

Von Siebold and Natural History of Japan, Crustacea

T. Yamaguchi, editor

CRUSTACEA
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RETURN TO W-119

**The non-Japanese new Species established
by W. de Haan in the Crustacea Volume
of Fauna Japonica (1833-1850)**

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The non-Japanese new Species established by W. de Haan in the Crustacea Volume of Fauna Japonica (1833-1850)

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The Crustacea volume of Fauna Japonica is not just a report on the extensive crustacean collections brought together in Japan by Ph. F. von Siebold and H. Bürger. In view of the many new Japanese species described and figured in it, such an enumeration in itself would have formed a major contribution to carcinology. But De Haan wanted more, he intended to give in this volume a revised classification of Crustacea, not only based on the external morphology but also on the configuration of the mouth parts. Long before he had seen any Japanese crustaceans and before he had ever published on the group, De Haan in 1826, in a report of the journey that he made in that year to visit various German musea, wrote as follows (free translation from the Dutch): "The director of the Berlin Museum, Mr. Lichtenstein (= Martin Hinrich Carl Lichtenstein, 1780-1857), has provided me with the opportunity to lay the foundation for a "Species Crustaceorum," an undertaking which is only possible in Berlin, because of the extent of the collection there, which is especially important by the presence of the original specimens described by Herbst. Apart from the study of this collection I had also the privilege to use the manuscripts of Prince Maurits (= Johan Maurits van Nassau (1604-1679), who was governor of Dutch Brazil (1637-1644) and brought home numerous animal paintings, part of which were used for Marcgraf's (1648) treatise on the natural history of Brazil), Mentzelius and Daldorff (Ingobert Karl Daldorff collected in India from 1790 to 1793; his Crustacean material was studied by J. C. Fabricius and J. F. W. Herbst)." This early interest in Crustacea explains why De Haan, when the extensive and beautifully preserved collections of Japanese Crustacea brought together by von Siebold and Bürger arrived in Leiden, could not resist the temptation to start his study of the Japanese Invertebrates with the Crustacea, putting the study of the Insects and the non-Arthropoda off until later, a "later" which unfortunately would never materialize for him.

In his volume of Fauna Japonica, De Haan, when starting the text of a family, first gave an enumeration of all the genera and subgenera of that family known to him. In the earlier fascicles or "Decades" of the work (these fascicles were called "Decas" because each contained exactly 10 plates and a variable amount of text), De Haan also

listed in each subgenus the species known to him, including undescribed ones. Such new species had their name followed by either (1) the indication "Faun. Jap." indicating they were Japanese and would be described in the text that followed, or (2) the indication "Nob." or "nov. spec." in the case of new species originating from outside Japan. Such new species sometimes are mentioned only in the enumeration without more data and thus the name remained a nomen nudum and not available (like in the case of *Cancer (Menippe) parvulus* n. sp." on p. 21). Sometimes the name is provided with an indication, either in the enumeration itself (e.g., a reference to a previously published figure) or in the descriptive text of the volume (e.g., when its characters are compared to those of a Japanese species described in the text). In a number of cases the mouth parts of such species are figured on the plates, which likewise makes the name available. In a few instances the plates show the mouth parts of species which are not further mentioned in the text; in the case of such new species, the figure makes the accompanying name available. There are quite a few instances in this volume of Fauna Japonica where new non-Japanese species are established available, but are often so hidden that they have overlooked by subsequent authors. It is the purpose of the present paper to bring those names to light and to discuss their taxonomic and nomenclatural status.

In this discussion the account of each species is headed by the currently accepted valid name for it. In the synonymy that follows, references are given (1) to the pages and plates in Fauna Japonica where the species is mentioned or shown, (2) to Herklots' (1861) catalogue of the Crustacea of the Leiden Museum, in which catalogue several of these new names are still being used, sometimes with more information than is found in Fauna Japonica, and (3) to other places in the literature where such names are discussed. After these references follows an enumeration of the extant type material of the species, and a verbatim citation of the inscriptions on the original labels, or other old labels, if relevant. In most instances, De Haan when studying the new species took out the mouth parts and had those glued to a narrow strip of stiff cardboard. On the cardboard below the mouth parts the name of the species is written in a contemporary hand (but not that of De Haan, perhaps of his technical assistant Cornelis Overdijk). The presence of those mouth parts carrying strips of cardboard, and that of specimens from which the mouth parts are dissected out, is a sure sign that the lot was studied by De Haan. The labels with the material are of three kinds: (1) The "Temminckian" labels, these are very old-fashioned pieces of white paper about 1.8 by 4.8 cm in size, bordered by an orange-brown margin of a double line, the outer line being broad, consisting of very closely placed parallel lines of orange-brown, and a narrow inner line of the same colour, separated from the outer line by a short interval. In the lower right hand corner is printed (also in orange-brown) "Cabinet Temminck." Coenraad Jacob Temminck (1778-1858) was the first director (from 1820 to 1858) of the Museum. He owned a splendid collection of vertebrates which he donated to the country for a National Museum on the condition that he would be its first director. Loth to waste good material, his old labels were used first before new ones were printed. To expel any doubts of propriety, the labels were used upside down so that the inscription "Cabinet Temminck" appeared upside

down in the upper left hand corner. (2) Later exactly the same labels were printed but without the reference to Temminck's cabinet, they are indicated in the following text as "old labels." (3) Sometimes the name of the species and its data are written on a piece of plain white paper, which judging by the paper and the handwriting must be quite old; such labels are indicated as "plain labels."

