

Annulata ørstediana: publication dates, composition and annotated taxonomic list, with some comments on *Hemipodus* (Polychaeta: Glyceridae)

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Abstract: The collecting trips by Ørsted and Krøyer in Central and South America resulted in a series of papers by Grube, the *Annulata ørstediana* which contained the proposal for seven genera and descriptions for 84 species. There are some problems dealing with the correct number of contributions, their publication dates, the correct citation for the authors for each species name and sometimes even for the type locality. In order to improve the current situation, we have consulted the original publications together with the corresponding collections. Our results indicate that there were only three parts in the series which were published in the journal, and repagination in reprints sometimes caused some further confusion. Additionally, we provided some review comments on the species current status and we added a short nomenclatural note on *Hemipodus* (Polychaeta: Glyceridae) trying to clarify the correct generic name and type species. Rev. Biol. Trop. 60 (3): 1391-1402. Epub 2012 September 01.

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The series of papers entitled *Annulata ørstediana* described species collected by Anders S. Ørsted and Henrik Krøyer in the Caribbean, Central America and South America. Adolph-Eduard Grube provided standardized descriptions and indicated the corresponding co-author for each name, but the correct authors for them have been elusive and, at the same time, the correct publication dates have been misunderstood. Most species were polychaetes but some hirudineans and sipunculans were also included; seven genera were proposed and 84 species were newly described.

Some of the species were studied by Augener (1925) and further comments were made by Wolff & Petersen (1991). In the latter contribution, the authors tried to clarify the publication dates for the series. However, two problems remain for correct citation of the species. First, despite the fact that many species were introduced with two authors ('Gr. Ørsd.' or 'Gr. Kr. '), most species have been attributed

to Grube alone. This contradicts Recommendation 51E of the Zoological Code (ICZN 1999), but probably because it is just a recommendation, it has not been widely followed. We think this should be modified such that the correct authors are acknowledged and some examples have already been introduced (Hartwich 1993). Second, because the parts were compiled and distributed as collected reprints with different pagination, there seems to be confusion about how many parts were issued. Hartman (1951a:101) indicated three parts, whereas Wolff & Petersen (1991:680) listed four. To clarify this issue, the corresponding volumes of the journal (*Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening*) have been thoroughly rechecked and the full citations are included to avoid confusion in the future. Furthermore, a list of all taxa newly described in this series is provided in order to improve the recognition of their correct authors together with some notes on the current status.

Recommended citations

(Publications available in http://www.archive.org/stream/annularstedi00grub/annularstedi00grub_djvu.txt)

Grube, A.E. 1857. *Annulata ørstediana*. *Enumeratio Annulorum, quae in itinere per Indiam occidentalem et Americam centralem annis 1845-1848 suscepto legit cl. A.S. Ørsted, adjectis speciebus nonnullis a cl. H. Krøyer* in itinere ad Americam meridionalem collectis. [1. Familia Aphroditea – F. Euniceae]. *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening for 1856*: 44-62.

Grube, A.E. 1858. *Annulata ørstediana*. *Enumeratio Annulorum, quae in itinere per Indiam occidentalem et Americam centralem annis 1845-1848 suscepto legit cl. A.S. Ørsted, adjectis speciebus nonnullis a cl. H. Krøyer* in itinere ad Americam meridionalem collectis, (Fortsættelse [continued]) [2. Familia Euniceae - F. Syllidea]. *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening for 1857*: 158-186.

Grube, A.E. 1859. *Annulata ørstediana*. *Enumeratio Annulorum, quae in itinere per Indiam occidentalem et Americam centralem annis 1845-1848 suscepto legit cl. A.S. Ørsted, adjectis speciebus nonnullis a cl. H. Krøyer* in itinere ad Americam meridionalem collectis, (Slutning [conclusion]) [3. Familia Ariciaea - F. Sipunculacea and Index]. *Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening for 1858*: 105-120.

Annotated taxonomic list

The following list includes only the newly described taxa; they are presented for each family (except in Hirudinea and Sipuncula) and all in an alphabetical sequence. Pagination follows that of the published volumes, not the reprints, and the type locality (depth included only if indicated in the description) and catalogue numbers, if any, have been appended. For the latter, the acronyms employed are ZMUC for the Zoological Museum, University of Copenhagen, and ZMB for the Zoological

Museum, Berlin (Hartwich 1993). This compilation is relevant because in the available lists for tropical American polychaetes (Salazar-Vallejo 1996, Salazar-Vallejo & Londoño-Mesa 2004), the authors or dates were not cited correctly. Further, since the contributions by Monro on Panamian polychaetes (Monro 1928a, 1928b, 1933a, 1933b), many Indian Ocean, Western Pacific and even European names were introduced to the tropical American fauna. The world catalogue of polychaete species by Hartman (1959, 1965) stressed the prevalence of the older species names, which are often from Scandinavian or European seas, and regarded regional names as junior synonyms. Therefore, there might be some names which deserve to be reinstated after a careful revision, and we hope this work will help encourage such efforts. On the other hand, the generic names were checked against the database of *Nomenclator Zoologicus* in <http://uio.mbl.edu/NomenclatorZoologicus/>.

Polychaeta

Amphinomidae

Amphinome

1. *A. carnea* Grube & Ørsted in Grube, 1857: 52, St. Croix. The status of this species was regarded as uncertain by Baird (1870:219). Hartman (1959:128) regarded it as indeterminable.
2. *A. paupera* Grube & Krøyer in Grube, 1857: 52-53, Valparaiso, ZMB 2785 (3 syntypes). Augener (1922:172) regarded this species as a subspecies in *E. complanata*; Hartman (1959:129) referred it to *Eurythoe* as *E. paupera*. Wesenberg-Lund (1962:38) transferred this species to *Pareurythoe*.

