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Sorensenius Berg, 1898 – a forgotten replacement name for *Asopus* Sørensen, 1896 –
supersedes *Pyramidops* Loman, 1902 (Opiliones: Grassatores: Pyramidopidae)

Sorensenius Berg, 1898 – un nome sostitutivo dimenticato per *Asopus* Sørensen, 1896 –
sostituisce *Pyramidops* Loman, 1902 (Opiliones: Grassatores: Pyramidopidae)

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Abstract

The forgotten *Sörensenius* Berg, 1898, which is an available replacement name for *Asopus* Sørensen, 1896, which in turn is preoccupied (invalid by being a junior homonym), has to be resurrected as its most senior valid synonym. The genus name *Pyramidops* Loman, 1902, in spite of having been somewhat cited in the old and recent literature, fails to meet the requirements of the ICZN Code and, accordingly, cannot replace *Asopus* Sørensen, 1896 as the next oldest available name from among its synonyms. *Sörensenius* has to be mandatorily corrected to *Sorensenius*, and all 11 currently valid species of *Pyramidops* are newly combined under it. *Pyramidops* is also the type genus of the family Pyramidopidae Sharma, Prieto *et* Giribet, 2011, which will remain unchanged.

Keywords: Afrotropics, Cameroon, Togo, harvestmen, Laniatores.

Riassunto

Il dimenticato *Sörensenius* Berg, 1898, che è un nome sostitutivo disponibile per *Asopus* Sørensen, 1896, che a sua volta è già occupato (invalido per essere un omonimo junior), deve essere resuscitato come sinonimo valido più vecchio. Il nome di genere *Pyramidops* Loman, 1902, malgrado a volte citato nella letteratura antica e recente, non soddisfa i requisiti del Codice ICZN e, di conseguenza, non può sostituire *Asopus* Sørensen, 1896, come il primo nome disponibile tra i suoi sinonimi. *Sörensenius* deve essere obbligatoriamente corretto a *Sorensenius* e tutte le 11 specie attualmente valide di

Pyramidops sono nuovamente combinate sotto di essa. *Pyramidops* è anche il genere tipo della famiglia Pyramidopidae Sharma, Prieto *et* Giribet, 2011, che rimarrà invariato.

Parole chiave: Afrotropici, Camerun, Togo, opilioni, Laniatores.

Introduction

Proceeding with the nomenclatural purge of harvestmen names for the forthcoming catalog of world Opiliones, this paper deals with the exhumation of a forgotten name of Afrotropical harvestmen which has to be reinstated in the place of a much better known name, but which does not meet the requirements of the ICZN Code.

Literature citations of taxa are not exhaustive, but rather only those relevant to the purposes of this work. Complete citations for every detail will be featured in the above mentioned Catalog of Opiliones of the World. The International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999) is herein referred to as simply ICZN Code.

Historical background and discussion

1) Burmeister (1834: 19) described in Hemiptera “Geocores” (today Geocoridae) the new genus *Asopus* Burmeister, 1834, mentioning two included species – *Asopus gibbus* Burmeister, 1834 and *Asopus diana* (Fabricius, 1803). Ἄσωπός is the name of different river-gods in Greek mythology. Gender masculine.

2) Sørensen (1896: 181) described in Phalangodidae the new genus *Asopus* Sørensen, 1896 along with the type species by monotypy *Asopus raptator* Sørensen, 1896 from Cameroon. This is a junior homonym of *Asopus* Burmeister, 1834.

3) Berg (1898: 16) quickly discovered the homonymy and proposed the new substitute name *Sörensenius* Berg, 1898 to replace *Asopus* Sørensen, 1896. This name honors the Danish arachnologist William Emil Sørensen (1848–1916), author of the second *Asopus*. This substitute name has never been cited again and fell in oblivion.

4) Loman (1902: 198) described in Epedanidae the new genus *Pyramidops* Loman, 1902 along with the new species *Pyramidops pygmaea* Loman, 1902 from Togo, which is the type by monotypy.

5) On grammatical gender. *Pyramidops* is derived from Greek πυραμίς = (pyramid) + ὄψ = (aspect). It takes the masculine gender of the last component (Art. 30.1.4.3). Loman (1902) originally used it as feminine by inflecting the specific epithet as *pygmaea* instead of *pygmaeus*. Roewer (1927; 1949) also regarded it as feminine. Sharma *et al.* (2011) gave an explanation based on Amaral (1975) that this name should be feminine. However, “Article 30.1.4.3 overrides any statement like the one made by Amaral, who, moreover, is wrong and invents a strange linguistic origin (that perhaps could go back to Pre-Indo-European

times, but not in Greek times, where -ops and -opsis were different and with different gender). *Pyramidops* is masculine.” [Alonso-Zarazaga, pers. comm., 20 January 2014].