The study of these obscure names leads to interesting results. The greater part of them proved to be available nomenclaturally, as they are accompanied by a figure, a short description or an indication. Some have been adopted in modern carcinology, some are either junior homonyms or junior synonyms and do no harm, of very few we have too little information for a positive identification and those have to be considered nomina dubia. In a single case, *Inachoides lambriformis*, a currently used name has to be replaced by a name introduced by De Haan, which so far has been overlooked.

The sources for De Haan's material of non-Japanese Decapoda are not many, because, when De Haan started his work on the Crustacea around 1830, the Museum existed a mere 10 years. All of De Haan's non-Japanese material, so far as known, was collected between 1815 and 1836. Some information concerning its sources is provided here:

1. Casper Georg Carl Reinwardt (1773-1854) was professor of Natural History in Amsterdam, when in 1815, after the fall of Napoleon and the liberation of the Netherlands, he was sent out by the Dutch government to the East Indies as Director of Agriculture. Reinwardt stayed in the Indies from 1815 to 1822, when he was appointed Professor of Natural History in Leiden. During his stay in the tropics Reinwardt made extensive zoological collections, mostly in Java, but also during a voyage (February 1821-January 1822) to the eastern part of the Malay Archipelago (Moluccas, Celebes). Part of the material that he sent to the Netherlands was shipwrecked, but that from his 1821-1822 voyage arrived safely, and still forms part of the present collection.

2. Natural History Commission. Almost simultaneous with the foundation of the Rijksmuseum van Natuurlijke Historie, in 1820, a "Natuurkundige Commissie voor Nederlandsch Indië" (Natural History Commission for the Netherlands Indies) was installed for the purpose of studying the natural history of the Dutch East Indies and to make zoological and botanical collections there. The Commission was planned to consist of two scientists, one artist and one technician. Between 1820 and 1836 the following zoologists of the Commission collected material dealt with by De Haan: Heinrich Kuhl (1797-1821) and Johan Coenraad van Hasselt (1797-1823) were sent out as the first scientists to the Commission and arrived in Java in December 1820; Kuhl was a young German zoologist who studied in Groningen, the Netherlands, and Van Hasselt was a Dutch zoologist. The two always worked together and their labels always mention Kuhl & Van Hasselt, or K. V. H. Kuhl died in West Java less than 9 months after his arrival, only 24 years old, Van Hasselt died two years later, aged 26. Notwithstanding their short stay in Java, they amassed large well preserved collections, which reached the Netherlands safely. They were succeeded in 1826 by the German zoologists Heinrich Boie (1794-1827) and Heinrich Christian Macklot (1799-1832), who before being sent out on the Commission had been employed by the Leiden Museum. Boie died in West Java slightly

more than one year after arrival; Macklot was killed in 1832 during a Chinese uprising in West Java. When they arrived in Java they had with them as a technician a young German, Salomon Müller (1804-1864), who developed himself as a talented zoologist and was the only zoologist of the Commission to return to the Netherlands (in 1837), where he continued and published his studies on the Vertebrata of the East Indies. The members of the Commission spent most of their time in West Java. In the period reported upon here (1820-1836) only two collecting trips outside the island were made: Macklot and Müller took part in a journey (from March 1828 to October 1829) to the Moluccas, New Guinea and Timor. From June 1833 to January 1836 Müller (accompanied by Heinrich Bürger, who was not an official member of the Commission) visited the east coast of Sumatra where excellent collections were made, mostly in the area of Padang.

3. H. B. van Horstok (ca. 1794-1838) was a Dutch physician who settled in Capetown, South Africa in 1826 and made large zoological collections for the Leiden Museum until about 1834, when he left South Africa to return to the Netherlands.

4. Jean Louis Florent Polydore Roux (born Marseilles, 19 July 1792, died either in Bombay, 12 April 1833 or in Egypt, 6 August 1833, according to different sources; he signed himself usually Polydore Roux) was a marine "Maler und Conservator des Museums der Naturgeschichte zu Marseille" (Gistel, 1846: 61). He is the author of the beautifully illustrated (by himself) "Crustacés de la Méditerranée et de son littoral" (1828-1830). Before going on a journey to Egypt (and India?) (1831-1833), "Hr. P. Roux, bot 1831 schon eine, in 230 vergoldeten, 18 Zoll breiten und 13 Zoll hohen Glasschränken, aufgestellt, sehr reich ausgestattete Sammlung zum Verkauf, die alle Insekten im Linné'schen Sinn (d.h. Crustaceen, Arachniden und eigentliche Insekten) in sich begreift, und aus etwa 15,000 Arten und 32,000 Exemplaren, und zwar zum dritten Theil exotischen besteht" (Gistel, 1846: 264). Roux's collection was evidently bought (entirely or partly) by the firm Marguier in Paris, from whom the Leiden Museum acquired several of Roux's Crustacea. The type material of *Cymopolia caronii* P. Roux dealt with below, was obtained in 1837, and in the same year Roux's holotype of *Latreillia elegans* was bought (teste De Haan, 1839: 108: "*Latreillia elegans*, Roux... cujus specimen femineum ab laudato auctore descriptum, ex ipsius collectione in Museo adest").

