa, even in current or prevailing scientific references. The date of the original description of a scientific name is of utmost importance for nomenclatural issues such as to determine priority or the validity of names or for compiling lists of synonyms (ICZN 1999).

By way of example, the year “1847” as date of the original description of *S. clavipes* C. L. Koch in well-known and widely accepted reference works (Kraepelin 1903, Attems 1930, Bonato *et al.* 2016), must be questioned because of its earlier citation by Stein (1839, p. 278), Brandt (1840, pp. 149, 154) and Ranzani (1841, p. 394) and also by Walckenaer & Gervais (1847; p. 257), who just cited Brandt's (1840) record of a previous reference. Other species descriptions were found to have remained unnoticed in the recent literature or were cited with wrong dates of publication.

The aim of the present contribution is to identify the correct date of publication of four European taxa originally assigned to the genus *Scolopendra*, using *S. clavipes* C. L. Koch, 1836 as a starting point. The present note is not intended to replace an in-depth nomenclatural study but to focus on the dating of the publication of the original description as one essential prerequisite.

### Material and methods

Studies on European centipedes revealed inconsistencies in the use of the publication's date of names and the underlying reference. Digital databanks (see below), original specimens provided by the authors' institutions, further

libraries and the authors' own resources were the main origin of information to resolve the puzzle. In the following we treat all four species separately, yet starting with *S. clavipes* as an example in a more comprehensive way.

Digital object consulted (last access 18th May 2022):

Bayerische Staatsbibliothek, München, Germany (BSB). Call number: Zool. 289 w-7/12 - Identifier: BSB-ID 1093159. urn:nbn:de:bvb:12-bsb10307828-3; <https://www.digitale-sammlungen.de/en/view/bsb10307828?page=,1>.

Biodiversity heritage Library (BHL). Identifier: LCCN: ca 11002214; Heft 142-144 - [doi.org/10.5962/bhl.title.15007](https://www.biodiversitylibrary.org/item/256588#page/5/mode/1up) - <https://www.biodiversitylibrary.org/item/256588#page/5/mode/1up>

Österreichische Nationalbibliothek (ÖNB): Identifier: BE.3.Z.45.(Vol.142-144); [http://digital.onb.ac.at/Onb-Viewer/viewer.faces?doc=ABO\\_%2BZ175999301](http://digital.onb.ac.at/Onb-Viewer/viewer.faces?doc=ABO_%2BZ175999301)

Standardized nomenclature for centipedes' external morphology was applied in the annotations following Bonato *et al.* (2010). Figures were assembled using Adobe Photoshop® CS6 software. Images modifications included mild angle, contrast and brightness retouches as well as visual references to accompany the text's description.

## Results

### *Scolopendra clavipes* C. L. Koch, 1836

*S. clavipes* C. L. Koch, 1836 is the currently accepted name of a *species propria* with the herewith corrected date "1836" instead of the widely used "1847" (see Bonato *et al.* 2016, founded on Würmli 1980). The name is not yet registered with Zoobank.

This species is often cited explicitly or with the implicit understanding that it was first published in C. L. Koch's well-known monograph and catalogue "System der Myriapoda" (Koch 1847), see for example Attems (1902, 1930), Kraepelin (1903), and Bonato *et al.* (2016), and a posthumously published work of C. L. Koch himself (Koch 1863a, see also Kohlrausch 1879, p. 72; 1881, p. 83). In fact, the text in Koch (1847, p. 169) is just the first comprehensive description, while the first illustration is found in Koch (1863a).

Publications before 1847 by Stein (1839, p. 278), Brandt (1840, p. 149) and Ranzani (1841, pp. 394, 441) as well as the coetaneous work of Walckenaer & Gervais (1847; p. 257), quoted the source of the description in two different ways. Stein (1839, p. 278) cited this as "Koch (in den von Dr. Herrich-Schäffer herausgeg. Deutschl. Krust. Myriap. und Arachn.)" while the other authors did it as "Koch (Deutschl. Crustaceen, Myriapoden und Arachniden, Heft [German term for "fascicle"] (or as Fasc.) 9, tab. [abbreviation of the Latin *tabula* = "plate"] (or as pl.) 1.)", but not any of them specified the year of the paper's release.

