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The Decapoda (Crustacea) described by Henri de Saussure

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Abstract: Henri de Saussure described 44 species of decapod; these are listed, the location of the type specimens is given where known and the current nomenclatural combination is given. Type specimens of 34 of the species have been identified in the collections of the Muséum d'histoire naturelle de Genève, and label data and the condition of the specimens are reported for each of these.

Keywords: Crab - shrimp - Mexico - Cuba - Haiti - St Thomas - Guadeloupe - Geneva - type catalogue.

INTRODUCTION

Henri de Saussure described 44 species of decapod, all of them from Mexico and the Caribbean. The specimens described in Saussure's first Crustacea publication (Saussure, 1853) were obtained from the natural history dealers Verreaux (father and sons) in Paris. These specimens were probably left with Félix-Edouard Guérin-Méneville (editor of the revue in which the descriptions were published) so that the latter could compare them with some Crustacea he was describing himself. Guérin-Méneville's collection was then acquired by Thomas Bellerby Wilson and donated to the Academy of Natural Sciences of Philadelphia before 1857 (Boyko, 2000), the transaction taking place while Saussure was on his expedition to Mexico and the Antilles (Hollier & Hollier, 2012). Most of the other species described by Saussure appear to have been collected on that expedition, although the specimens from Guadeloupe must have been collected by someone else. His last Crustacea publication (Saussure, 1858) appeared in the *Mémoires de la Société de Physique et d'histoire naturelle de Genève* but was also printed separately as the first part of Saussure's *Mémoires pour servir à l'Histoire naturelle du Mexique, des Antilles et des Etats-Unis* with the same publication date but different pagination: the pagination cited here refers to the former. Most of the original descriptions are cursory and without illustrations, but most of the species are given longer subsequent descriptions and are illustrated in the final publication (Saussure, 1858). Apart from the type specimens known to be deposited in North America, the type specimens of nearly all of Saussure's species can be identified in the collections of the Muséum d'histoire naturelle in Geneva (MHNG). It remains possible that some type specimens were deposited in other institutions.

Leo Zehntner (1864-1961), who acted as Saussure's assistant in the 1890s, described twenty three species of decapod collected by Maurice Bedot (later the director of the MHNG) and Camille Pictet during an expedition to what is now Indonesia (Zehntner, 1894) and also revised many other specimens in the collection (Hauser, 1972). More recently, Richard Bott (1902-1974) and Michael Türkay (1948-2015) have revised parts of the collection and identified a number of Saussure's type specimens.

ARRANGEMENT AND FORMAT

The species are listed in alphabetic order. The format for each is:

specific epithet Author, publication: page [*Original generic placement*].

Provenance as given in the original description, depository. Type series.

Other information given by Saussure. Enumeration of the type specimens in the MHNG, with specimen condition and label data. Type material in other collections. Other information.

Currently valid combination

Nomenclature follows WoRMS (WoRMS Editorial Board, 2018).

The following abbreviations are used in the list:

ANSP Academy of Natural Sciences of Philadelphia, USA

MHNG Muséum d'histoire naturelle, Geneva

USNM United States National Museum of Natural History, Washington

CATALOGUE

americana Saussure, 1857b: 305 [*Pseudothelphusa*].
Haiti. Unspecified series.

The MHNG collection contains three specimens [MHNG-ARTO-16401, MHNG-ARTO-16402 and MHNG-ARTO-16436] transferred from the dry collection into alcohol and stored in tubes in separate jars. The first specimen is in fragments, the second lacks many appendages and most of those that remain are detached, the third is in fragments. The original identification label, which is still pinned in Crustacea box 183, has “Cuba M H de Saussure” written on it. It is not clear if this is an error, whether the locality given in the original description and in Saussure (1858) is incorrect, or if these specimens are not part of the type series. Bott (1970: 334) considered them likely to be syntypes.

Pseudothelphusa americana Saussure, 1857

americana Saussure, 1857b: 305-306 [*Sesarma*].
Île de Saint-Thomas. Unspecified series.

The MHNG collection contains two pinned dry specimens [MHNG-ARTO-16408 and MHNG-ARTO-16409] in Crustacea box 194. They are accompanied by a small tube secured by a pin through the cork stopper containing a gonopod. The identification label pinned in the box has “St Thomas, M H de Saussure” written on it, indicating that the specimens are syntypes. The second specimen has lost one of the right legs.

