

The generic and subgeneric names of the European Lithobiidae
generally referred to *Polybothrus* Latzel, 1880
(Chilopoda, Lithobiida)

by

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The generic nomenclature of the large Lithobiid centipedes occurring in Central Europe and the Mediterranean region has been rather confused for a long time. In the taxonomic and faunistic papers dealing with the species of this group we find them generally referred to the genus *Polybothrus* Latzel, although a minority of writers continually brought them in the genus *Bothropolys* Wood.

As it appears now, neither of the two is the correct name for the group, a fact shown already by CHAMBERLIN as early as 1925, by the same author in 1952, and still more recently by CRABILL in 1955. Actually, the case was clearly stated by the latter author and I would not have concerned myself with it, were it not for a minor, though perhaps not unimportant oversight in the citation of the type-species of the valid genus. On the rectification of this error, the opportunity presents itself, moreover, to review the nomenclatorial status of the subgeneric names based on the species of *Polybothrus*.

In 1862, WOOD created the genus *Bothropolys* for three North American Lithobiid species in which the coxal pores of the 12th to the 15th pairs of legs were arranged in three to four series instead of being uniseriate as in *Lithobius* Leach. As type-species of this genus, CRABILL in 1955 selected *Bothropolys nobilis* Wood, 1862.

For the European Lithobiidae, LATZEL in 1880 adopted the morphological concept of the two categories distinguished by WOOD, and, within the genus *Lithobius*, recognized two groups of species: a group with uniseriate coxal pores, for which he introduced the name *Oligobothrus*, and a group with multiseriate coxal pores. For the latter group, however, LATZEL did not accept the name *Bothropolys*, because, to his opinion this name was incorrectly formed. Accordingly, he remodelled *Bothropolys* to *Polybothrus*.

It is clear, that both names created by LATZEL are objective synonyms: *Oligobothrus* of *Lithobius*, as the group includes the type-species of *Lithobius*, and *Polybothrus* of *Bothropolys*, in accordance with Art. 67 (i) of the International Code. The type-species of *Polybothrus*, therefore, is *Bothropolys nobilis* Wood, a fact correctly ascertained by CRABILL.

Of European authors, apparently only BROLEMANN understood the nomenclatorial status of *Polybothrus* Latzel. Already in his earliest papers he brought *Polybothrus* into the synonymy of *Botropolys*, and subsequently used *Bothropolys* as a generic name for American as well as European species, which he thought to be congeneric.

Other European writers, notably ATTEMS and VERHOEFF, treated the European species generically distinct from *Bothropolys*, and referred them to *Polybothrus*, at first as a subgenus of *Lithobius*, but later as a genus by itself.

Subsequent taxonomic work in the genus *Polybothrus* in the sense of these authors has induced the creation of several subgeneric names.

In 1907, VERHOEFF split up *Polybothrus* into three subgenera, viz. *Propolybothrus* Verh., *Allopolybothrus* Verh., and *Eupolybothrus* Verh. In the publication in which these subgenera were distinguished VERHOEFF's concept of *Polybothrus* did not include the true type-species of that genus. Therefore, none of the three subgeneric names can be treated as an objective synonym of *Polybothrus* and *Bothropolys*.

In 1925, CHAMBERLIN in his discussion of the nomenclatorial status of *Polybothrus* proposed the use of *Eupolybothrus* as a generic name for the European species previously referred to *Polybothrus*, and designated *Lithobius grossipes* C. Koch, 1847, as type-species of *Eupolybothrus*.

Apparently, CHAMBERLIN held the opinion that the three subgeneric names of VERHOEFF were nomina nuda, probably because VERHOEFF had not mentioned any species by name. As a consequence of this, he regarded himself as the author of *Eupolybothrus*. But, as CRABILL pointed out, this is not correct. VERHOEFF gave proper diagnoses for the three subgenera, and the names conform to the requirements of availability of the Code. The author of *Eupolybothrus*, therefore, is VERHOEFF.

Possibly because CHAMBERLIN's discussion was given in a paper dealing exclusively with North American Lithobiida, his argument did not get any recognition of European authors. Actually, the three subgeneric names of VERHOEFF were completely forgotten, and apparently discarded even by their own author.

However, after what has been said above, it is clear that henceforth *Eupolybothrus* is the valid generic name for the European Lithobiidae with multiseriate coxal pores, with VERHOEFF, 1907, as author, and *Lithobius grossipes* C. Koch, 1847 (and not *L. grossipes* L. Koch, 1862, as CRABILL maintained!) as type-species.