This work certainly was published in two versions, both with identical content but with different numbering and title (Nagel & Grieder 2019, e.g. Figures 2 - 7) (Figs. 1, 2). The species *S. clavipes* was published by C. L. Koch in the section "Anmerkungen" (notes) of the letterpress associated with the text to index species Tab. 1 and plate 1 (*S. italica*), but not appearing in the index itself nor in an illustration in the following parts of the two parallel editions [Author of letterpress and illustrations in both editions: C. L. Koch] (Fig. 1D, 2D):

Koch, C.L. (1836a). Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur deutschen Fauna. [Herausgegeben von Dr. Herrich-Schäffer] [N. B.: This statement "Edited by Dr. Herrich-Schäffer" is true for the whole Koch series, despite it was printed only on few title pages]. 9th fascicle, 24 plates and associated letterpress. Regensburg: Fr. Pustet. [in the present paper quoted as the "Koch series"].

and

Koch, C.L. (1836b) in Herrich-Schäffer G. A. W. (ed.). Deutschlands Insecten, herausgegeben von G. W. F. Panzer, fortgesetzt von Dr. G. A. W. Herrich-Schäffer. 142nd fascicle, 24 plates and associated letterpress. Regensburg: Fr. Pustet. (in the present paper quoted as the "Herrich-Schäffer series")

The index pages (wrappers) of these *Hefte* of both editions display a footnote with the imprinted date "Den 1. Oktober 1836" (Figs. 1B, 2B). This date was confirmed as the actual date of publication of both *Hefte* 9 and 142

(Nagel & Grieder 2019). Consequently, the original description of *S. clavipes* has to be dated as “1<sup>st</sup>. Oct. 1836” and the publication should be chosen as *Heft* 9 of the “Koch series” or as *Heft* 142 of the “Herrich-Schäffer series”.

The citation of *Heft* 9 as part of the Koch series in the form of a separate line of the text in *Heft* 142 of the Herrich-Schäffer series (see Fig. 2C) by Koch himself is an objective evidence of the precedence of *Heft* 9 in the case of a simultaneous publication (Nagel & Grieder 2019).

The detailed statement in Nagel & Grieder (2019, p. 119) quoting “1836” rather than “1837” of *Heft* 9 in the Koch series “Deutschlands Crustaceen ...” reveals a minor uncertainty: Indeed, a few subsequent references seem to support the publication date “1837”, without denying the wrapper date “1836” (ICZN 1999, Article 21.2; Nagel & Grieder 2019, pp. 119-120). Identical description of *S. clavipes* in *Heft* 142 of the Herrich-Schäffer series “Deutschlands Insecten ...” was equally dated as “1. Oktober 1836” with stronger evidence: Five subsequent records of *Heft* 142 have to be dated “1836” with the utmost probability (Nagel & Grieder 2019, p. 70).

In summary, both *Hefte* 9 and 142 were published contemporaneously. *Heft* 9 was cited in *Heft* 142 and hence marked as the original publication (see above).

Consequently, the work containing the original description must be determined as follows:

*Scolopendra clavipes* C. L. Koch, 1836 in Koch, C.L., Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur deutschen Fauna. *Heft* 9, unpaginated letterpress titled “Anmerkung [no.] 3)” [1 p.], listed subsequently to index species no. 9.1. Regensburg: Fr. Pustet. Date of publication 1 October 1836 (cf. Fig. 1B).

The application of this amendment will contribute to the stability of nomenclature with regard to the date and title of publication. However, some other nomenclatural issues such as the list of subspecies or eventual synonyms were not checked in detail as this would be beyond the scope of the present contribution.

### ***Scolopendra italica* C. L. Koch, 1836**

The name *Scolopendra italica* C. L. Koch, 1836 is depicted with the corrected date “1836” instead of the widely used date “1837”. Gervais (1837) seems to be the first author who cited the original description of *S. italica* correctly (in Koch, Deutschl., Crust., Myr., Arach., *Heft* 9, species no. 1), although without date. The correct reference of the original description was also given by Koch himself (Koch 1847) with equal ranking of both *Hefte* as “9. (142.) 1.”, and Koch (1863b) as “Deutschl. Crustaceen, Arachniden und Myriapoden Heft 9”, neither of them dated.

The date “1836” together with the reference to *Heft* 9 of the Koch series was only used recently (1 Feb 2021) for the Zoobank record (<http://zoobank.org/NomenclaturalActs/3c684667-fc35-4942-bbe9-d2462fb1d5f8>, and <http://zoobank.org/References/3e59cf22-15c6-49d4-9724-f9692847f2f1>) last accessed in 23<sup>th</sup> January of 2022).