Armases americanum (Saussure, 1857)

americanus Saussure, 1857b: 304-305 [*Chlorodius*].
Haiti. Unspecified number of ♂.

The MHNG contains four pinned dry specimens under the name *Leptodius americanus* in Crustacea box 169. One specimen [MHNG-ARTO-16416] has “Haiti ♂ M H de Saussure” written on the identification label pinned in the box and is part of the type series. This specimen has lost one leg from each side. The other three specimens [MHNG-ARTO-16438 to MHNG-ARTO-16440] have “Guadeloupe, M H de Saussure” written on the identification label pinned in the box and are probably not part of the type series. Since the type series was unspecified, the type specimen should be regarded as a syntype.

A junior synonym of *Xanthodius parvulus* (Fabricius, 1793)

americanus Saussure, 1858: 472-473, fig. 31 [*Oplophorus*].

L’embouchure des rivières de l’Île de Haiti. Unspecified series.

The MHNG collection contains five pinned dry specimens [MHNG-ARTO-13988 to MHNG-ARTO-13992] in Crustacea box 32 under the name *Xiphocaris elongata*. The species name label pinned in the box has “= americanus Saussure, Haiti, M H de Saussure” indicating that they are syntypes. The specimens are pinned and all have

lost appendages; MHNG-ARTO-13989 has also lost the front of the carapace.

A junior synonym of *Xiphocaris elongata* (Guérin-Méneville, 1855)

americanus Saussure, 1857c: 502 [*Panopeus*].
Guadeloupe. Unspecified series.

The MHNG collection has six pinned dry specimens [MHNG-ARTO-16417 to MHNG-ARTO-16422] in Crustacea box 181. The identification label pinned in the box has “Guadeloupe ♂♀ M H de Saussure” written on it, indicating that the specimens are syntypes. The first two have card supports on the pin, and all of the specimens have lost at least one leg.

Panopeus americanus Saussure, 1857

anceps Saussure, 1857c: 502 [*Lupea*].
Cuba. Unspecified series.

The MHNG collection contains the lectotype designated by Türkay (1971: 125) [MHNG-ARTO-16368] in Crustacea box 149. This is a pinned dry specimen with a label on the pin with “Portunus anceps (SAUSSURE) TYPUS! Türkay revid. VII.1970” typewritten on it. The specimen has lost three left legs, one right leg and parts of one left leg and three right legs. The identification label has “Cuba Mr H de Saussure” written on it. A second pinned dry specimen in the same box [MHNG-ARTO-16369] was designated as a paralectotype. Both specimens were illustrated in Türkay (1971: plate 3). Two other specimens placed under this name in the same box were identified by Türkay (1971: 125) as syntypes of *Lupea duchassagni* Desbonne in Desbonne & Schramm, 1867, a junior synonym of *L. anceps* Saussure, 1857. It is stated in Desbonne & Schramm (1867) that their specimens were compared with the types of Saussure and Stimpson, but it is not stated explicitly where their type specimens are deposited. It is possible, that if this is indeed a type specimen, that there are others present in the MHNG.

Portunus anceps (Saussure, 1857)

armatus Saussure, 1853: 355-357, pl. 13, fig. 1 [*Mithrax*].
Côte occidentale du Mexique; Mazatlan. Unspecified number of ♀.

No specimens found in the MHNG collection. According to Boyko (2000: 128) there is a ♀ type specimen from Mazatlan (referred to as the holotype) in the ANSP [ANSP CA3843].

Mithrax armatus Saussure, 1853

aztecus Saussure, 1857c: 503-504 [*Cambarus*].
Mexico. Unspecified series.

Saussure (1858: 461) gave the type locality as “Tomatlan, dans les Terres-Chaudes”. Hobbs (1987) stated that there was a syntype in the collections of the USNM (and 13 in MHNG). The MHNG collection contains eleven pinned dried specimens in Crustacea box 68. Four of these [MHNG-ARTO-14912 to MHNG-ARTO-14915]

have "Tomatlan (Mexique), M H d Saussure" written on the associated identification label and are syntypes. The specimens are in good condition apart from each having lost most of their antennae. The identification label associated with the other specimens [MHNG-ARTO-14916 to MHNG-ARTO-14922] have "Misantla, Mexique, Dr Vogt" written on it, and these specimens are not part of the type series.