5. Jean Victor Audouin (1797-1841) was in charge of the Crustacean collections of the Muséum National d'Histoire Naturelle in Paris and a correspondent of W. de Haan. At an exchange made by the two Musea in 1838 Audouin sent to the Leiden Museum 38 species of Brachyura in 46 specimens. A list of this shipment is present in the archives of the Leiden Museum. Four of the species sent were then still unpublished, and in the list their names are followed by "Aud. (inédit.)"; all four were collected by Alcide d'Orbigny in Peru (Callao) or Chile. These four species are *Leptopodia modesta* (from Callao), *Eurypodius Cuvieri* (from Chile), *Leucippa ensinadae* (from "Côtes de Chili"), and *Cyrnus microrhynchus* (from Callao), all four represented by a single specimen. As all these genera (except *Leptopodia* [= *Stenorhynchus*]) were not otherwise available to De Haan, he used this material for his study of the mouth parts of these taxa. He published his drawings of these mouth parts on pls. G and H of Fauna Japonica under Audouin's manuscript names, not realizing that future rules of nomenclature would make himself

the legal author of those names. Audouin, namely, did not publish his account of Orbigny's Crustacea, and when he died in 1841, only 44 years old, the task of dealing with that collection was entrusted to H. Milne Edwards and H. Lucas, who published the results of their study in 1842. The four just mentioned species were named by them *Leptopodia sagittaria* (Fabricius), *Eurypodius Audouinii* nov., *Leucippa Ensenadae* nov., and *Inachoides microrhynchus* nov., respectively. The name *Leptopodia modesta* was not used at all by De Haan, but Herklots (1861: 136) listed it, as *Inachus (Leptopodia) Modesta* Aud., in his list of the Crustacea of the Leiden Museum, but as a nomen nudum. The name *modesta* for the species was first made available by A. Milne Edwards (1878: 173), but by that time it was a junior synonym of *Stenorhynchus debilis* (Smith, 1871). The other three names were made available by De Haan and are discussed below.

Not included in the present paper are the non-Japanese species that were mistakenly labelled "Japan" and which De Haan treated as Japanese species. They are treated in the part of this volume dealing with the Japanese specimens of the von Siebold-Bürger collection.

For the photographs of De Haan's material I am greatly indebted to Dr. T. Yamaguchi of Aitsu Marine Biological Station, who also took great pains in arranging the outlay of this paper. Dr. Yamaguchi's unrelenting efforts greatly increased the knowledge of Ph. F. von Siebold's zoological activities in Japan. The present paper may be considered a kind of appendix to the revision by Drs. Yamaguchi and K. Baba of the still existing collections of Japanese Crustacea collected by Ph. F. von Siebold and H. Bürger and studied by W. de Haan.