#### Original description:

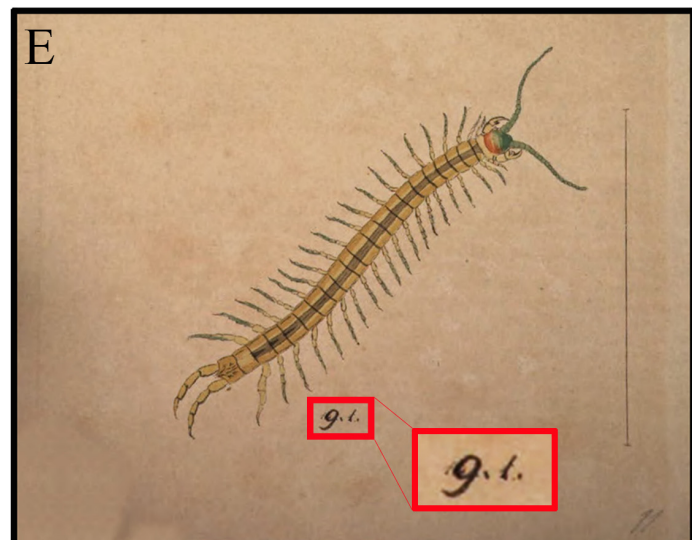
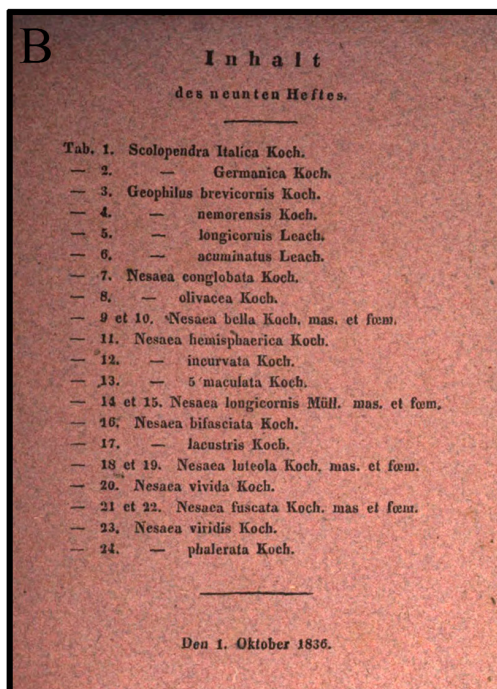
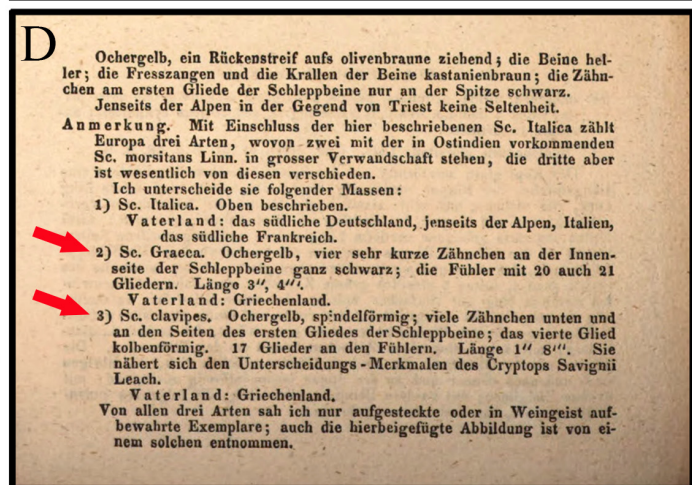
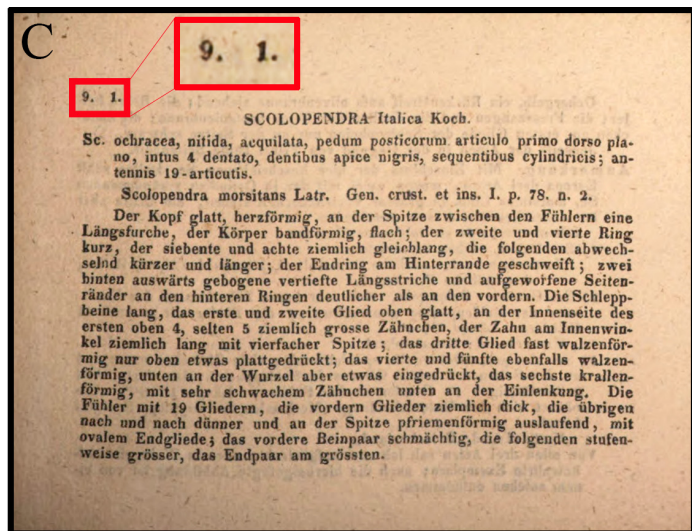
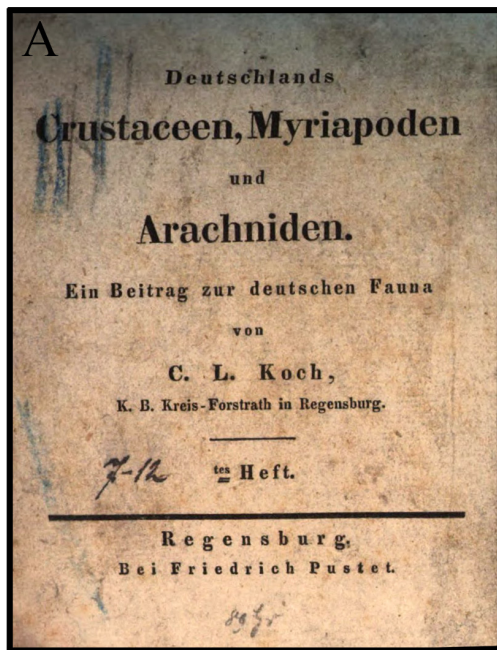
Similar to *S. clavipes* (see reasoning above), *S. italica* was originally described on 1<sup>st</sup> October in Koch C. L. (1836a) (precedence), and, simultaneously, in Koch (1836b) (subordinated).