A junior synonym of *Procambarus mexicanus* (Erichson, 1846)

aztecus Saussure, 1857c: 504 [*Palaemon*].

Vera-Cruz. Unspecified series.

Saussure (1858: 466) stated that he found the species in good quantities at Vera Cruz and at the mouth of the "Rio de Tampico". The MHNG collection contains five pinned dry specimens [MHNG-ARTO-14671 to MHNG-ARTO-14675] in Crustacea box 52 and one pinned dry specimen [MHNG-ARTO-14686] in Crustacea box 52d. The species name labels pinned in both boxes have "Vera Cruz" written on them and the specimens are syntypes. The specimens in box 52 have lost the ends of many appendages; the specimen in box 52d has lost the appendages of the left side and the ends of most of the appendages of the right.

A junior synonym of *Macrobrachium carcinus* (Linnaeus, 1758)

bicornis Saussure, 1857c: 501 [*Pericera*].

Antilles. Unspecified series.

The MHNG collection includes four specimens under the name *Microphrys bicornutus* which are probably syntypes of this species. Two pinned dry specimens in Crustacea box 133 [MHNG-ARTO-15980 and MHNG-ARTO-15981] are placed with a label pinned in the box with "galibica Desbr., Pericera bicornis Sss., Milnia bicornuta Simps., Guadeloupe ♂♀ M H de S." written on it. Both of these specimens are in excellent condition. Two pinned dry specimens in Crustacea box 135f [MHNG-ARTO-16114 and MHNG-ARTO-16115] have "bicornutus Latr., Guadeloupe, M He de Saussure" written on the species name label pinned in the box and are less certainly syntypes. Both of these specimens have lost some of their legs.

A junior synonym of *Omalacantha bicornuta* (Latreille, 1825)

consobrinus Saussure, 1857a: 101-102 [*Cambarus*].

Les mares de la partie centrale de l'île de Cuba. Unspecified number of ♂ and ♀.

The MHNG collection contains eight pinned dry specimens [MHNG-ARTO-14904 to MHNG-ARTO-14911] in Crustacea box 68, four pinned dry specimens in Crustacea box 69 [MHNG-ARTO-14947 to MHNG-ARTO-14950] and one pinned dry specimen in Crustacea box 60b [MHNG-ARTO-14796]. There is also a card mount with dissected appendages glued to it in

Crustacea box 68. All of the specimens in Crustacea box 68 are in fairly good condition apart from each having lost most of their antennae. The identification label in this box has "Cuba M H d Saussure" written on it and the specimens are syntypes. The specimens in Crustacea box 69 are rather shrivelled and have lost appendages; they are palced under the name *Procambarus cubensis* (Erichson), but each has a label on the pin with "Camb. consbrinus, Cuba, Sauss." and these are probably also syntypes. The specimen in box 60b (a mixed box of "doubles") is in good condition, lacking the ends of the antennae. It has only "Cuba" written on the identification label, but is probably also a syntype.

A junior synonym of *Procambarus cubensis* (Erichson, 1846)

consobrinus Saussure, 1857c: 504-505 [*Palaemon*].

Vera-Cruz. Unspecified series.

The MHNG collection contains three pinned dry specimens [MHNG-ARTO-14587, MHNG-ARTO14607 and MHNG-14608] and two vials, each containing four small dry specimens, secured by pins through the cork stoppers [MHNG-ARTO-14609 and MHNG-ARTO-14610] in Crustacea box 47. The species name label pinned in the box under the pinned specimens has "Vera Cruz, M H de Saussure" written on it, indicating that the specimens are syntypes. The label pinned in the box under the specimens in tubes has "Ventosa (Mexique)" written on it and the specimens are not part of the type series. The syntypes have insect feeding damage and the ends of most of the appendages are missing.

A junior synonym of *Macrobrachium olfersii* (Wiegmann, 1836)

convexa Saussure, 1853: 362-364, pl. 13, fig. 3 [*Calappa*].

Côte occidentale du Mexique; Mazatlan. Unspecified series.