Brachyura

Calappidae

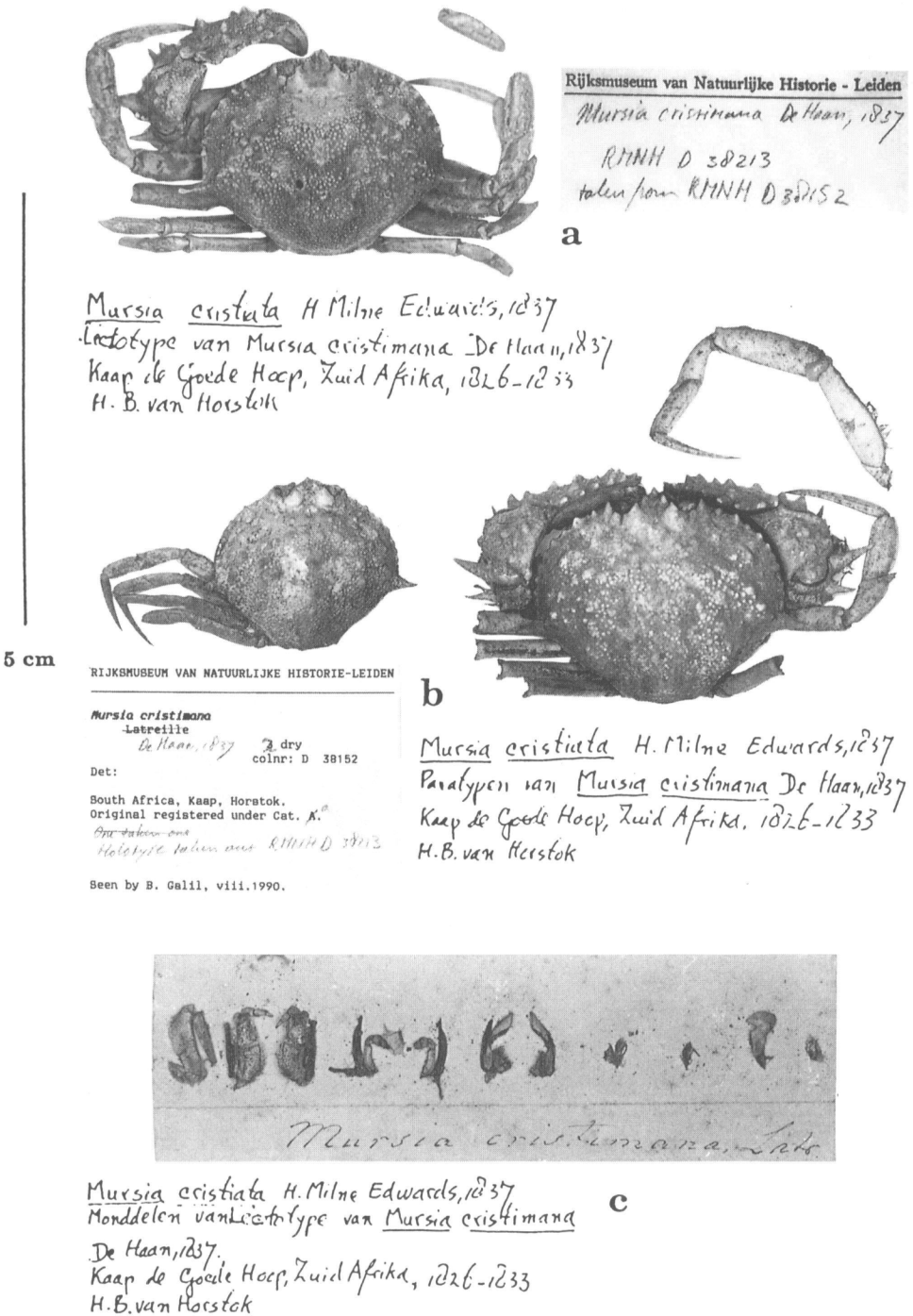
Mursia cristata H. Milne Edwards, 1837

Figure 1

- Mursia* Desmarest, 1823: 231; Desmarest, 1825: 108.
 Mursie Mains-en-crête Desmarest, 1823: pl. [9] fig. 3; Desmarest, 1825: pl. 9 fig. 3.
 Mursie en crête Latreille, 1831: 352.
Mursia Cristata H. Milne Edwards, 1837 (1 July): 109.
Mursia cristimanus De Haan, 1837 (16 August): 70.
Mursia cristimana De Haan, 1837 (16 August): pl. E; De Haan, 1839: 73. .
Mursie custata: H. Milne Edwards, 1840: (Index) 627.
Mursia cristata: H. Milne Edwards, 1840a: (Explication des planches) 17.
Mursica cristata: H. Milne Edwards, 1843: pl. 13 fig. 1.
Mursia Cristata: H. Milne Edwards, 1861: 139 (with reference to "*Cristimana*").
Mursia cristimanus: Stebbing, 1900: 22.

Material. – Cape of Good Hope, South Africa, 1826-1833, H. B. van Horstok, 1 dry ♂ lectotype (CW: 34 mm) (a) of *Mursia cristimana* De Haan, 1837; mouth parts of this lectotype (c); 2 paratypes (dry males, CW: 25 mm & 35 mm) (b).

Fig. 1



Unintentionally De Haan (1837) became the author of the name *Mursia cristimana*. The complicated nomenclatural history of the generic and specific name is as follows.

The generic name *Mursia* was coined, but never published, by W. E. Leach. It was accepted by P. A. Latreille but not published by him either until 1829 (Latreille, 1829: 39), in the mean time Latreille used the name on labels of the material in the collection of the Paris Museum. It was Desmarest (1823), who first published the Latin generic name *Mursia* with sufficient indications to make that name available. In his text Desmarest (1823) did not mention any species for *Mursia*, but on pl. [9] fig. 3 he figured "Mursie Mains-en-crête," without a Latin name. The correct name for the genus thus is *Mursia* Desmarest, 1823, and it is a genus established without included nominal species.

It is the correct name of the type species of *Mursia* that causes the most difficulties. Until 1837 that species was either not mentioned at all or indicated with vernacular names: "Mursie Mains-en-crête" (Desmarest, 1823, 1825) or "Mursie en crête" (Latreille, 1831).

H. Milne Edwards (1837: 109) was the first to use a Latin name for the species, namely *Mursia Cristiata*. *Cristiata* possibly is an erroneous spelling of *cristata*, a name later used by H. Milne Edwards (1840a: 17; 1843, pl. 13 fig. 1) for the species. But according to Art. 32(c) (ii) of the International Code of Zoological Nomenclature, *cristiata* has to be accepted as the correct original spelling as in the original publication itself there is no clear evidence that the spelling *cristiata* is an inadvertent error. In the (1840) index to the three volumes of H. Milne Edwards (1834-1840) "Histoire Naturelle des Crustacés" the name is again differently spelled, this time as *custata*. The correct spelling of H. Milne Edwards' species thus is *Mursia cristiata*; all other spellings have to be considered as erroneous subsequent spellings. Also the spelling *Mursica* for the generic name, used by H. Milne Edwards, 1843, in the explanation of pl. 13 is an erroneous spelling of *Mursia*.