*Scolopendra italica* C. L. Koch., 1836 [1 Oct.]. Index *Tab. 1*, Plate 9.1., Text headed 9.1 [2 pp., second page unpaginated] – In: Koch, C.L. (1836a). Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur deutschen Fauna. [Herausgegeben von Dr. Herrich-Schäffer] [N.B.: This statement “Edited by Dr. Herrich-Schäffer” is true for the whole Koch series, however printed only on some title pages]. *9tes Heft*, 24 plates and associated letterpress. Regensburg: Fr. Pustet.

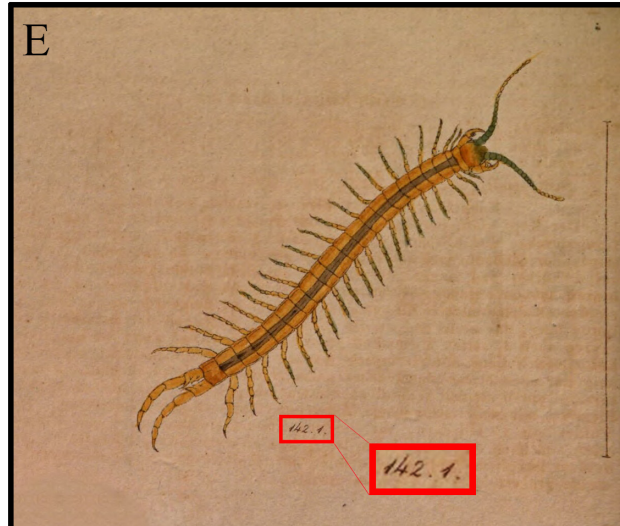
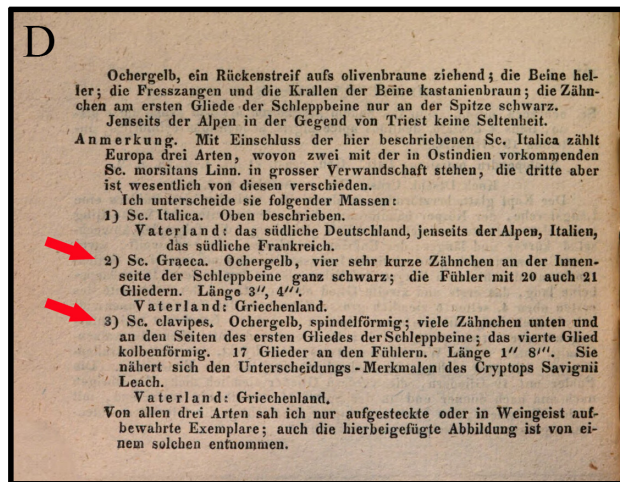
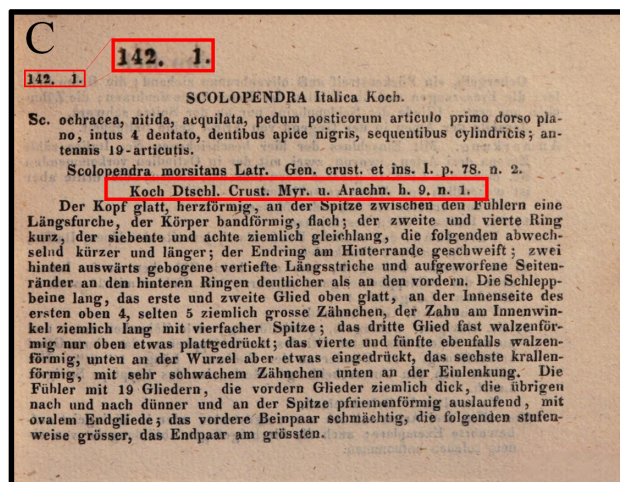
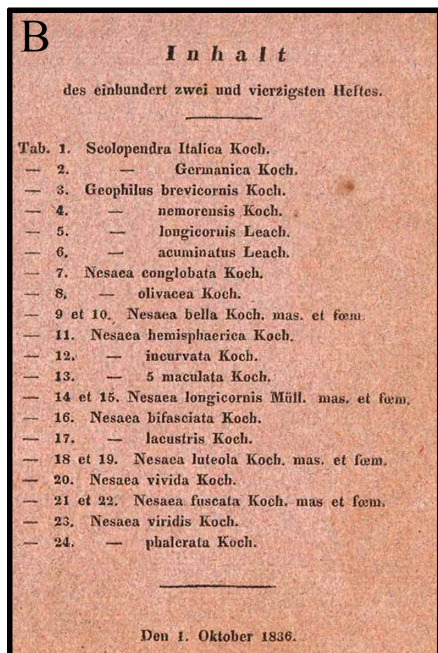
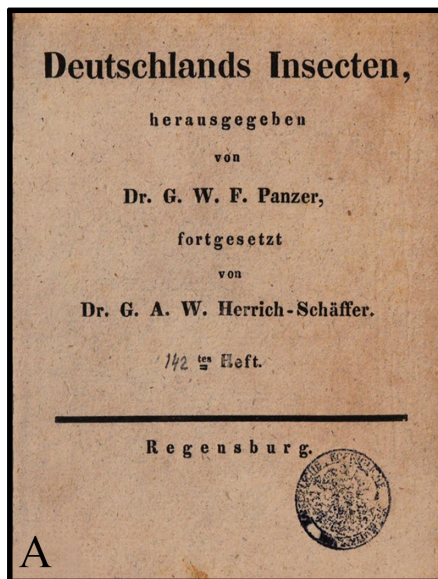
The differences between the parallel published, corresponding *Hefte* of the Koch series and the Herrich-Schäffer series were described by Nagel & Grieder (2019, p. 39). They are also present between *Heft* 9 and 142.