Notopygos

3. *N. ornata* Grube & Ørsted in Grube, 1857: 53, Puntarenas, Costa Rica, ZMUC-POL-183 (3 syntypes), ZMB 3331 (lost). The species was redescribed (Monro

1933a:10) and the name is available (Hartman 1940:207, 1959:136).

Chrysopetalidae

4. *Palmyra(?) elongata* Grube & Ørsted in Grube, 1857: 51-52, St. Croix, ZMUC-POL-251 (holotype). Augener (1925:5) regarded this species as belonging in *Bhawania* and Hartman (1959:127) thought it might be identical to *B. goodei* Webster, 1884. Monro (1933a:18) recorded this species for the Eastern Tropical Pacific. In World Register of Marine Species (WoRMS) it is regarded as a junior synonym for the latter but the reasons for this are enigmatic. The original name has priority and a revision of the type materials would allow the solution of this problem.

Cirratulidae

Cirratulus

5. *C. caribous* Grube & Ørsted in Grube, 1859: 106, St. Croix, 3 fathoms. Hartman (1959:403) regarded this species as indeterminable.
6. *C. punctatus* Grube & Ørsted in Grube, 1859: 107, St. Croix, Christiansted, Virgin Islands, 3 fathoms. Monro (1933b:264) recorded this species from Southern Florida. Hartman (1959:405) transferred it to *Cirriformia*. The species has been redescribed and transferred to *Timarete* Kinberg, 1866 (Çinar 2007:757).

Dorvilleidae

7. *Anisoceras* Grube & Ørsted in Grube, 1857: 60. Pre-occupied by *Anisoceras* Hope, 1840, Coleoptera. Pettibone (1961:181) proposed *Papilliodorvillea* as a replacement name, with *A. rubra* (see below) as the type species. The presence of a nuchal papilla was rejected as a generic, diagnostic feature, and the genus was considered a junior synonym of *Dorvillea* by Jumars (1974:114). It should be noted that

Dorvillea Parfitt, 1866 is a junior homonym of *Dorvillea* Gray, 1852 (or Leach, 1852), a fossil bivalve.

8. *A. bioculata* Grube & Ørsted in Grube, 1857: 62, Puntarenas, Costa Rica. Illustrated by Wolff & Petersen (1991:Fig. 2A-F). Hartman (1959:348) regarded this species as a member of *Dorvillea* Parfitt, 1866, but Jumars (1974:132) regarded it as indeterminable.
9. *A. rubra* Grube & Ørsted in Grube, 1857: 60-61, St. Croix, 30 fathoms. This species was regarded as belonging in *Dorvillea* (Hartman 1951b:66, 1959:348). It was later designated as the type species of *Papilliodorvillea* Pettibone, 1961 (181), but this genus was rejected by Jumars (1974:113-115).
10. *A. vittata* Grube & Ørsted in Grube, 1857: 61-62, Puntarenas, Costa Rica. Illustrated by Wolff & Petersen (1991:Pl. 2, Fig. 7). According to Hartman (1959:348), the species belongs in *Dorvillea* and this was confirmed by Pettibone (1961:182).

Eunicidae

Eunice

11. *E. cariboea* Grube & Ørsted in Grube, 1857: 57, St. Croix, Christiansted, Virgin Islands, ZMUC-POL-297 (lectotype, designated by K. Fauchald), ZMUC-POL-298 (1 paralectotype), ZMUC-POL-299 (1 paralectotype = holotype of *E. excariboea* Fauchald, 1992), ZMUC-POL-300 (1 paralectotype = paratype of *E. excariboea*), ZMB 4004 (3 syntypes and 3 anterior fragments). Monro (1933a:63) recorded this species from the Eastern Tropical Pacific. It was redescribed by Fauchald (1992:98).
12. *E. filamentosa* Grube & Ørsted in Grube, 1857: 56, St. Croix, ZMUC-POL-303 (lectotype, designated by K. Fauchald), ZMUC-POL-304 (1 paralectotype = *Palola* sp. fide Fauchald 1992), ZMB 1855 (1 paralectotype). Augener (1925) reexamined this species and found that it contained a specimen that he thought belonged to