6) Roewer (1912: 122) synonymized *Pyramidops* Loman, 1902 with *Asopus* Sørensen, 1896, being unaware of the homonymy with Burmeister’s name.

7) Roewer (1923: 81) finally was made aware of the homonymy of *Asopus* and used *Pyramidops* Loman, 1902 as the next oldest available name from among its synonyms, not being aware of the existence of *Sörensenius*. This usage prevailed until now, when *Sörensenius* has been unearthed.

8) I have tried herein to gather elements to make a case of reversal of precedence, as shown below. However, this was frustrated and *Sörensenius* should be retrieved. Only the spelling should be corrected to *Sorensenius*. As the ICZN Code (Art. 32.5.2.1) explains about the correction of names originally spelled with diacritics: “In the case of a diacritic or other mark, the mark concerned is deleted, except that in a name published before 1985 and based upon a German word, the umlaut sign is deleted from a vowel and the letter "e" is to be inserted after that vowel (if there is any doubt that the name is based upon a German word, it is to be so treated).” As the name *Sörensenius* is based on the Danish word Sørensen, the –ö is simply to be replaced by –o.

9) Neave (1939: 318) cites *Asopus* as an available genus although invalid due to homonymy and already with a cross-reference to *Sörensenius*. Neave (1940a: 1056; 1940b: 216) lists both *Pyramidops* and *Sörensenius* as available genus names. The online version (uBio 2017) repeats all these.

10) According to the ICZN Code (Art. 23.9). Reversal of precedence: “In accordance with the purpose of the Principle of Priority [Art. 23.2], its application is moderated as follows: 23.9.1. prevailing usage must be maintained when the following conditions are both met: 23.9.1.1. the senior synonym or homonym has not been used as a valid name after 1899, and 23.9.1.2. the junior synonym or homonym has been used for a particular taxon, as its presumed valid name, in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years.”

11) The name *Pyramidops* has been used as valid in works spanning virtually all decades since the 1910s to 2010s (excepted the 2000s). Furthermore, it has been made the type of the family Pyramidopidae Sharma *et al.*, 2011. The enumeration of works that used *Pyramidops* as presumed valid follows:

1. Sørensen (1910: 59)
2. Roewer (1923: 81)
3. Roewer (1927: 280)
4. Henriksen (1932: 256)
5. Roewer (1949: 38)
6. Roewer (1950: 31)
7. Roewer (1953: 613)

8. Lawrence (1957: 158)
9. Lawrence (1958: 860)
10. Roewer (1961: 38)
11. Lawrence (1962: 19)
12. Moritz (1971: 208)
13. Kauri (1985: 90)
14. Staręga (1989: 5)
15. Staręga (1992: 291)
16. Rambla & Juberthie (1994: 219)
17. Giribet *et al.* (2010: 425)
18. Santos & Prieto (2010: 204)
19. Sharma & Giribet (2011: 129)
20. Sharma *et al.* (2011: 143)
21. Fernández (2012: 371)
22. Kury (2015: 305)
23. Kury & Villarreal (2015: 4)
24. Cruz-López *et al.* (2016: 605)
25. Sharma *et al.* (2017: 3)

12) Unfortunately, as shown above at point 9), the Code rules are very strict regarding to benchmarks, and even with this expressive citation in the literature, *Pyramidops* falls short (only 14 citations in the period 1968–2017) to making a case for reversal of precedence, with the name *Sorensenius* (stripped of the original diacritic as per ICZN Code, Art. 32.5.2.1).

13) As a famous arachnologist, with a great contribution to the study on harvestman, Sørensen's name is also remembered in other genus names in Opiliones:

1. *Sorensenella* Pocock, 1903
2. *Soerensenia* Mello-Leitão, 1926
3. *Soerensenibunus* Strand, 1942
4. *Soerenseniopilio* Strand, 1942
5. *Soerensenolynthus* Soares *et* Soares, 1947

14) Since we cannot apply 23.9.1.2, we end up with a family-group name whose type genus is a synonym. Other examples in Opiliones are:

1. Sclerosomatidae Simon, 1879. Type genus is *Sclerosoma* Simon, 1879, which is a junior subjective synonym of *Homalenotus* C.L. Koch, 1839.
2. Heterostygninae Roewer, 1913. Type genus is *Heterostygnus* Roewer, 1913, which is a junior subjective synonym of *Stygnidius* Simon, 1879.
3. Enantiobuninae Mello-Leitão, 1931. Type genus is *Enantiobunus* Mello-Leitão, 1931, which is a junior subjective synonym of *Thrasychirus* Simon, 1884.
4. Leiosteninae Šilhavý, 1973. Type genus is *Leiostenus* Šilhavý, 1973, which is a

junior subjective synonym of *Avima* Roewer, 1949.