The currently accepted (valid) name for *S. italica* C. L. Koch, 1836 is *Scolopendra cingulata* Latreille, 1829 (see Bonato *et al.* 2016, founded on Newport 1845, p. 388, see also urn:lsid:zoobank.org:act:3C684667-FC35-4942-BBE9-D2462FB1D5F8, <http://zoobank.org/NomenclaturalActs/3c684667-fc35-4942-bbe9-d2462fb1d5f8>; last accessed 16<sup>th</sup> Jan. 2022).

The often referenced date “1837” traces back to Kraepelin (1903), Attems (1930) or even earlier to the wrong dating of *Heft* 9 of the Koch series. Bonato *et al.* (2016), item “*Scolopendra italica* C. L. Koch, 1837”, mix the references of *Heft* 9 of the Koch series and *Heft* 142 of the Herrich-Schäffer series, and also cite “1837” in error.



**FIGURE 1.** The Koch series, *Heft 9*, selected pages. **A.** Title page (Label) [glued on the front of the cardboard slipcase]. **B.** Outer front wrapper of thick, dusky pink paper. It depicts the register of contents. **C.** First page of letterpress with the description of *Scolopendra italica* Koch. The numbering of this page is on top left, highlighted and enlarged by present authors. **D.** Second page of letterpress with continuation of the description of *S. italica* and followed by the section “Anmerkung” (note). The two red arrows point to the descriptions of *S. graeca* and *S. clavipes*. **E.** Colour lithograph of *S. italica*, with plate and species number 9. 1. (highlighted and enlarged by the present authors) and long vertical scale bar pointing the actual size of the described *Scolopendra*. (Holding Library: Bayerische Staatsbibliothek, München, Germany)



**FIGURE 2.** The Herrich-Schäffer series, *Heft* 142, selected pages. **A.** Title page (Label) [glued on the front of the cardboard slipcase]. **B.** Outer front wrapper of thick, dusky pink paper. It depicts the register of contents. **C.** First page of letterpress with the description of *Scolopendra italica* Koch. The numbering of this page is on top left. The red frame highlights the additional information on the primary publication as part of the “Koch series”. **D.** Second page of letterpress with continuation of the description of *S. italica* and followed by the section “Anmerkung” (note). The two red arrows point to the descriptions of *S. graeca* and *S. clavipes*. Neither of them is found in the “Index”. **E.** Colour lithograph of *S. italica*, with plate and species number 142. 1. (highlighted and enlarged by the present authors) and a scale bar pointing the actual size of the described *Scolopendra* (Holding Libraries: Bayerische Staatsbibliothek, München, Germany, Biodiversity Heritage Library (BHL) and Österreichische Nationalbibliothek, Wien, Österreich).