Propolybothrus Verh. and *Allopolybothrus* Verh. are also available at least as subgeneric names. After careful consideration and in accordance with the diagnoses given by VERHOEFF I herewith select *Lithobius nodulosus* Verhoeff, 1905, as type-species of *Propolybothrus*, and *Lithobius koenigi* Verhoeff, 1891, as type-species of *Allopolybothrus*.

Disregarding his earlier subdivision of *Polybothrus*, VERHOEFF in 1934 and 1937 created some more subgeneric names.

Of these, *Schizopolybothrus* Verhoeff, 1934, and *Mesobothrus* VERHOEFF, 1937, were monobasic. *Schizopolybothrus* was erected for *Lithobius caesar* Verhoeff, 1899, and *Mesobothrus* was based on *Lithobius transsylvanicus* Latzel, 1882. Consequently these two species are the types of their respective subgenera.

Parapolybothrus Verhoeff, 1934, however, was based on several species, namely *Polybothrus electrinus* Verhoeff, 1934, *Lithobius herzegowinensis* Verhoeff, 1900, *Lithobius elongatus* Newport, 1849 and *Lithobius obrovensis* Verhoeff, 1930, but as usual VERHOEFF did not designate a type-species of this subgenus. The name *Parapolybothrus*, therefore, has no status in nomenclature.

Now, in a case like this there are two possibilities. The name can be completely discarded and left without status. Perhaps this might be best, but the difficulty is, that a name once introduced into literature can hardly be suppressed. Not every

author may be aware of the fact that the name lacks status, so that continued use may easily cause further confusion.

The other possibility, and this one was brought into practice recently by HOFFMAN & KEETON (1960, *Trans. Amer. ent. Soc.* 86 : 1—26) in their list of Spirobolid genera, is to validate the name in question by designating a type-species. The disadvantage of this procedure is, that the person who does so automatically becomes the author of the generic name.

Yet, it seems best to adopt the latter of the two possibilities to preclude any doubt about the status of *Parapolybothrus*. In accordance with the use of the name by VERHOEFF I have, therefore, selected *Polybothrus electrinus* Verhoeff, 1934 as type-species of *Parapolybothrus*.

Summarizing the foregoing discussion we get the following survey of the generic and subgeneric names under consideration:

Bothropolys Wood, 1862 (*J. Acad. nat. Sci. Philad.* (2) 5 : 15).

Type-species. — *Bothropolys nobilis* Wood, 1862 (l.c.), by subsequent designation of CRABILL, 1955 (*Ent. News* 66 : 110).

Polybothrus Latzel, 1880 (*Myr. öst.-ung. Mon.* 1 : 35).

Type-species. — *Bothropolys nobilis* Wood, 1862 (l.c.), by direct substitution.

Eupolybothrus Verhoeff, 1907 (in: BRONN's Kl. Ordn. Tier-Reichs 5 (2) (1): 241).

Type-species. — *Lithobius grossipes* C. Koch, 1847 (*Syst. Myriap.*: 147), by subsequent designation of CHAMBERLIN, 1925 (*Bull. Mus. comp. Zool. Harv. Coll.* 57 : 386).

Propolybothrus Verhoeff, 1907 (l.c.).

Type-species. — *Lithobius nodulosus* Verhoeff, 1905 (*Zool. Anz.* 29 : 513), by present designation.

Allopolybothrus Verhoeff, 1907 (l.c.).

Type-species. — *Lithobius koenigi* Verhoeff, 1891 (*Berl. ent. Zeitschr.* 36 : 65), by present designation.

Schizopolybothrus Verhoeff, 1934 (*Zool. Jahrb. (Syst.)* 66 : 73).

Type-species. — *Lithobius caesar* Verhoeff, 1899 (*Verh. zool.-bot. Ges. Wien* 49 : 455), by monotypy.

Mesobothrus Verhoeff, 1937 (*Mitt. Höhl. Karstf.* 1937 : 103).

Type-species. — *Lithobius transsylvanicus* Latzel, 1882 (*Zool. Anz.* 5 : 332), by monotypy.

Parapolybothrus nov. subgen. (= *Parapolybothrus* Verhoeff, 1934 (l.c.: 67)).

Type-species. — *Polybothrus electrinus* Verhoeff, 1934 (l.c.: 65), by present designation.