No specimens found in the MHNG collection. According to Boyko (2000: 130) there are two ♂ syntypes from Mazatlan in the ANSP [ANSP CA3695].

Calappa convexa Saussure, 1853

cornutus Saussure, 1857c: 501 [*Mithrax*].

Antilles. Unspecified number of ♀.

The MHNG collection contains two pinned dry specimens [MHNG-ARTO-15960 and MHNG-ARTO-15961] in Crustacea box 129. The species name label in the box has "Antilles ♀ M H de Sauss." written on it and the specimens are syntypes. The first has lost six legs, the second has lost two.

Nemausa cornuta (Saussure, 1857)

crenulatus Saussure, 1857c: 501-502 [*Lambrus*].

Antilles. Unspecified series.

Saussure (1858: 430) stated that he has several individuals. The MHNG collection contains five pinned dry spe-

cimens under the name *Platylambrus serratus*. Four specimens in Crustacea box 138 [MHNG-ARTO-16129 to MHNG-ARTO-16132] have “Antilles M de Sauss.” written on the species name label in the box. Each specimen is supported on a card mount added to the pin. Three have the front legs detached and glued to the card and have lost most of the smaller legs. The single specimen in Crustacea box 135f [MHNG-ARTO-16118] is also supported on a card mount and has lost most of the smaller legs. These specimens are syntypes.

A junior synonym of *Platylambrus serratus* (H. Milne Edwards, 1834)

cristata Saussure, 1857b: 306 [*Sicyona*].

Cuba. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-13923] in Crustacea box 31. The species name label pinned in the box has “Cuba, M H de Saussure” written on it, indicating that the specimen is a syntype. The specimen, which has been repaired with glue, has insect feeding damage and lacks the ends on most of its appendages. A note in the box states that the name is a junior homonym [of *S. cristata* de Haan, 1844]. A replacement name was proposed by Stimpson (1871: 159).

Replaced by the name *Sicyona brevirostris* Stimpson, 1871

cubensis Saussure, 1858: 455-456 [*Pagurus*].

Les côtes de Cuba. Unspecified series.

The MHNG contains one pinned dried specimen [MHNG-ARTO-15332] and three specimens [MHNG-ARTO-15333 to MHNG-ARTO-15335] still in the host shells, which are glued to individual cork mounts on pins in Crustacea box 87. The pinned specimen has lost most of the appendages and the rear of the body is detached and secured on a separate pin. The other specimens, two of which are very small, are mostly hidden by the shells and have lost their antennae. The identification label has “Cuba, M H de Saussure” written on it and the specimens are probably all syntypes.

A junior synonym of *Clibanarius sclopetarius* (Herbst, 1796)

cubensis Saussure, 1857c: 503 [*Remipes*].

Cuba. Unspecified series.

Saussure (1858: 452) stated that he had many specimens of all ages. The MHNG collection contains twenty-four pinned dried specimens [MHNG-ARTO-15590 to MHNG-ARTO-15613] accompanied by a card mount with many appendages glued to it, in Crustacea box 99. The identification label in the box has “Cuba, M H de Saussure” written on it and these specimens are syntypes. There is insect feeding damage to some of the larger specimens, and many have lost appendages. There is also one pinned dry specimen in Crustacea box 100bis [MHNG-ARTO-15630]. The identification label in the

box only has “Cuba” written on it but the specimen, which has lost three legs, is probably a syntype.

A junior synonym of *Hippa testudinaria* (Herbst, 1791)

depressus Saussure, 1857b: 305 [*Gecarcinus*].

Haiti. Unspecified series.

The MHNG collection contains two specimens [MHNG-ARTO-16403 and MHNG-ARTO-16404] which have been transferred from the dry collection into alcohol, and are stored in separate tubes in the same jar. Both have the remaining appendages detached, the second has a damaged carapace and is accompanied by a small vial containing dissected parts. The jar contains two typewritten labels that indicate that Türkay revised the specimens in 1972 and identified them as *G. lateralis lateralis* (Fréminville, 1836) (this authority was used by Türkay, 1970: 337). The original identification label, which is still pinned in Crustacea box 199, has “Haiti M H de Saussure” written on it, indicating that the specimens are syntypes.