- E. gagzoi* Augener, 1922 or *E. siciliensis* Grube, 1840; this specimen has subsequently been referred to *Palola* (K. Fauchald, pers. comm.). Monro (1933a:65) recorded it from the Eastern Tropical Pacific. The species was redescribed and restricted by Carrera-Parra & Salazar-Vallejo (2011:53-56, Fig. 1).
13. *E. lucei* Grube & Ørsted in Grube, 1857: 57-58, Puntarenas, Costa Rica, ZMUC-POL-305 (lectotype, designated by K. Fauchald), ZMUC-POL-306 (1 paralectotype), ZMB 2019 (holotype). This species was regarded as indeterminate by Hartman (1959:312) but it was redescribed by Fauchald (1992:201); he also selected a lectotype from among the Copenhagen specimens, but this does not appear to be valid since the holotype is in Berlin (Hartwich 1993:114).
 14. *E. punctata* Grube & Ørsted in Grube, 1857: 59-60, St. Thomas, ZMUC-POL-307 (holotype = holotype of *E. binominata* de Quatrefages, 1866). According to Ehlers (1887:85), Augener (1906:132) and Hartman (1959:314), this is a junior homonym of *E. punctata* (Risso, 1826); de Quatrefages (1866:327) proposed *E. binominata* as a replacement name, but the single specimen was thought to be lost (Fauchald 1992:85-86) and because the original description is brief, this was regarded as *species inquerenda*. The specimen is, however, present in the collection of the Zoological Museum in Copenhagen and should be regarded as the holotype of *E. binominata* de Quatrefages, 1866.
 15. *E. quadrioculata* Ørsted in Grube, 1857: 60, Puntarenas, Costa Rica. Fauchald (1992:284) commented that this species was described on the basis of an illustration and that de Quatrefages (1866:337) referred it to *Marphysa*; however, the latter author regarded the species as being deprived of branchiae and probably belonging in Lumbrineridae.
 16. *E. rubra* Grube & Ørsted in Grube, 1857: 59, St. Thomas, ZMUC-POL-308 (holotype). Redescribed by Ehlers (1887:87), Augener (1925:9), Hartman (1951b:55) and Fauchald (1992:291).
 17. *E. splendida* Grube & Krøyer in Grube, 1857: 58, Valparaiso, ZMUC-POL-309 (holotype). Wesenberg-Lund (1962:111) and Fauchald (1992:308) regarded this species as indeterminate.
 18. *E. violacea* Grube & Ørsted in Grube, 1857: 55, Puntarenas, Costa Rica. Fauchald (1992:335) regarded this species as indeterminate.
- Flabelligeridae
Siphonostomum
19. *S. cariboum* Grube & Ørsted in Grube, 1859: 108-109, St. Croix, ZMUC-POL-331 (holotype). Ehlers (1887:158) recorded a different species under this name. Chamberlin (1919:397) selected it as the type species for *Semiodera*.
 20. *S. cingulatum* Grube & Krøyer in Grube, 1859: 108, Rio de Janeiro.
- Glyceridae
Glycera
21. *G. cirrata* Grube, 1858: 176, Rio de Janeiro, St. Croix, ZMUC-POL-392 (1 syntype). According to Augener (1925:10) the specimen present in the Zoological Museum in Copenhagen, which is from St. Croix, Virgin Islands, is not the one that Grube's description was based on. He referred this specimen to *G. tessellata* Grube, 1863, described from the Mediterranean Sea. Hartman (1950:64, 1959:289) regarded this species as close to *G. americana* Leidy, 1855 described from Rhode Island. Böggemann (2002:23) indicated that there were two lots, one from the Virgin Islands, which he regards as belonging to *G. americana*, whereas the Brazilian materials belong to *G. brevicirris* Grube, 1870, which has an uncertain type locality, probably the Indian Ocean.

22. *G. papillosa* Grube, 1858: 176-177, Valparaíso. Hartman (1940:248) followed Augener (1922:203) and based on a specimen from Perú, regarded the species as valid. It was briefly characterized by Wesenberg-Lund (1962:103); however, because there is no type material, Böggemann (2002:28) regarded it as *nomen dubium*.

***Hemipodus* de Quatrefages, 1866 or *Hemipodia* de Quatrefages in Kinberg, 1866?** Böggemann (2002:79) proposed *Hemipodia* Kinberg, 1865 as a senior synonym of *Hemipodus* de Quatrefages, 1866, and designated *Hemipodia simplex* as the type species. There are three main problems with this procedure. First, the correct publication dates for Kinberg contributions were revised by Hartman (1948) and the corresponding part was published in 1866, which might not have been before de Quatrefages' publication. Second, the original proposals by de Quatrefages (1865) were introduced in French without any Latin version as Hémipode de Quatrefages, 1865a(596), or as Hemipode de Quatrefages, 1865b(292). They were introduced in a long series of keys and could be regarded as *nomina nuda*. Being aware of this, Kinberg (1866:245) proposed "*Hemipodia* Quatref." and referred to the first of the earlier proposals by de Quatrefages, which did not include descriptions or illustrations. Consequently, this new generic name is not a different genus but rather an orthographic correction, which was clearly indicated by Kinberg himself and emphasized by Grube (1870:66); we think that if this replacement name is really older than the Latin proposal of *Hemipodus* de Quatrefages (1866:194), then it should be cited as *Hemipodia* de Quatrefages in Kinberg, 1866 (ICZN 1999:54, Recomm. 51E). The third problem involves the type species. Kinberg (1866:245) diagnosed *H. patagonica* as the only species in *Hemipodia*, and according to article 68.3 (ICZN 1999:71), this is the type species by monotypy. However, de Quatrefages (1866:194) did not introduce the five species in alphabetical order and the first species was *H. roseus* de Quatrefages,

1866, which was subsequently designated by Hartman (1940:79) as the type species of *Hemipodus*. It is enigmatic why Böggemann thought that a new type species was needed, since there are two type species for these two generic names, but according to article 67.1.2 (ICZN 1999:66), *H. simplex* cannot be the type species, despite the fact that it is the senior synonym of *H. patagonica* Kinberg, 1866.

23. *H. simplex* Grube, 1858: 177-178, Valparaíso, Callao. This species was actually described within *Glycera* but was introduced as "*H. simplex*" due to a typographic error (similarly, in his comments on the preceding species, *Glycera papillosa*, Grube referred to *G. capitata* as *H. capitata*). It was briefly characterized by Wesenberg-Lund (1962:104) and redescribed by Böggemann (2002:79-81, Figs. 127-129).

Hesionidae

Oxydromus Grube, 1855. Pre-occupied by *Oxydromus* Schlegel, 1854 (Pleijel 1998:161; see *Ophiidromus*).

24. *O. flaccidus* Grube & Ørsted in Grube, 1858: 173-174, St. Croix. Pleijel (1998:162) regarded this species as *nomen dubium* because the type material was probably lost.
25. *O. longisetis* Grube & Ørsted in Grube, 1858:172-173, St. Croix. Pleijel (1998:162) regarded this species as *nomen dubium* because the type material was probably lost.