## ***Scolopendra graeca* C. L. Koch, 1836**

### Original description:

*Scolopendra graeca* C. L. Koch 1836 [1. Oct.]. Text 9.1 [*Anmerkung* 2, 1 p., unpaginated] - In: Koch, C.L. (1836a) Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur deutschen Fauna. Herausgegeben von Dr. Herrich-Schäffer. [see *S. clavipes* above] 9tes Heft. Regensburg: Fr. Pustet.

This case is similar to *S. clavipes* (see above). The pretended original description in Koch (1847) is just a comprehensive redescription from Koch (1836a, b). The original description was published as “*Anmerkung* 2” in line with the description of *S. italica* in *Heft* 9 of the Koch series and, concurrently, *Heft* 142 of the Herrich-Schäffer series without being listed in the index and neither illustrated.

The name *S. graeca* C. L. Koch, 1836 is corrected herewith from the wrong “1847” or referenced work “System der Myriapoda”, respectively (Koch 1847, pp. 161, 269, plate 5 detail drawings). The latter reference was used in the sense of the first description e.g. by Koch (1863b pp. 70, 71, plate 95 habitus), Kraepelin (1903, p. 254), Attems (1930, p. 28) and Bonato *et al.* (2016).

The currently accepted name is *Scolopendra cingulata* Latreille, 1829 (see Bonato *et al.* 2016, founded on Kraepelin 1903).

## ***Scolopendra germanica* C. L. Koch, 1836**

### Original description:

*Scolopendra germanica* C. L. Koch 1836 [1 Oct.]. Index *Tab.* 2., Plate 9.2., Text 9.2 [1 page with header 9.2, subsequent page unpaginated] - In: Koch, C.L. (1836a) Deutschlands Crustaceen, Myriapoden und Arachniden. Ein Beitrag zur deutschen Fauna. Herausgegeben von Dr. Herrich-Schäffer, 9tes Heft. Regensburg: Fr. Pustet.

Parallel publication in Koch (1836b) (see treatise on *S. clavipes* above).

The name *S. germanica* C. L. Koch, 1836 is herewith corrected from the misleading “1837” e.g. in Kraepelin (1903) and Attems (1930).

When describing and publishing his “*Scolopendra germanica*” in 1836, Koch indicated a possible identity with the earlier described and illustrated “*Cryptops hortensis*” in Leach (1817) [actually: *Cryptops hortensis* (Donovan, 1810)] by relating to this reference and followed by a question mark. However, Koch has possibly never seen the reference “Zoological Miscellany” (Leach 1817), because he made mistakes with the volume number (II or III) and already in 1836 he called *C. hortensis* “[species] n. 2 [in Leach]” (actually: *C. hortensis* is species no. 1 in Leach, Vol. III, p. 42, 1817). This concept (*S. germanica* is a synonym of *C. hortensis*) was adopted by prominent researchers like Kraepelin (1903) and Attems (1930).

Immediately after its description, Gervais (1837, p. 51) synonymized *S. germanica* Koch with *Cryptops savignii* Leach, 1817 (actually: *C. savignyi* Leach, 1817, because of its prevailing usage: see Lewis 2014, Bonato *et al.* 2016). This classification was also adopted and maintained by Koch (1847) until his last work (Koch 1863b).

During the following decades none of these taxonomic concepts was unanimously accepted. The classification of *S. germanica* C. L. Koch, 1836 is debated until date. Considered synonyms comprise *C. hortensis* (Donovan, 1810), *C. savignyi* Leach, 1817, and, predominantly, *C. anomalans* Newport, 1844. Several relevant references do not mention *S. germanica* C. L. Koch, 1836 at all (Lewis 2011, 2014; Bonato *et al.* 2016). A focused taxonomic study seems to be necessary to reveal the taxonomic status of this species and to resolve this historic taxonomic controversy.