De Haan (1837: 70), in the same year that H. Milne Edwards published his *Mursia cristiata*, also gave a scientific name to the species, namely "*Mursia cristimanus*, Desmarest," being the latin translation of Desmarest's "Mursie Mains-en-crête." De Haan did this in the text of the third Decas of the Crustacea volume of Fauna Japonica, but he did not provide the name with a description. However, in the same Decas, on pl. E, he published figures of the mouth parts of the species which he named there *Mursia cristimana*. In the next Decas De Haan (1839: 73) gave descriptive characters of the species (as *Mursia cristimana*). The fact that De Haan (1837) published the name *Mursia cristimana* with a figure, makes the name available.

Since that time both the names *cristata* and *cristimana* have been used for the species, which is South African and does not occur in Japan. So Herklots (1861) in his catalogue of the Crustacea of the Leiden Museum referred to De Haan's type material under "*Mursia Cristata*," mentioning De Haan's use of the name *cristimana*. In 1900 Stebbing (1900: 22) reviewed the situation and advised to use the name *Mursia cristimanus* De Haan, 1837 for the species: "It may no longer be possible to decide the question of priority between De Haan and Milne-Edwards, their respective works having both been published in 1837, but that being the case, it would be absurd to give such a

form as *cristiata* preference over *cristimanus*." Since that time the name *Mursia cristiimanus* was generally accepted for the species.

Stebbing's surmise that the dates of publication of H. Milne Edwards' and De Haan's names could not be further narrowed down proved to be incorrect. Holthuis (1979: 290-291, 295) showed that vol. 2 of H. Milne Edwards' *Histoire Naturelles des Crustacés* was published on or before 1 July 1837 and that with the available evidence that date had to be accepted as the date of the new names published in H. Milne Edwards' volume. The date of publication of Decas III of De Haan's *Crustacea* volume so far was only known as 1837 (Holthuis & Sakai, 1970: 72). Thanks to the cooperation received from Mrs. F. van Anrooij and Mr. J. H. Kompagnie of the Algemeen Rijksarchief (General National Archives) in The Hague, it was possible to more accurately fix the date of publication of Decas III mentioned above. As pointed out by Holthuis & Sakai (1970: 72), the Dutch Government, through the Department of Internal Affairs, subscribed to 10 copies of *Fauna Japonica*, as a kind of subsidy to the publication of that work. These 10 copies were sent out to 10 Dutch public libraries. The date on which the various fascicles were received by the Department was noted in many instances. A query to the Rijksarchief about that date for Decas III was kindly answered by Mrs. van Anrooij, who indicated that this was received by the Department of Internal Affairs on 16 August 1837 and must have been published a very short time before that; for purposes of zoological nomenclature 16 August 1837 has to be accepted as the date of publication of *Mursia cristiimana* De Haan. It is clear therefore that *Mursia cristiata* H. Milne Edwards has priority over *Mursia cristiimana* De Haan.

Mursia cristiata is a South African species, whose range extends from Saldanha Bay in the West to Durban in the East; it inhabits depths of 16 to 330 m.

Leucosiidae

Leucosia perlata De Haan, 1841

Figure 2

Leucosia perlata De Haan, 1841: 134.

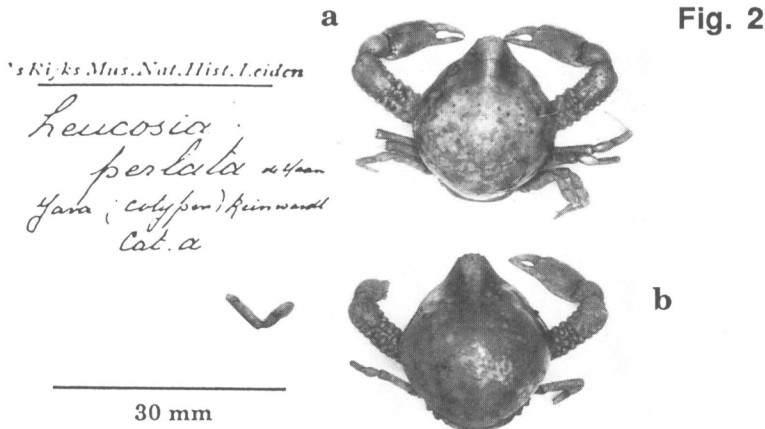
Leucosia Perlata: Herklots, 1861: 140.

Leucosia perlata: De Man, 1881: 124.

Leucosia perlata: Tyndale-Biscoe & George, 1962: 84.

Material. – Java, Indonesia, 1816-1822, C. G. C. Reinwardt, 1 dry lectotype ♂ (CW: 21.9 mm) (a) and 1 dry paralectotype ♀ of *Leucosia perlata* De Haan (old label: "*perlata* F. Jap. M. Reinwardt Java") (b); no mouth parts taken out.

