

**Crustacean specimens collected in Japan by Ph. F. von  
Siebold and H. Bürger and held by the Nationaal  
Natuurhistorisch Museum  
in Leiden and other Museums  
(revised edition)**

**Takao Yamaguchi<sup>1)</sup> & Keiji Baba<sup>2)</sup>**

- 1) *Aitsu Marine Station, Matsushima-cho, Amakusa-gun, Kumamoto, 861-6102, Japan*
- 2) *Biological Laboratory, Faculty of Education, Kumamoto University, Kumamoto 860-8555, Japan*

In a previous paper (Yamaguchi & Baba, 1993), the crustacean specimens collected in Japan by Ph. von Siebold and H. Bürger during 1823–1834, and now extant mainly in the Nationaal Natuurhistorisch Museum, Leiden and other museums, were shown. This work was intended not only to complement De Haan's Crustacea Volume of Fauna Japonica, in which none of the material was included in each species account, but also to evaluate their contribution to the development of Japanese natural history by providing zoological notes, historical and technical backgrounds, etc. where necessary under the list of material.

In 1987 when we commenced locating the material of the Siebold and Bürger collection in the Nationaal Natuurhistorisch Museum, most of the dry specimens including types had not been given registration numbers. In 1990, the "Delta Plan for the Conservation of Cultural Heritage" was launched in the Netherlands by the Ministry of Welfare, Health and Cultural Affairs. Financially supported by this plan, all the types in the collections of the National Natuurhistorisch Museum were registered (Fransen et al, 1997) and the dry collections were renovated. The registered numbers for the Siebold & Bürger collection were recorded and verified by TY during a visit to the Museum in 2002.

In this revised edition, nearly all the lots of the Siebold and Bürger's collections were given registration numbers. Excluded from this report are the eight species that do not occur in Japan, but mistakenly incorporated in the Crustacea Volume of Fauna Japonica and that were included in the previous version of our paper: *Solenocera membranacea* (Risso, 1816), *Macrobrachium amazonicum* (Heller, 1862), *Macrobrachium carcinus* (Linnaeus, 1758), *Scyllarus bertholdii* Paulson, 1875, *Parribacus caledonicus* Holthuis, 1960, *Ozius tuberculatus* H. Milne Edwards, 1834, *Micippa cristata* (Linnaeus, 1758), and *Pseudograpsus crassus* A. Milne Edwards, 1868. After the publication of our paper, five species were found in the collection: *Coenobita cavipes* Stimpson, 1858, *Charybdis (Charybdis) riversandersoni* Alcock, 1899, *Thalamita*

*danae* (Stimpson, 1858), *Pilumnus habererianus* Doflein, 1902 and *Macrophthalmus (Mareotis) banzai* Wada & K. Sakai, 1989. Recently Galil (2001) described *Myra cerelis* n. sp. based upon material from von Siebold and Bürger's collections, which had previously been misidentified as *Myra fugax* (Fabricius, 1798) (see Yamaguchi & Baba, 1993). Thus, the total number of species included in the collection has now risen to 197.

In the meantime, documents pertinent to von Siebold and Bürger's collection have been studied, particularly "Kai-ka Rui Siya-sin" [a collection of pictures of crabs and shrimps]. This was prepared by Kurimoto Suiken (1756–1834), then one of the physicians of the Shogun and a well known naturalist, and donated to von Siebold when he paid a visit to Edo (now Tokyo) in 1826. Von Siebold appreciated and cited it in his paper on the Fauna Japonica, as did De Haan (1833–1849). The originals of Suiken's illustrations are now in the library of the Leiden University. The late Dr. Tsune Sakai in his life time wanted to publish these through the Kodansha Printing, but reluctantly abandoned this plan as a result of unavoidable circumstances. However, by the permission of the Leiden University Library, all the colour illustrations have been published in black and white, with annotations of the species figured (Yamaguchi & Holthuis, 2001).

In this revised edition, the arrangement of the species follows that of Miyake (1982, 1983). For each species the current name is first presented, accompanied with the Japanese name in Katakana characters. Shown next in brackets is the name (and pages and plates where the name is used) given by De Haan in the Crustacea Volume of Fauna Japonica. For 12 species, however, it is preceded by the name given by von Siebold (1824) who described them prior to the publication of the Fauna Japonica. The mark © is given to the valid specie's name when De Haan gave two or three different scientific names to the same species. When the species was described prior to De Haan, or redescribed and given a new scientific name by another author, the other name along with references, is presented in brackets in the line next to De Haan's name. Most of the species are presented by several lots. The lots in the Nationaal Natuurhistorisch Museum are listed first, followed by the lots held by the other museums.