Lumbrineridae

Lumbrineris

26. *L. brasiliensis* Grube & Krøyer in Grube, 1858: 159, Rio de Janeiro, ZMB 5592 (3 syntypes). Resembles species in *Scoletoma*, but the genus has not been revised (L.F. Carrera-Parra, 2011, com. pers.)
27. *L. longissima* Grube & Krøyer in Grube, 1858: 158, Valparaíso. Hartman (1959:329) regarded this species as an oeonid,

probably *Arabella iricolor* (Montagu, 1804), which was described from England.

Nephtyidae
Nephtys

28. *N. imbricata* Grube & Krøyer in Grube, 1858: 168, Valparaiso, ZMUC-POL-1471 (1 syntype), ZMB 1881 (1 syntype). Hartman (1959:283) regarded this species as a probable synonym of *N. squamosa* Ehlers, 1887, described from Southern Florida.

Nereididae
Heteronereis

29. *H. caudipunctata* Grube & Ørsted in Grube, 1858: 166-167, St. Croix, 20 fathoms, ZMUC-POL-1494 (holotype). Hartman (1959:242) transferred this species to *Nereis*.
30. *H. pannosa* Grube & Krøyer in Grube, 1858: 167-168, Callao. Hartman (1959:243) transferred this species to *Nereis*.

Nereilepas

31. *N. callaona* Grube & Krøyer in Grube, 1858: 165-166, Callao, ZMUC-POL-1495 (holotype). Hartman (1939a:11, 1940:227, 1959:251) transferred this species to *Nereis*. It was recorded and briefly redescribed by Hartmann-Schröder (1960:19, 1962:107) and by Wesenberg-Lund (1962:75).
32. *N. variegata* Grube & Krøyer in Grube, 1858: 164-165, Valparaiso, ZMUC-POL-1496 (holotype). Augener (1927:48) regarded this species as a member of *Perinereis* and Monro (1933a:45, Hartman 1959:251, Wesenberg-Lund 1962:83) transferred it to *Pseudonereis*.

Nereis

33. *N. debilis* Grube & Ørsted in Grube, 1858: 164, no type locality indicated. Hartman

(1959:257) transferred this species to *Ceratonereis*.

34. *N. krebsii* Grube & Ørsted in Grube, 1858: 161, St. Croix, ZMUC-POL-1482 (holotype). This species should possibly be transferred to either *Pseudonereis* or *Perinereis* (Augener 1925:7). Hartman (1959:261) regarded it as indeterminable.
35. *N. marginata* Grube & Ørsted in Grube, 1858: 160-161, St. John, ZMUC-POL-1483 (holotype). Hartman (1959:264) regarded this species as indeterminable.
36. *N. puncturata* Grube & Ørsted in Grube, 1858: 163, Valparaiso and St. Croix (Grube 1859:119), ZMUC-POL-1486 (1 syntype from St. Croix), ZMB 4040 (2 syntypes from Valparaiso *vide* Hartwich 1993:130). Hartman (1959:269) regarded this species as indeterminable.
37. *N. rigida* Grube & Ørsted in Grube, 1858: 162, Puntarenas, Costa Rica. Redescribed by Augener (1906:149) on the basis of Caribbean specimens.
38. *N. riisei* Grube & Ørsted in Grube, 1858: 162-163, Puntarenas, Costa Rica, ZMUC-POL-1487 (1 syntype). This species was redescribed by Augener (1925:6), Hartman (1940:221) and Monro (1933a:43) and was later recorded for the Caribbean fauna (Augener 1927:47, Monro 1933b:256, Hartman 1942:99, 1944:17, 1951b:46, Renaud 1956:14). However, *N. glandulata* Hoagland, 1919, described from Puerto Rico, should possibly be reestablished for the Caribbean forms. Hartman (1959:270) wrongly gave the Antilles as the type locality for *N. riisei*. The syntype in the Zoological Museum in Copenhagen is the smaller of the two specimens mentioned in the original description; the whereabouts of the larger specimen is unknown.
39. *N. vallata* Grube & Krøyer in Grube, 1858: 159-160, Valparaiso, ZMUC-POL-1489 (1 syntype), ZMUC-POL-1490 (1 syntype), ZMUC-POL-1491 (1 syntype), ZMUC-POL-1492 (1 syntype), ZMUC-POL-1493 (1 syntype). Hartman (1959:272) transferred this species to *Perinereis*, and it was

redescribed by Wesenberg-Lund (1962:79) and Bertrán (1980:84). According to the original description only four specimens were found, but the type material contains five syntypes, which were placed in separate vials and given individual catalogue numbers at the request of Robin Wilson (Museum of Victoria, Melbourne, Australia) in 1987.

Onuphidae
Diopatra

40. *D. brevicirris* Grube & Krøyer in Grube, 1857: 55, Madeira.
41. *D. rhizophorae* Grube & Ørsted in Grube, 1857: 54, Realejo, Nicaragua, ZMUC-POL-1507 (3 syntypes).

Opheliidae
Ophelia

42. *O. appendiculata* Grube & Krøyer in Grube, 1859: 107, Valparaiso. Hartman (1959:432) transferred this species to *Ophelina* Ørsted, 1843.

Orbiniidae

43. *Porcia* Grube, 1859: 105.
44. *P. maderensis* Grube, 1859: 105-106, Madeira. The genus and species have been regarded as indeterminable (Hartman 1957:214).