A junior synonym of *Gecarcinus lateralis* (Guérin-Ménéville, 1832)

dubius Saussure, 1858: 445, fig. 16 [*Metopograpsus*].

Les Antilles; Saint-Thomas. Unspecified number of ♀.

The MHNG contains one pinned dry specimen [MHNG-ARTO-16423] in Crustacea Box 190 with a label on the pin on which “Etiqueté comme Goniograpsus dubius Sauss. Ile St. Thomas” is written, apparently by Zehntner. The right claw is detached and glued to the label on the pin. A typed label pinned in the box indicates that Türkay revised the specimen in 1971 and identified it as *Pachygrapsus transversus* (Gibbes), to which a printed “Typus” label has been glued. Türkay (1974: 142) referred to this specimen as the ♀ holotype, which represents an inadvertent lectotype designation.

A junior synonym of *Pachygrapsus transversus* (Gibbes, 1850)

edwardsii Saussure, 1853: 366-367, pl. 12, fig. 3 [*Porcellana*].

Côte occidentale du Mexique; Mazatlan. Unspecified series.

No specimens found in the MHNG collection. According to Boyko (2000: 130) there are three possible syntypes (one ♂ and two ♀) in the ANSP [ANSP CA4152], although unlike the other specimens he discussed those of *P. edwardsii* did not have the locality Mazatlan on the label. One of these specimens (the one lacking a supraocular spine) was designated as the lectotype by Hillier & Werding (2007: 191).

Petrolisthes edwardsii (Saussure, 1853)

faustinus Saussure, 1857c: 505 [*Palaemon*].

Haiti. Unspecified series.

The MHNG collection contains five pinned dry specimens [MHNG-ARTO-14661 to MHNG-ARTO-14665]

in Crustacea box 52 and three pinned dry specimens [MHNG-ARTO-14681 to MHNG-ARTO-14683] in Crustacea box 52d under this name. According to the data written on the species name labels pinned in the box, those in box 52 come from Cuba and Mexico and are not part of the type series. The species name label pinned in box 52d has "Haïti, M H de Saussure" written on it, indicating that these specimens are syntypes. One of these [MHNG-ARTO-14681] has lost the ends of most of the right appendages, while another [MHNG-ARTO-14683] has lost the ends of the rear left appendages.

Macrobrachium faustinum (Saussure, 1857)

gracilis Saussure, 1857c: 502-503 [*Metapograpsus*].

Saint-Thomas. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-16424] under this name in Crustacea box 190. The identification label in the box has "Île St Thomas, M H de Saussure" written on it and there is a label pinned in the box indicating that Türkay revised the specimen in 1971 to which a printed "Typus" label has been glued. The carapace is cracked and two legs are missing. Türkay (1974: 144) referred to this specimen as the ♀ holotype which represents an inadvertent lectotype designation.

Pachygrapsus gracilis (Saussure, 1857)

gracilis Saussure, 1858: 449-450 [*Plagusia*].

Les Antilles, Cuba. Unspecified series (many individuals).

The MHNG contains two pinned dry specimens placed under the name *P. depressa*; the first [MHNG-ARTO-16426] is in Crustacea box 197, the second [MHNG-ARTO-16437] in Crustacea box 197a. The first specimen is in excellent condition. The identification label pinned in the box has "Guadeloupe M. de Sauss." written on it. There is a typed label pinned in the box indicating that Türkay revised the specimen in 1971, that he identified it as *Plagusia depressa* (Fabricius), and which has a printed "Typus" label glued to it. The second specimen is supported on a card mount and the carapace is broken. One left leg and two right legs are missing and the others are held in place with glue. The identification label pinned in the box has "Cuba, M H de Saussure" written on it. There is a typewritten label pinned in the box indicating that Türkay revised the specimen in 1971 and that he identified it as *Plagusia depressa* (Fabricius), and which has a printed "Typus" label glued to it. It is not clear whether the locality of the first specimen is given incorrectly on the label or if Türkay was mistaken in identifying it as a syntype, but the label is not original (Saussure is spelled in full on the older labels) and it is probable that Türkay was correct.

A junior synonym of *Plagusia depressa* (Fabricius, 1775)

guadalupeensis Saussure, 1857c: 502 [*Portunus*].