**FIGURE 3.** Original status of a specimen of *Heft* 121 (1833) of the Herrich-Schäffer series, illustrating the piceous cardboard slipcase (10.5 X 15 X 1 cm) with the affixed title page (10 X 12 cm), the partially extracted dusky pink wrapper (displaying the register of contents) (10 X 16.3 cm), one example of the more than 24 loose sheets of letterpress, (10 X 16 cm) and one example of the 24 loose plates with an illustration (10 X 13 cm). This example should also help to understand the rarity of the complete work, especially because of the unusual collation of differently sized individual parts, and the storage of all loose items in open-top slipcases. (Credit: P. Nagel)

## Four *Scolopendra* species original description's translation from German and Latin [annotated].

9-1

### SCOLOPENDRA *Italica* Koch.

Sc. ochreous, shiny, equilateral [or with equal sides; *Note: the author is probably referring to the tergites' constant width; see in contraposition the description of S. germanica*], the first article [prefemur] of posterior feet [ultimate legs; UL] dorsally flat, internally fourth-dentate [medial position with 4 spines], teeth [spines] apically black, the following cylindrical, antennae with 19 articles.

#### *Scolopendra morsitans* Latr. Gen. crust. et ins. I p.78. n. 2.

Head [Cephalic plate] smooth, cordiform, apically with a longitudinal groove [median sulcus] between antennae, body ribbon-like, flat; the 2<sup>nd</sup> and 4<sup>th</sup> segment [leg bearing segments; LBS. *Note: Koch is actually describing tergites in place of LBS (or as the equivalent term "body rings")*]; Hence from this point the text is adapted in that way; Tergites 2 and 4; TT2 and 4] short, the 7<sup>th</sup> and 8<sup>th</sup> [TT7 and 8] of approximately the same length, the following ones alternately shorter and longer; terminal segment [Ultimate leg body segment; ULBS] with hind [distal] margin sinuous; the body rings [TT] exhibit two grooved longitudinal lines [paramedical sutures] which are bent [divergent] backwards and outwards [anteriorly and distally] and also exhibit raised lateral margins [TT's margins]. This feature is more distinct at the posterior body rings [distal TT] compared to the anterior ones. Ultimate legs long, the first and second article [prefemur and femur] smooth above, inner surface of article 1 dorsally [prefemoral medial position] with 4 or rarely 5 rather big denticles [spines], the tooth at the internal angle [UL's prefemoral process] rather long with four cusps [spines] at apex; article 3 [tibia] almost cylindrical, slightly flattened above; articles 4 and 5 [tarsus 1 and 2] cylindrical as well yet little impressed down at the root [flattened proximally], article 6 [unguis proper] claw-shaped with very weak denticle [accessory spine] down at the joint. Antennae with 19 articles, the apical ones rather thick, the remaining ones tapering to a subulate apex with oval terminal article; the anterior pair of legs slim, the following ones stepwise enlarged, the ultimate ones largest.

[page break]

Ochreous-yellowish, a dorsal stripe tending towards olive-brown; the legs lighter; jaw-feet [maxillipeds] and claws of legs [unguis proper] castaneous; denticles at first article of ultimate legs [UL's prefemoral spines] with black colour confined to apices.

Not uncommon on the other side of the Alps in the neighbourhood of Trieste.

Note. Europe harbours three species with the here described Sc. *Italica* included. Two of them are closely related to Sc. *morsitans* Linn. of East India. The third species, however, is clearly different from them.

I discriminate them as follows:

1) Sc. *Italica*. Described above.

Distribution: southern Germany, on the other side of the Alps, Italy, southern France.

2) Sc. *Graeca*. Ochreous-yellowish, four very short denticles [spines] at inner surface of ultimate legs [spines on medial position of the UL's prefemur] are completely black; antennae with 20 or 21 articles. Length 3", 4"" [3 inches, 4 lignes; 1 - 19<sup>th</sup> century Anglo-Saxon - inch= 27.0672mm, 1 -Paris- ligne=2.2556mm; Length 90.2234mm].

Distribution: Greece.

3) Sc. *clavipes*. Ochreous-yellowish, fusiform; many denticles [spines] ventrally and laterally of article 1 of the ultimate legs [spines on ventral and lateral (sic.) position of the UL's prefemur; *Note: "laterally" in this case should be understood as laterointernal or more properly as "medially"*; see the more comprehensive redescription in Koch 1847]; article 4 [tarsus 1] spadiciform. Antennae with 17 articles. Length 1" 8"" [Length 45.1118mm; see above]. This species has almost the same distinguishing characters as *Cryptops savignii* Leach.

Distribution: Greece.