Phyllodocidae
Phyllodoce

45. *P. callaona* Grube & Krøyer in Grube, 1858: 170-171, Callao.
46. *P. flavescens* Ørsted in Grube, 1858: 172, Puntarenas, Costa Rica, ZMUC-POL-1563 (lectotype). ZMUC-POL-1563 is not a specimen, but rather one of Ørsted's original plates (N27), which was illustrated and designated as the lectotype by Wolff

& Petersen (1991:Pl. 2, Fig. 2, Fig. 3B). Wesenberg-Lund (1962:45) regarded this species as *species inquirenda*.

47. *P. longicirris* Grube & Ørsted in Grube, 1858: 171-172, Realejo, Nicaragua. Hartman (1959:162) transferred this species to *Kinbergia*, which Pleijel (1991:257) regarded as a *nomen dubium*.
48. *P. macrophthalma* Grube & Ørsted in Grube, 1858: 169, Realejo, Nicaragua. Hartman (1959:162) transferred this species to *Kinbergia*, which Pleijel (1991:257) regarded as a *nomen dubium*. Pleijel also considered this species to be a *nomen dubium*.
49. *P. puntarenae* Grube & Ørsted in Grube, 1858: 169-170, Puntarenas, Costa Rica. Wesenberg-Lund (1962:44) regarded the species as *species inquirenda*.

Pisionidae

50. *Pisione* Grube, 1858: 174-175.
51. *P. ørstedii* Grube, 1858: 175, Valparaiso, ZMUC-POL-1605 (1 syntype), ZMB 3834 (2 syntypes and slide). Hartman (1939b:91, 1959:124) redescribed the species and corrected the epithet to *oerstedii*, whereas Hartmann-Schröder (1962:70) and Wesenberg-Lund (1962:39) omitted the last letter.

Polynoidae

52. *Hermenia* Grube & Ørsted in Grube, 1857:44.
53. *H. verruculosa* Grube & Ørsted in Grube, 1857: 44-45, St. John, ZMUC-POL-1667 (holotype). The generic and specific names are valid (Augener 1925:4). Fauvel (1953:4) provided additional information and Ebbs (1966:500) redescribed the species. Hartman (1939a:4) recorded it from the Eastern Tropical Pacific but this might be a different species.

Polynoe

54. *P. clavata* Grube & Ørsted in Grube, 1857: 47-48, Christiansted and St. Croix. Hartman (1959:99) regarded this species as the same as *Halosydna muelleri* (see below) or *H. parva* Kinberg, 1855, described from Chile.
55. *P. crucis* Grube & Ørsted in Grube, 1857: 47, Christiansted, Virgin Islands, ZMUC-POL-1300 (2 syntypes). Transferred to *Harmothoe* by Augener (1925:4) and redescribed by Salazar-Silva (2010).
56. *P. exanthema* Grube & Krøyer in Grube, 1857: 46, Valparaiso, ZMUC-POL-1671 (holotype). Hartman (1939b:52, 1959:100, followed by Wesenberg-Lund 1962:23) transferred this species to *Harmothoe*, but Hartmann-Schröder (1965:67) transferred it to *Lagisca* Malmgren, 1865.
57. *P. marginata* Grube & Krøyer in Grube, 1857: 48, Callao.
58. *P. mülleri* Grube & Krøyer in Grube, 1857: 48, Valparaiso. Hartman (1959:104) transferred this species to *Halosydna*, perhaps as a synonym of *H. parva*.
59. *P. nigrovittata* Grube & Krøyer in Grube, 1857: 50. Hartman (1959:104) regarded this species as indeterminable.
60. *P. punctulata* Grube & Krøyer in Grube, 1857: 49, Rio de Janeiro. Hartman (1959:105) transferred this species to *Halosydnella*.
61. *P. savignyi* Grube & Krøyer in Grube, 1857: 45, Callao. Hartman (1959:106) transferred this species to *Lepidonotus*.
62. *P. tenuisetis* Grube & Krøyer in Grube, 1857: 46, Rio de Janeiro. Hartman (1959:106) regarded this species as indeterminable.
63. *P. tomentosa* Grube & Ørsted in Grube, 1857: 45, Puntarenas, Costa Rica, ZMUC-POL-1317 (holotype). Hartman (1959:106) transferred this species to *Lepidonotus*.
64. *P. variegata* Grube & Krøyer in Grube, 1857: 49-50, Madeira. Hartman (1959:107) regarded this species as a junior synonym of *P. scolopendrina* Savigny, 1822,

described from the Mediterranean Sea according to Hartman, but it was actually described from the Atlantic French coasts, which Savigny called “l’Océan”.

Sabellidae

Sabella

65. *S. brevicollaris* Grube & Ørsted in Grube, 1859: 112, St. Croix, Christiansted, Virgin Islands. Hartman (1959:558) regarded this species as a member of *Hypsicomus* Grube, 1870.
66. *S. pacifici* Grube & Ørsted in Grube, 1859: 113, Puntarenas, Costa Rica, ZMUC-POL-1985 (holotype). Hartman (1959:562) regarded this species as indeterminable.

Sigalionidae

67. *Sigalion(?) pergamentaceum* Grube & Ørsted in Grube, 1857: 50-51, St. Croix. Hartman (1959:119) regarded this species as questionable.

Syllidae

68. *Amblyosyllis* Grube & Ørsted in Grube, 1858: 186.
69. *A. rhombeata* Grube & Ørsted in Grube, 1858: 186, St. Croix. Illustrated by Wolff and Petersen (1991:Fig. 3A).