Rather hidden, near the end of the text of *Leucosia rhomboidalis* n. sp., on p. 134 of *Fauna Japonica*, De Haan gave a five line description of a new "species Moluccensis, (*L. perlata* n.)." No illustrations were provided. De Haan's indication that the type material



came from the Moluccas evidently rests on an error: both Herklots (1861) and the type lot itself indicate the locality as "Java."

De Man (1881) unearthed De Haan's description and types, and showed *Leucosia perlata* De Haan, 1841, to be a senior synonym of *Leucosia pallida* Bell, 1855, a conclusion with which Tyndale-Biscoe & George (1962) concur. The name *L. perlata* is now generally accepted for the species.

Corystidae

Nautilocorystes ocellatus (Gray, 1831)

Figure 3

Corystes (Dicera) 8-dentata De Haan, 1833: 15, pl. 15, pl. A.

Corystes (Dicera) Ocellata: Herklots, 1861: 120.

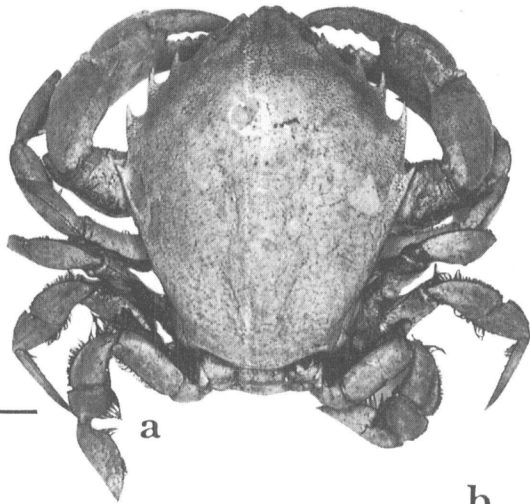
Nautilocorystes ocellatus: Stebbing, 1914: 264.

Material. – Cape of Good Hope, South Africa, 1826-1833, leg. H. B. van Horstok, 1 dry ♂ (CW: 38.3 mm) holotype of *Corystes (Dicera) octodentata* De Haan, 1833 (with plain label "*Nautilocorystes (Dicera) ocellata* M. Edw. Horstok. Cap") (a) and mouth parts ("*Corijstes (Dicera) 8-dentata* n. sp. Pr. B. Sp. [= Promontorio Bonae Spei]") (b).

De Haan (1833: 14, 15) gave an extensive description of the new subgenus *Dicera* of the genus *Corystes*. In this subgenus he placed as only species *C. (D.) octodentata* which thus is its type by monotypy. The mouth parts of the species are figured on pl. A. The figure, and also the description of the subgenus make the name *octodentata* (written by De Haan as *8-dentata*) an available name. Herklots (1861: 120) used the specific name *ocellata* H. Milne Edwards, 1837, for the species rather than *octodentata* De Haan, 1833, probably in the erroneous belief that Milne Edwards' name had priority. Later authors, realizing that De Haan's name is the older, turned back to *octodentata*. But Stebbing (1914) showed that there is a still older name for the species, viz., *Corystes ocellata* Gray,

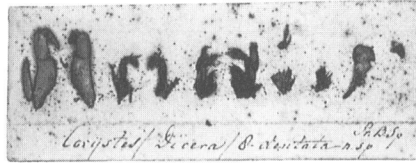
Fig. 3

Nautilocorystes ocellatus
 (Gray, 1831)
 holo
 type van *Corystes* (*Dicera*)
ocellata De Haan, 1833
 Kaap de Gode Hoop, Z. Afrika
 1826-1833. H. B. van Heisterok



5 cm

Nautilocorystes cecillatus
 (Gray, 1831)
 manddelen van hele type van
Corystes (*Dicera*) *ocellata* De Haan,
 1833
 Kaap de Gode Hoop, Z. Afrika, 1826-1833
 H. B. van Heisterok



5 cm

1831, and that the name *ocellata*, be it with Gray (1831) rather than H. Milne Edwards (1837) as author, has to be used for it.

The generic name *Dicera* De Haan, 1833, although a senior synonym of *Nautilocorystes* H. Milne Edwards, 1837, cannot be used for the genus as it is a junior homonym of *Dicera* Germar, 1817 (Hymenoptera). Gistel (1848) replaced the preoccupied *Dicera* De Haan, 1833 by a new name *Alyptes* Gistel, 1848, but that is a junior synonym of *Nautilocorystes*. So neither De Haan's new generic name, nor his new specific name can be used for the species.

Portunidae

Charybdis anisodon (De Haan, 1835)

Figures 4-A & 4-B

Portunus (*Thalamita*) *anisodon* De Haan, 1833: 10.

Portunus anisodon: De Haan, 1835: 42.