All three species are known to me only as pinned specimens or as specimens preserved in ethyl alcohol. The attached illustration is drawn from such a preserved specimen. [*Note: Koch refers to the illustration of S. italica. The illustrations of S. clavipes and S. graeca do not exist in this publication!*]



9.2.

**SCOLOPENDRA Germanica Koch.**

Sc. ochreous, head [head capsule] and feet [legs] a bit more obscure; these posterior ones [UL] longer, setose; antennae with 19 articles.

**Cryptops hortensis Leach. Zool. Misc. n. 2 ?**

Small. Mid-body uniformly thick, fore and hind body little [LBS] narrower, body segments [TT] distinctly separated from each other, rather domed [convex], the two frontal ones [TT1-2] without impressed longitudinal streaks [paramedian sutures], the remaining ones with six such striae [sutures]: four delicate lines approaching in the middle [paramedian sutures plus lateral longitudinal sutures], one lateral line more impressed and curved [lateral longitudinal sutures or maybe margination]. Head [Cephalic plate] not longer than wide; antennae with 17 articles, the distal ones with short bristles [hairs], the remaining ones with short velvet-like pilosity with individual small hairs difficult to recognize. Legs thin, the ultimate pair of legs [UL] long and thick, the proximal article [prefemur] of which being the longest one, thick and equipped all over with spine-like bristles [setae]; article 2 [femur] almost as long as article 1 [prefemur], but thinner, and the following ones equally stepwise smaller and simply bristly [setose]. The whole body including head and legs ochreous-yellowish,

[page break]

the posterior head [posterior part of the head plate], neck segment [T1], terminal segment [T21] and the ultimate legs little darker; in the middle of the posterior half of the body mostly with brown gut shining through [Malpighian's tubule]; antennae more clearly of yellow colour.

At humid places of low-lying gardens. Very rare in our neighbourhood.

**Discussion**

The present research on the dates of publication of four species revealed two possible reasons for incorrect data: First, the publication containing the original description of taxa was not consulted by the following authors, either not found or deliberately not used - because of an assumed reliable, easily accessible secondary publication, or the erroneous rating of the latter as the primary source of the original description (*S. clavipes*, *S. graeca*) -. Second, the date of publication found in catalogues, monographs or related taxonomic works, rated as reliable, was copied without scrutiny (*S. italica*, *S. germanica*).

One may speculate why the standard literature on centipedes did not find the original description of several of Koch's species in either of the series edited by Herrich-Schäffer ("Deutschlands Insecten, Hefte 132-190, 1835-1844", the Herrich-Schäffer series, or "Deutschlands Crustaceen, ...", Hefte 1-40, 1835-1844, the Koch series). Instead, it cites the more widely distributed single volume work "System der Myriapoda" by C. L. Koch of 1847 as the place of the original description. Obviously, the number of copies of the fascicles of the Herrich-Schäffer series, and, in particular, of the Koch series was not abundant and even smaller in the earlier and the later issues (Nagel & Grieder 2019). It is comprehensible that these authors referred to the detailed description in the "System der Myriapoda" (Koch 1847) in the pre-digitization era. In this book the entry of *S. clavipes* (pp. 169, 196) or *S. graeca* (pp. 169, 268) does not give any hint to a previous publication but, instead, it pretends a description to be the first one. Neither *S. clavipes* nor *S. graeca* are mentioned in the index of the *Hefte* of the Herrich-Schäffer and Koch series, they are not accompanied by an illustration and are listed rather inconspicuously as "Anmerkung" (note) as an attachment after the original description of *S. italica* on the unpaginated page [2] of the letterpress part of *Hefte* 9 and 142 respectively. In addition all plates and pages of the letterpress part of the Koch series and the Herrich-Schäffer series were delivered in a loose-leaf slipcase (Fig. 3). Original copies of the two series are rare even in natural history libraries and digital copies are now available, very recently.

C. L. Koch published more myriapods in the "Koch series" and "Herrich-Schäffer series" and in subsequent publications such as "System der Myriapoda" (Koch 1847) or the posthumously published "Die Myriapoden" (Koch 1863a, b). In most applicable cases, but not always, these latter works refer species names to either or both the "Koch series" and the "Herrich-Schäffer series".

The detected wrong dating of the four taxa treated in the present paper does not seem to have an immediately recognizable impact on the nomenclature of *Scolopendra* or *Cryptops* species at present. Studies like the treatment of Lewis (2014) document the open issues still present in the taxonomic assessment of these centipedes. The species described by C. L. Koch in the “Koch series” and the parallel “Herrich-Schäffer series” (1835-1844) certainly deserve closer attention especially with regard to their recently amended publication date and possibly repercussion on the nomenclature.

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