Syllis

70. *S. brachycirris* Grube & Ørsted in Grube, 1858: 179, St. Croix, ZMUC-POL-920 (holotype). This species was regarded as identical to *S. gracilis* Grube, 1840, described from the Mediterranean Sea (Augener 1925:7; Hartman 1959:224).
71. *S. breviarticulata* Grube & Ørsted in Grube, 1858: 179-180, St. Croix. Hartman (1959:224) regarded this species as indeterminable.
72. *S. latifrons* Grube & Krøyer in Grube, 1858: 178-179, Callao.

73. *S. longesegmentata* Grube & Ørsted in Grube, 1858: 184-185, St. Croix.
74. *S. macroceras* Grube & Ørsted in Grube, 1858: 185-186, St. Croix, Christiansted, Virgin Islands. Hartman (1959:227) regarded this species as indeterminable.
75. *S. obscura* Grube & Ørsted in Grube, 1858: 181. Hartman (1959:228) regarded this species as indeterminable.
76. *S. rubra* Grube & Ørsted in Grube, 1858: 180-181, St. Croix, ZMUC-POL-921 (1 syntype). Augener (1925:8) regarded one syntype as belonging to *Trypanosyllis zebra* Grube, 1860, described from France, and the other syntype (no longer present in the collection of the Zoological Museum in Copenhagen) was referred to *Typosyllis corallicoloides* Augener, 1922. This synonymy was repeated by Hartman (1959:229).
77. *S. streptocephala* Grube & Ørsted in Grube, 1858: 181-182, St. Croix, ZMUC-POL-922 (holotype). Identical with *Haplosyllis spongicola* (Grube, 1855), described from the Mediterranean Sea (Augener 1925:8; Hartman 1959:229).
78. *S. valida* Grube & Krøyer in Grube, 1858: 183-184, Valparaíso, ZMUC-POL-881 (lectotype, designated by F. Licher in 1996), ZMUC-POL-890 (1 paralectotype). Hartman (1959:231) regarded this species as indeterminable and Wesenberg-Lund (1962:58) considered it as a *species inquerenda*.
79. *S. zonata* Grube & Ørsted in Grube, 1858: 182-183, St. Croix. Hartman (1959:231) regarded this species as indeterminable.

Terebellidae

80. *Sabellina* Dujardin, 1839. This genus is questionable according to Hartman (1959:566) and was regarded as indeterminable by Fauchald (1977:140); both regarded it as a member of Sabellidae, but the only illustrated species, *S. brachycera*,

resembles a juvenile, probably abbranchiate terebellid (Dujardin 1839, Pl. 7, Figs. 6-8).

81. *S. longicauda* Grube & Ørsted in Grube, 1859: 111, St. Croix, Christiansted, Virgin Islands. Hartman (1959:566) regarded this species as indeterminable.

Terebella

82. *T. alata* Grube & Ørsted in Grube, 1859: 110, Puntarenas, Costa Rica. Hartman (1959:523) regarded this species as questionable.
83. *T. comata* Grube & Krøyer in Grube, 1859: 109, Valparaíso, Chile, Puntarenas, ZMUC-POL-2151 (1 syntype from Puntarenas), ZMB 1561 (lost). Hartman (1959:524) transferred this species to *Thelepus* Leuckart, 1849.
84. *T. frondosa* Grube & Ørsted in Grube, 1859: 110-111, Puntarenas, Costa Rica, ZMUC-POL-2152 (holotype). Hartman (1959:524) regarded this species as questionable.

Hirudinea

Aulacostomum

85. *A. costaricense* Grube & Ørsted in Grube, 1859: 114, Cartago?
86. *Centropygos* Grube & Ørsted in Grube, 1859: 115.
87. *C. joseensis* Grube & Ørsted in Grube, 1859: 115, San José. Redescribed by Badham (1923).

Clepsine

88. *C. triserialis* Grube & Krøyer in Grube, 1859: 115-116, La Plata.

Sipuncula

89. *Dendrostomum* Grube & Ørsted in Grube, 1859: 118.
90. *D. alutaceum* Grube & Ørsted in Grube, 1859: 118, St. Croix. According to WoRMS, this genus is a junior synonym

of *Themiste* and referred to this species as *T. (T.) alutacea*.

Phascolosoma

91. *P. antillarum* Grube & Ørsted in Grube, 1859: 117-118, Puntarenas, Costa Rica, St. Croix. According to WoRMS, this species has been transferred to *Antillesoma* as *A. antillarum*.
92. *P. puntarenae* Grube & Ørsted in Grube, 1859: 117, Puntarenas, Costa Rica, ZMUC-SIP-001 (2 syntypes). According to WoRMS, this species is a junior synonym of *P. nigrescens* (Keferstein, 1865).

RESUMEN

Los viajes de recolecta por Ørsted y Krøyer en Centroamérica y Sudamérica resultaron en una serie de notas por Grube, los *Annulata* ørstediana que contienen la propuesta de siete géneros y 84 especies. Hay algunos problemas en relación con el número correcto de contribuciones, sus fechas de publicación, la citación correcta de los autores para cada nombre específico y a veces incluso para la localidad tipo. Para mejorar la situación, hemos consultado las publicaciones originales junto con las colecciones correspondientes. Nuestros resultados indican que hubo tres partes en la serie, que fueron publicadas en la revista y cuyas páginas fueron re-enumeradas para las separatas lo que a veces ocasionó confusiones adicionales. Además, brindamos algunos comentarios para revisar el estado de cada especie y agregamos una breve nota nomenclatural sobre *Hemipodus* (Polychaeta: Glyceridae) para aclarar el nombre correcto del género y la especie tipo.

Palabras clave: taxonomía, nomenclatura, invertebrados marinos, hirudíneos, sipúnculos.