15) All species currently combined under *Pyramidops* should be part of new combinations as follows:

1. *Sorensenius aelleni* (Lawrence, 1958) comb. nov. for *Pyramidops aelleni* Lawrence, 1958, from Gabon.
2. *Sorensenius albimanus* (Roewer, 1927) comb. nov. for *Pyramidops albimanus* Roewer, 1927, from Equatorial Guinea.
3. *Sorensenius biseriatus* (Roewer, 1949) comb. nov. for *Pyramidops biseriatus* Roewer, 1949, from Equatorial Guinea.
4. *Sorensenius congonis* (Roewer, 1949) comb. nov. for *Pyramidops congonis* Roewer, 1949, from Democratic Republic of the Congo.
5. *Sorensenius globipes* (Roewer, 1927) comb. nov. for *Pyramidops globipes* Roewer, 1927, from Cameroon and Ghana.
6. *Sorensenius kolombinus* (Kauri, 1985) comb. nov. for *Pyramidops kolombinus* Kauri, 1985, from Democratic Republic of the Congo.
7. *Sorensenius major* (Roewer, 1949) comb. nov. for *Pyramidops major* Roewer, 1949, from Cameroon and Democratic Republic of the Congo.
8. *Sorensenius pygmaeus* (Loman, 1902) comb. nov. for *Pyramidops pygmaea* Loman, 1902, from Ghana and Togo.
9. *Sorensenius raptator* (Sørensen, 1896) comb. nov. for *Asopus raptator* Sørensen, 1896, from Cameroon and Equatorial Guinea. Technically, when Berg (1898) proposed the replacement name, he is deemed to have made this combination automatically.
10. *Sorensenius schoutedeni* (Lawrence, 1957) comb. nov. for *Pyramidops schoutedeni* Lawrence, 1957, from Democratic Republic of the Congo.
11. *Sorensenius venator* (Roewer, 1927) comb. nov. for *Pyramidops venator* Roewer, 1927, from Cameroon.

Taxonomic summary

Laniatores Thorell, 1876

Pyramidopidae Sharma, Prieto *et* Giribet, 2011

“Phalangodidae” – undescribed new family: Starega 1992: 289.

Pyramidopidae Sharma *et al.* 2011: 144; Cruz-López *et al.* 2016: 606, 611 (affinities, composition).

Remarks. Starega (1992) suggested that some African phalangodids should form a new family. But he never published any name for that group. Other authors refrained from

naming the group. It was cited with quotation marks as “Pyramidops group” for years on the Internet, until Sharma *et al.* (2011) decided to formalize the name.

Type genus. *Pyramidops* Loman, 1902, currently a junior synonym of *Sorensenius* Berg, 1898.

***Sorensenius* Berg, 1898**

Asopus Sørensen 1896: 181; Roewer 1912c: 122 [junior homonym of *Asopus* Burmeister, 1834 (Hemiptera); homonymy first noted by Roewer (1923); type species: *Asopus raptator* Sørensen, 1896, by monotypy].

Sörensenius Berg 1898: 16 (available replacement name for *Asopus* Sørensen, 1896).

Pyramidops Loman 1902: 198; Roewer 1923: 81; Roewer 1927a: 280 (key); Starega 1989a: 5; Starega 1992: 291 [junior subjective synonym of *Asopus* Sørensen, 1896 by Roewer (1912c); type species: *Pyramidops pygmaea* Loman, 1902, by monotypy].

Placement. *Asopus* originally described in Phalangodidae. *Pyramidops* originally described in Epedanidae by Loman (1902), assigned to Phalangodidae Phalangodinae by Roewer (1912c). Included in an “undescribed family” of Laniatores by Starega (1989a).

Conclusions

- 1) *Sörensenius* Berg, 1898 (herein corrected to *Sorensenius*) is revealed as a valid replacement name for *Asopus* Sørensen, 1896, preoccupied by *Asopus* Burmeister, 1834.
- 2) *Pyramidops* Loman, 1902, in spite of quite a few citations in the literature as the next oldest available name from among *Asopus* synonyms, falls short to meeting the required quota of 25 works in the last 50 years for making a case of reversal of precedence.
- 3) *Pyramidops* Loman, 1902 – even being the type genus of family Pyramidopidae – could not supersede *Sorensenius* by using reversal of precedence.
- 4) *Sorensenius* is thus the valid name that should be used and all species currently in *Pyramidops* have been newly combined with it.

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