Guadeloupe. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-16318] in Crustacea box 146. The identification label in the box gives the name as "guadeloupeensis" and has "Guadeloupe, ♂, M H de Saussure" written on it. The specimen, which has lost the ends of two legs, is accompanied by a label pinned in the box on which "Macropipus guadalupeensis (SAUSSURE) Holotypus, M. Türkay revid. VIII.1970" is written and to which a printed label on red card with "TYPUS" written on it has been glued. It is not clear why Türkay followed the orthography of the specific epithet used by Saussure (1858: 433) rather than that in the original description. Türkay (1971: 118) referred to this specimen as the holotype, which represents an inadvertent lectotype designation.

Macropipus guadalupeensis (Saussure, 1857)

insignis Saussure, 1857c: 503 [*Pagurus*].

Guadeloupe. Unspecified series.

The MHNG collection contains one dried specimen [MHNG-ARTO-15275] pinned into position in Crustacea box 84. The identification label has "insignis? Sauss., Cuba, M H de Saussure" written on it, indicating that it is not part of the type series. The whereabouts of the types(s) is unknown.

Dardanus insignis (Saussure, 1857)

jurinei Saussure, 1853: 365-366, pl. 13, fig. 4 [*Guaia*].

Côte occidentale du Mexique; Mazatlan. Unspecified series.

No specimens found in the MHNG collection. According to Boyko (2000: 130) there are five ♂ and three ♀ syntypes from Mazatlan in the ANSP [ANSP CA3695].

Leucosilia jurinei (Saussure, 1853)

lucasia Saussure, 1853: 367, pl. 12, fig. 4 [*Albuminea*].

Côte occidentale du Mexique; Mazatlan. Unspecified series.

No specimens found in the MHNG collection. According to Boyko (2000: 130) there is one ♀ type specimen from Mazatlan (referred to as the holotype) in the ANSP [ANSP CA41021].

Albunea lucasia Saussure, 1853

lutaria Saussure, 1857a: 100-101 [*Halopsyche*].

Côtes de Cuba. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-14113] under the name *Alpheus lutarius* in Crustacea box 33. The body of the specimen is pinned, and has a label with "Cuba" and a label with "Selon T. E. Yves Proceed. Ac. Nat Sci Philad. 31 March 1891 pag. 183 l'Alpheus luctarius Sss. est synonym. avec A. heterochaelis Say" written on it on the pin. The species name label pinned in the box has "Cuba, M H de Saussure" written on it, indicating that the specimen is a syntype.

Most of the anterior appendages have been removed, glued to a piece of card and annotated in ink.

A junior synonym of *Alpheus heterochaelis* Say, 1818

mexicana Saussure, 1857c: 505 [*Caridina*].

Vera-Cruz. Unspecified series.

Saussure (1858: 463) gave a size range, indicating that he had more than one specimen. The MHNG collection contains one pinned dry specimen [MHNG-ARTO-13987] under this name in Crustacea box 32. The pin has a label with “Vera Cruz” written on it and the species name label pinned in the box has “Vera Cruz, M H de Saussure” written on it, indicating that it is a syntype. The specimen is in fairly good condition with most appendages intact.

Potimirim mexicana (Saussure, 1857)

mexicanus Saussure, 1857c: 504 [*Palaemon*].

Cuba et Mexique. Unspecified series.

Saussure (1858: 468) noted that this species was valued as a food resource. The MHNG collection contains six pinned dry specimens [MHNG-ARTO-14590 and MHNG-ARTO-14601 to MHNG-ARTO-14605] in Crustacea box 48. The species name label pinned in the box has “Mexique, M H de Saussure” written on it and these specimens are syntypes. Although all the specimens have most appendages intact, specimen MHNG-ARTO-14602 has the pleon detached and in two pieces, held in place by other pins, MHNG-ARTO-14603 has the end of the pleon detached and held in place by other pins, and the abdomen of MHNG-ARTO-14605 has been reattached with glue. There are two small pinned dry specimens [MHNG-ARTO-14596 and MHNG-ARTO-14597] in Crustacea box 49. Both have a label on the pin with “Vera Cruz” written on it, and the species name label pinned in the box has “Vera Cruz, M^r H de Sauss.” written on it, indicating that these specimens are syntypes. Both have lost some appendages. There are eleven pinned dry specimens [MHNG-ARTO-14691 to MHNG-ARTO-14701] in Crustacea box 52e. A label in the box states that these specimens are “doubles”. The species name label pinned in the box under these specimens has “Mexique” written on it and these specimens are probably also syntypes. They all have some insect feeding damage and many of the appendages lack the ends. There are two further specimens [MHNG-ARTO-14593 and MHNG-ARTO-14594] in Crustacea box 49, but the species name label pinned in the box under these specimens gives the identification as “mexicanus?” and therefore these specimens cannot be considered syntypes.