REFERENCES

Augener, H. 1906. Westindische Polychaeten. Reports on the results of dredging, under the supervision of Alexander Agassiz, in the Gulf of Mexico and the Caribbean Sea, and on the coast of the United States, 1877-1880, by the U.S.S. Coast Survey Steamer Blake. Bull. Mus. Comp. Zool. Harv. Univ. 43: 91-197.

Augener, H. 1922. Litorale Polychaeten von Juan Fernandez, pp 161-218. In C. Skottsberg (ed.). The Natural History of Juan Fernandez and Easter Island, vol.

3, Zoology, Part 2. Almqvist & Wiksells, Uppsala, Swedish.

Augener, H. 1925. Über westindische und einige andere Polychaeten-Typen von Grube (Ørsted), Krøyer, Mörch und Schmarda. Publ. Univ. Zool. Mus. København 39: 1-47.

Augener, H. 1927. Resultaten einer Reise von Dr. C.J. van der Horst in 1920. Polychaeten von Curaçao. Bijdr. Kennis Fauna Curaçao, Zool. Genoots. Nat. Magistra 25: 39-82.

Badham, C. 1923. On *Centropygus joseensis*, a leech from Brazil. Q. J. Micr. Sci. n. ser. 46: 243-256.

Baird, W. 1870. Contributions towards a monograph of the species of Annelides belonging to the Amphinomacea with a list of the known species and a description of several new species belonging to the group contained in the national collection of the British Museum, to which is appended a short account of two hitherto nondescript Annulose Animals of a larval character. Zool. J. Linn. Soc. London 10: 215-250.

Bertrán, C. 1980. Análisis taxonómico de *Perinereis gualpensis* Jeldes y *Perinereis vallata* Grube (Annelida, Polychaeta) en el estuario del Río Lingue, Chile. Stud. Neotrop. Fauna Environm. 15: 81-89.

Böggemann, M. 2002. Revision of the Glyceridae Grube 1850 (Annelida: Polychaeta). Abhandl. Senckenberg. Naturforsch. Gesells. Frankfurt Main 555: 1-249.

Carrera-Parra, L.F. & S.I. Salazar-Vallejo. 2011. Redescription of *Eunice filamentosa* and *E. denticulata* and description of *E. tovarae* n. sp. (Polychaeta: Eunicidae), highlighted with morphological and molecular data. Zootaxa 2880: 51-64.

Çinar, M.E. 2007. Re-description of *Timarete punctata* (Polychaeta: Cirratulidae) and its occurrence in the Mediterranean Sea. Sci. Mar. 71: 755-764.

de Quatrefages, A. 1865a. Note sur la classification des Annelides. C.R. Acad. Sci. Paris 60: 586-600 (also available on-line: <http://gallica.bnf.fr/ark:/12148/bpt6k30171/f1.image.r=Comptes%20Rendus%20Hebdomadaires%20S%C3%A9ances.langES>).

de Quatrefages, A. 1865b. Note sur la classification des annélides et réponse aux observations de M. Claparède. Ann. Sc. Nat. Zool. Paléontol. ser. 5 3: 253-296 (also available on-line: <http://www.biodiversitylibrary.org/item/92544#page/7/mode/1up>).

de Quatrefages, A. 1866 (1865). Histoire Naturelle des Annelés Marins et d'Eau Douce: Annelides et Géphyriens. Tome Premier. Collection des Suites