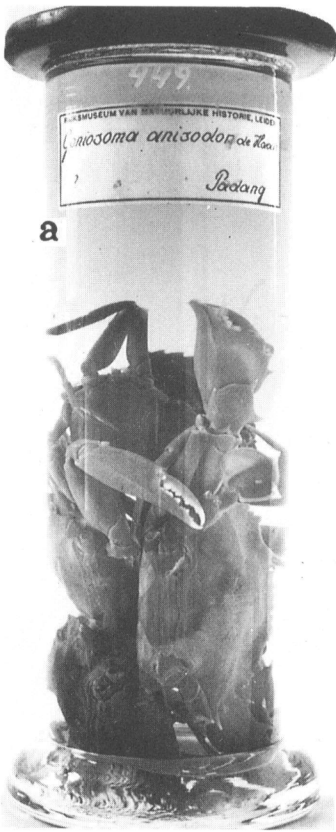
Portunus (*Thalamita*) *Anisodon*: Herklots, 1861: 119.

Charybdis (*Charybdis*) *anisodon*: Leene, 1938: 64, figs. 29, 30.

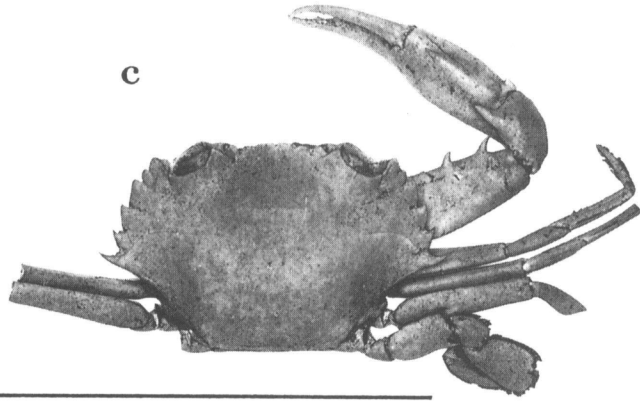
Material. – Timor, Indonesia (probably 1828-1829, H. C. Macklot and S. Müller), 1 ♂

Fig. 4-A

Charybdis anisodon (De Haan, 1855)
Lectotype van *Portunus anisodon* De Haan, 1835.
Molukken, Indonesia 1828 H.C. Macclot



a

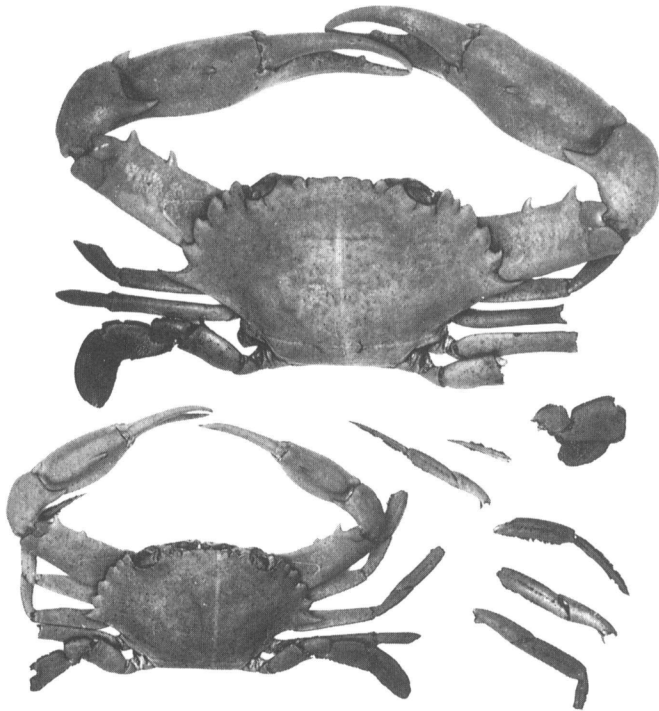


c

Charybdis anisodon (De Haan, 1855)
Paralectotypen van *Portunus anisodon* De Haan, 1835
Java, Indonesia 1820-1823 H. Huhl & J.C. van Hasselt.



b



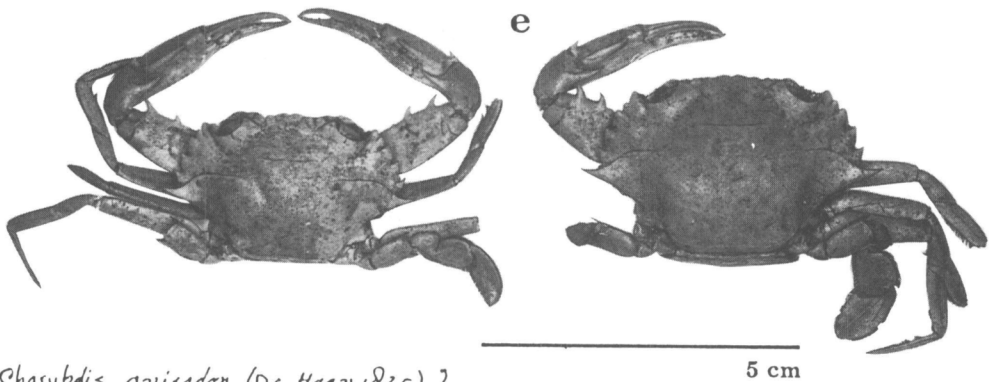
d

10 cm

paralectotype, in alcohol, reg. no. D. 450 (b). Padang, east coast of Sumatra, Indonesia (probably 1833-1835, S. Müller), 3 ♂ and 1 ♀ paralectotypes, in alcohol, reg. no. D 449 (a). Java, Indonesia, 1820-1823, H. Kuhl and J. C. van Hasselt, 2 dry ♂ paralectotypes (CW: 75.1 & 51.8 mm)(the larger with mouth parts removed) (d). Moluccas, Indonesia, 1828, H. C. Macklot, 1 dry ♂ (CW: 38.8 mm) lectotype (c) and 1 dry ♂ and 1 dry ♀ paralectotypes (all with mouth parts in situ) (plain label: "*Portunus (Thalamita) anisodon* n. Macklot Molucq.") (e). Mouth parts of paralectotype, Java, Indonesia, 1820-1823, H. Kuhl and J. C. van Hasselt (f).