A junior synonym of *Macrobrachium acanthurus* (Wiegmann, 1836)

miniata Saussure, 1857b: 306 [*Sesarma*].

Ile de Saint-Thomas. Unspecified series.

The MHNG collection has six pinned dry specimens [MHNG-ARTO-16410 to MHNG-ARTO-16415] in Crustacea box 194. The last has a label on the pin with “Ile St Thomas” written on it and the identification label

pinned in the box has “St Thomas, M H de Saussure” written on it, indicating that the specimens are syntypes. All of the specimens have lost legs, and the third lacks the left eye.

A junior synonym of *Armases ricordi* (H. Milne Edwards, 1853)

miniatus Saussure, 1857c: 503 [*Metapograpus*].

Saint-Thomas. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-16425] with a label on the pin on which “Etiqueté comme Goniograpus miniatus Sauss. Ile St Thomas” is written. A typed label pinned in the box indicates that Türkay revised the specimen in 1971 and identified it as *Pachygrapsus transversus* (Gibbes), and which has a printed “Typus” label attached to it. The specimen has a card support to which two detached legs have been glued. Four legs are missing. Türkay (1974: 142) referred to this specimen as the ♂ holotype, which represents an inadvertent lectotype designation.

A junior synonym of *Pachygrapsus transversus* (Gibbes, 1850)

minutus Saussure, 1858: 425-426, fig. 1 [*Mithrax*].

Mers des Antilles. More than one ♂ and ♀.

The MHNG collection contains three specimens are labelled as having been identified as *M. minutus* and are almost certainly syntypes in Crustacea box 127. Two pinned dry specimens [MHNG-ARTO-15921 and MHNG-ARTO-15922] have an identification label pinned in the box with “Etiquetés comme Mithrax minutus de Sauss, cependant c’est Mithraculus sculptus Edw.” written on it, apparently by Zehntner. The second has lost the hindmost three left legs and the last right leg. Another pinned dry specimen [MHNG-ARTO-15940] has an identification label pinned in the box with “Etiqueté comme Mithrax minutus de Sauss.” and “Mithraculus coronatus Herbst, Guadeloupe” written on it, apparently by Zehntner. It is possible that some of the other specimens in this box were also part of the type series, but they cannot be positively identified.

A junior synonym of *Mithraculus sculptus* (Lamarck, 1818)

montezumae Saussure, 1857a: 102 [*Cambarus*].

Marais de la vallée de Mexico. Unspecified number of ♂ and ♀.

Saussure (1858: 460) stated that he had found this species in great abundance at Chapultepec, a league from Mexico City. The MHNG collection contains 13 pinned dry specimens [MHNG-ARTO-14933 to MHNG-ARTO-14945] and a card mount with detached appendages glued to it. The larger specimens are in fairly good condition although most have lost some appendages; the smaller specimens are shrivelled. The identification label in the box has “Chapultepec (Mexique) M H de Saussure” and the specimens are all syntypes. Crustacea box 69.

Cambarellus montezumae (Saussure, 1857)

montezumae Saussure, 1857c: 504 [*Palaemon*].

Vera-Cruz. Unspecified series.

The MHNG collection contains three pinned dry specimens [MHNG-ARTO-14668 to MHNG-ARTO-14670] in Crustacea box 52. One of the specimens has a label "Vera Cruz" on the pin and the species name label pinned in the box has "Vera Cruz, M H de Saussure" written on it, indicating that the specimens are syntypes. All of the specimens have lost most of their appendages and MHNG-ARTO-14668 has lost the entire pleon.

A junior synonym of *Macrobrachium carcinus* (Linnaeus, 1758)

occidentalis Saussure, 1857c: 502 [*Panopeus*].