- a Buffon formant avec les Oeuvres de cet auteur un Cours Complet d'Histoire Naturelle. Librairie Encyclopédique de Roret, Paris (Wright, E.P. 1866. Annelida Zool. Rec. Sec. 6: 578-600).
- Dujardin, F. 1839. Observation sur quelques annélides marines. Ann. Sci. Nat. Paris ser. 2 11: 287-294.
- Ebbs, N.K. 1966. The coral-inhabiting polychaetes of the Northern Florida reef tract, 1. Aphroditae, Polynoïdae, Amphinomidae, Eunicidae, and Lysaretidae. Bull. Mar. Sci. 16: 485-555.
- Ehlers, E. 1887. Report on the Annelids. Reports on the Result of Dredging, under the Direction of Pourtales & Agassiz in the Gulf of Mexico. Mem. Mus. Comp. Zool. Harvard 15: 1-335.
- Fauchald, K. 1992. A review of the genus *Eunice* (Polychaeta: Eunicidae) based upon type material. Smithsonian. Contr. Zool. 523: 1-422.
- Fauvel, P. 1953. Annélides polychètes de la croisière du "Président Théodore Tissier" aux Antilles (1951). Bull. Inst. Ocean. Monaco 50: 1-23.
- Grube, A.E. 1870. Bemerkungen über die Familie der Glycereen (*Glycera* Sav., *Hemipodus* Qfg., *Goniada* A. & E., *Leonatus* Kbg., *Eone* Mgn. und *Glycinde* Fr. Müll.). Jahres-Bericht Schles. Gesellsch. Vaterl. Cultur, Breslau 47: 56-68.
- Hartman, O. 1939a. The polychaetous annelids collected on the Presidential Cruise of 1938. Smithson. Misc. Coll. 98: 1-22.
- Hartman, O. 1939b. Polychaetous annelids, 1. Aphroditidae to Pisionidae. Allan Hancock Pac. Exped. 7: 1-155.
- Hartman, O. 1940. Polychaetous annelids, 2. Chrysopetalidae to Goniadidae. Allan Hancock Pac. Exped. 7: 173-287.
- Hartman, O. 1942. The polychaetous Annelida. Report on the scientific results of the Atlantis Expedition to the West Indies under the joint auspices of the University of Havana and Harvard University. Mem. Soc. Cub. Hist. Nat. 16: 89-107.
- Hartman, O. 1944. Polychaetous annelids. Allan Hancock Atl. Exped. Rep. 3: 1-32.
- Hartman, O. 1948. The marine annelids erected by Kinberg with notes on some others types in the Swedish State Museum. Ark. Zool. 42A: 1-156.
- Hartman, O. 1951a. Literature of the polychaetous annelids, 1. Bibliography. Privately published.
- Hartman, O. 1951b. The littoral marine annelids of the Gulf of Mexico. Publ. Inst. Mar. Sci. Tex. Univ. 2: 7-124.
- Hartman, O. 1957. Orbiniidae, Apistorbranchidae, Paraoïdae and Longosomidae. Allan Hancock Pac. Exps. 15: 211-393.
- Hartmann-Schröder, G. 1960. Zur Polychaeten-Fauna von Peru. Beitr. Neotrop. Fauna 2: 1-44.
- Hartmann-Schröder, G. 1962. Zweiter Beitrag zur Polychaeten fauna von Peru. Kiel. Meeresforsch. 18: 109-147.
- Hartmann-Schröder, G. 1965. Die Polychaeten des Sublitorals. Zur Kenntnis des Sublitorals der chilenischen Küste unter besonderer Berücksichtigung der Polychaeten und Ostracoden. (Mit Bemerkungen über den Einfluss sauerstoffärmer Strömungen auf die Besiedlung von marinen Sedimenten). Mitt. Hamb. Mus. Inst. 62: 59-305.
- Hartwich, G. 1993. Die Polychaeten-Typen des Zoologischen Museums in Berlin. Mitt. Zool. Mus. Berlin 69: 73-154.
- Hoagland, R.A. 1919. Polychaetous annelids from Porto Rico, the Florida Keys and Bermuda. Amer. Mus. Nat. Hist. Bull. 41: 517-591.
- ICZN (International Commission on Zoological Nomenclature). 1999. International Code of Zoological Nomenclature, 4th ed. International Trust for Zoological Nomenclature (The Natural History Museum), London (Also available online: www.iczn.org/iczn/index.jsp)
- Jumars, P.A. 1974. A generic revision of the Dorvilleidae (Polychaeta) with six new species from the deep North Pacific. Zool. J. Linn. Soc. 54: 101-35.
- Kinberg, J.G.H. 1866. Annulata nova. Part 3. Öfv. Vet. Akad. Stockholm Förh. 22: 239-258.
- Monro, C.C.A. 1928a. Papers from Dr. Th. Mortensen's Pacific Expedition 1914-16, 45. On the Polychaeta collected by Dr. Th. Mortensen off the coast of Panama. Vidensk. Meddel. Dansk Naturhist. Foren. 85: 75-103.
- Monro, C.C.A. 1928b. Polychaeta of the families Polynoïdae and Acoetidae from the vicinity of the Panama Canal, collected by Dr. C. Crossland and Dr. Th. Mortensen. Zool. J. Linn. Soc. 36: 553-576.
- Monro, C.C.A. 1933a. The Polychaeta Errantia collected by Dr. C. Crossland at Colón, in the Panamá Region, and the Galápagos Islands during the Expedition of

- the S.Y. «St. George». Proc. Zool. Soc. Lond. 1933: 1-96.
- Monro, C.C.A. 1933b. On a Collection of Polychaeta from Dry Tortugas, Florida. Ann. Mag. Nat. Hist., ser. 10 12: 244-269.
- Pettibone, M.H. 1961. New species of polychaete worms from the Atlantic Ocean, with a revision of the Dorvilleidae. Proc. Biol. Soc. Wash. 74: 167-86.
- Pleijel, F. 1991. Phylogeny and classification of the Phyllodocidae (Polychaeta). Zool. Scripta 20: 225-261.
- Pleijel, F. 1998. Phylogeny and classification of Hesionidae (Polychaeta). Zool. Scripta 27: 89-163.
- Renaud, J.C. 1956. A report on some polychaetous annelids from the Miami-Bimini area. Am. Mus. Novit. 1812: 1-39.
- Salazar-Silva, P. 2010. Redescription of *Harmothoe crucis* (Annelida, Polychaeta, Polynoidae), and re-establishment of synonymized species from the Grand Caribbean with descriptions of four new species. Mar. Biol. Res. 6: 125-154.
- Salazar-Vallejo, S.I. 1996. Lista de especies y bibliografía de los poliquetos (Polychaeta) del Gran Caribe. An. Inst. Biol. ser. Zool. UNAM 67: 11-50 (also available on-line: [http://biblio68.ibiologia.unam.mx/FullText/Art-Zoo/671\(2\)zool.PDF](http://biblio68.ibiologia.unam.mx/FullText/Art-Zoo/671(2)zool.PDF)).
- Salazar-Vallejo, S.I. & M.H. Londoño-Mesa. 2004. Lista de especies y bibliografía de poliquetos (Polychaeta) del Pacífico oriental tropical. An. Inst. Biol. ser. Zool. UNAM 75: 9-97 (also available on-line: http://biblio68.ibiologia.unam.mx/FullText/Art-Zoo/anazoo751/anazoo751_2.pdf).
- Wesenberg-Lund, E. 1959. Polychaeta Errantia. Rep. Lund Univ. Chile Exped. 1948-49, 43: 1-139.
- Wolff, T. & M.E. Petersen. 1991. A brief biography of A. S. Ørsted, with notes on his travels in the West Indies and Central America and illustrations of collected polychaetes. Ophelia Suppl. 5: 669-685.