Charybdis anisodon (De Haan, 1835)
 Paralecto
 Syntypes van *Portunus anisodon* De Haan, 1835.
 Molukken, Indonesia 1828 H.C. Macklot

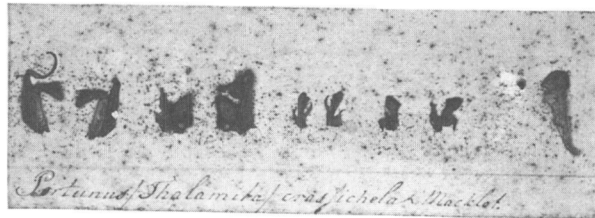
Fig. 4-B



Charybdis anisodon (De Haan, 1835)?
 Monddeelen onder de naam van *Portunus*
 (*Thalamita*) *crassichelus* n. in de collectie
 Vindplaats onbekend 1826- H.C. Macklot
 Mogelijk de monddeelen van grootste ♂ van *Ch.*
anisodon van Java, leg. H. Kuhl e J. C. van Hasselt
 Doch hiervoor geen zekerheid.

5 cm

f



In 1833 De Haan in an enumeration of the species of the subgenus *Thalamita* listed (on p. 10) "*anisodon* n. sp. Macklot ex Insulis Moluccensibus." No more information of the species is found there and *Portunus (Thalamita) anisodon* De Haan, 1833, is a nomen nudum. In the next Decas, De Haan (1835: 42) changed his mind and placed the species in the subgenus *Charybdis*, and in his treatment of *Portunus (Charybdis) variegatus*, Fabr. from Japan, he gave an enumeration of the differences between that species and his new *Portunus anisodon*. This description of *P. anisodon* makes that name available as from 1835. The locality of the new species was said in 1835 to be "ex Mari Indico." The specific name *anisodon* has been generally accepted for the species by later authors (see Leene, 1938).

In the collection of the Leiden Museum there are quite a number of specimens of *Charybdis anisodon* that could be types of the species. They are enumerated above. The lot from the Moluccas collected by Macklot certainly is type material. The fact that in 1835 De Haan extended the locality to Mari Indico (with which usually all localities in the Malay Archipelago were indicated), shows that he included more material in the species in 1835 than he did in 1833. Herklots (1861) still placed the species in the subgenus *Thalamita* and gave Java as the locality. In the old catalogues of the alcohol material the Padang specimens are indicated as types.

It seems best to select the largest male of the lot from the Moluccas as the lectotype of the species.

In the collection is a set of dry mouth parts, glued in the usual way to a strip of cardboard with the inscription "*Portunus (Thalamita) crassichela* n. Macklot." *P. crassichela* evidently is an unpublished manuscript name by De Haan, and it is tempting to think that these mouth parts originate from the large specimen from Java in which they have been dissected out. Supporting this supposition is the fact that the specimen is a large male in which the chelae are conspicuously enlarged and somewhat swollen, so that the name "*crassichela*" is very apt. But as the Javanese specimens are not collected by Macklot, the theory becomes a little shaky.

***Lupella forceps* (Fabricius, 1793)**

Figure 5

Portunus (Lupa) Leachii De Haan, 1833: pl. A.

Portunus (Lupa) forceps: De Haan, 1833: 11.

Portunus (Lupa) Forceps: Herklots, 1861: 119.

Material. – Havana, Cuba. don. Mus. Paris, 1 dry ♂ (CW: 53.5 mm) holotype of *Lupa leachii* De Haan, 1833 (old label: "*Lupa forceps* Fabr. M. Gallic. Havana") (a), and mouth parts ("*Portunus (Lupa) Leachii* n. - *forceps* Zool. Misc." (b).

The specific name *leachii* De Haan, 1833, is an available name, as it was accompanied by a figure when it was established. The words "Zool. Misc." on the label refer to Leach's (1815) "The Zoological Miscellany," where the species is described and figured in vol. 1, p. 123, pl. 54.

The specimen is one of the oldest in the Museum and existed already when the Museum was founded in 1820. It formed part of a collection received from the Paris Museum in 1815 in exchange for a part of the collection of the Dutch Royal family that the French had confiscated in 1795. Most of this collection of the Orange family was returned to Holland in 1815, but at the very urgent request (mainly of Lamarck) part was kept in Paris; in exchange for this part a large collection of duplicates of the Paris Museum was offered to the Dutch. The 24 Crustacea (in 15 species) of this duplicate