Guadeloupe. Unspecified series.

The MHNG collection contains three pinned dry specimens [MHNG-ARTO-16427 to MHNG-ARTO-16429] in Crustacea box 181. The identification label pinned in the box has "Guadeloupe M H de Saussure" written on it, indicating that the specimens are syntypes. The first specimen has been repaired with glue and all have lost at least one leg.

Panopeus occidentalis Saussure, 1857

picteti Saussure, 1853: 357-359, pl. 13, fig. 2 [*Othonia*].

Côte occidentale du Mexique; Mazatlan. Unspecified number of ♂.

No specimens found in the MHNG collection. According to Boyko (2000: 128) there is a ♂ type specimen from Mazatlan (referred to as the holotype) in the ANSP [ANSP CA3989].

Pitho picteti (Saussure, 1853)

quadrata Saussure, 1857b: 305 [*Cardisoma*].

Haiti. Unspecified series.

Saussure (1858: 438) stated that he had found this species to be fairly abundant in brackish marshes near the shore. The MHNG collection contains three specimens [MHNG-ARTO-16405 to MHNG-ARTO-16407] that have been transferred from the dry collection into alcohol, each in a separate jar. Most of the appendages of all three specimens are detached. Each jar contains a typewritten label that indicates that Türkay revised the specimens in 1970 and identified them as *C. guanhumi* Latreille. The original identification label, which is still pinned in Crustacea box 199, has "Haiti M H de Saussure" written on it, indicating that the specimens are syntypes.

A junior synonym of *Cardisoma guanhumi* Latreille, 1828

quadratus Saussure, 1853: 360-362, pl. 12, fig. 2 [*Gecarcinus*].

Côte occidentale du Mexique; Mazatlan. Unspecified number of ♂.

No specimens found in the MHNG collection. According to Boyko (2000: 128) there are parts of two syntypes from Mazatlan in the ANSP [ANSP CA3741].

Gecarcinus quadratus Saussure, 1853

serratus Saussure, 1857c: 502 [*Panopeus*].

Guadeloupe. Unspecified series.

Saussure (1858: 432) indicated that he had several specimens including juveniles and both sexes. The MHNG collection contains six pinned dry specimens [MHNG-ARTO-16430 to MHNG-ARTO-16435] in Crustacea box 180. The second specimen has a broken carapace, and all but the fourth have lost at least one leg. The identification label pinned in the box has "Guadeloupe M H de Saussure" written on it indicating that the specimens are syntypes.

A junior synonym of *Panopeus occidentalis* Saussure, 1857

spinosissima Saussure, 1857c: 501 [*Pericera*].

Antilles. Unspecified series.

Saussure (1858: 427) gave a more precise type locality, specifying Guadeloupe. The MHNG collection contains one pinned dry specimen [MHNG-ARTO-16013] in Crustacea box 134. The identification label in the box has "Guadeloupe, M H de Saussure" written on it and the specimen is part of the type series. The specimen has lost a leg from each side, and two of the right legs have been reattached with glue. Since the type series was unspecified, this specimen should be regarded as a syntype.

Stenocionops spinosissimus (Saussure, 1857)

tuberculatus Saussure, 1858: 450-451, fig. 9 [*Hepatus*].

Guadeloupe. Unspecified series.

The MHNG collection contains one pinned dry specimen [MHNG-ARTO-15726] in Crustacea box 112. The specimen has lost two legs and the pin is corroded where it enters the carapace. The species name label in the box has "Guadeloupe, M H de Saussure" written on it and the dimensions of the specimen match those given in the original description, indicating that the specimen is part of the type series. Since the series is unspecified, the specimen should be regarded as a syntype.

A junior synonym of *Hepatus pudibundus* (Herbst, 1785)

verreauxii Saussure, 1853: 359-360, pl. 12, fig. 1 [*Ozius*].

Côte occidentale du Mexique; Mazatlan. Unspecified series.

No specimens found in the MHNG. According to Boyko (2000: 128) there is a ♀ type specimen from Mazatlan (referred to as the holotype) in the ANSP [ANSP CA3483].

Ozius verreauxii Saussure, 1853

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Note: Missing references of taxon authorities can usually be found in the WoRMS database (see below).

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