Abbreviations used for repositories include:

BM(NH), Natural History Museum, London

KPMY, Kanagawa Prefectural Museum of Natural History, Odawara, Japan

MNHN, Muséum nationale d'Histoire naturelle, Paris

MSR, Staatliches Museum für Naturkunde (Museum Schloß Rosenstein), Stuttgart

NSMT, National Science Museum, Tokyo

RMNH, Nationaal Natuurhistorisch Museum, Leiden

SMF, Forschungsinstitut Natur-Museum Senckenberg, Frankfurt a. M.

USNM, National Museum of Natural History, Smithsonian Institution, Washington, D.

C.

ZMC, Zoologisk Museum, Copenhagen

## シーボルトとビュルゲルが収集した甲殻類標本（改訂版）

山口隆男・馬場敬次

シーボルトとビュルゲルが収集した甲殻類の標本はデ・ハーンによって活用され、「ファウナ・ヤポニカ・甲殻類編」となって、生かされたのであった。「甲殻類編」が執筆された当時はまだ生物が進化し、変化するということが知られていなかった。そのために、生物界の体系を理解するために自然哲学が論じられ、円環説という今日からすると奇妙な説がもてはやされていた。残念なことに、デ・ハーンは円環説の賛同者になり、その考えを「甲殻類編」に持ち込んでいる。しかし、デ・ハーンは極めてすぐれた観察力の持ち主であったので、それぞれの種の特徴をうまく捉えて、種の分類に関しては的確な記述を行っている。いくつもの新属を設けて多くの新種を発表した。その結果、「甲殻類編」は日本産の十脚甲殻類の分類だけではなく、十脚甲殻類の分類学に関する古典的名著となった。

デ・ハーンは多くの新種を設けたので、シーボルトとビュルゲルの甲殻類標本には数多くのタイプが含まれている。それゆえ、分類学的研究において、現在においても重要な標本になっている。それらがどのように保存されているのか、広く調査を行い、1993年に日本甲殻類学会から単行本として刊行された「シーボルトと日本の博物学、甲殻類」において詳しく紹介をした。日本甲殻類学会の設立者で、長く学会の運営にあたってこられた小田原利光先生と水産無脊椎動物研究所から印刷費の援助を頂くことができたので、この本では上質の紙を使用し、見つかった全部の標本を写真で紹介することができた。

シーボルトは著名であるが、ビュルゲル (Heinrich Bürger, 1804 or 1806 - 1854) はあまり知られていないので、簡単に紹介しておきたい。彼はシーボルトの助手として1825-1827年出島に勤務した。シーボルトは1828年に離任することになっていたので、1828年10月1日付けでシーボルトの後任の自然史調査官に任命され、1834年まで勤務した。そして計4回(1830, 1831, 1832, 1834年)の標本発送を行い、ライデンにある日本関連の標本を充実させるのに貢献した。彼は職務に忠実で、さまざまな動植物の標本類を多数作成して送付している。甲殻類標本の場合、タカアシガニなどの一部の例外を除くと、シーボルトとビュルゲルのどちらが採集したものが区別されていない。

その後、標本の大部分を保存しているライデンの国立自然史博物館では、所有する十脚類のタイプ標本のカタログの作成、乾燥標本の整理が行われた。オランダ政府は1990年からデルタプランという文化財保全の企画を数年間推進した。国立民族学博物館にある日本関連の絵画なども対象になり、リストの作成とか修復が行われたが、自然史博物館の甲殻類部門でも人件費の補助を得て、標本のリストの作成、タイプの登録が進められた。その結果、私たちが標本の調査を行った1987年当時には標本番号がまだ与えられていなかった乾燥標本にも現在では番号が与えられている。そのために、2002年2月に改めて国立自然史博物館で標本調査を実施して、新規に作成したのが以下のリストである。

1993年に報告した際には、実際には日本に産しない種なのに、デ・ハーンが誤って「甲殻類編」において日本産として紹介してしまったものもリストして解説を行った。今回ではそうした種、合計8種は省いている。一方、新規に存在が明らかになった種が5種加わり、標本数の変動もあった。また、学名が変更された種がある。

アカイシモドキはアカイシガニに似ているので、デ・ハーンは見過ごしてしまい、甲殻類編では紹介をしなかった。また、調査をした私たちもその存在に全く気付かなかった。しかし、1個体だけではあるが、保存されていることが故永井誠二氏の指摘によって判明した。氏は「シーボルトと日本の博物学、甲殻類」に示したアカイシガニ標本の写真を見て、その中にアカイシモドキがまぎれていることを見出したのであった。

このアカイシモドキの標本の発見は一方で全く思いがけない発見をもたらした。このカニは川原慶賀によって描かれていたのである。国立自然史博物館には、ビュルゲルが出島出入り絵師の慶賀に描かせた美しい甲殻類の写生画が53枚保存されている(ホルサイス・酒井, 1970; 山口・ホルトハウス, 1993)。その中にアカイシモドキが含まれている。しかし、デ・ハーンはアカイシモドキを見過ごしてしまい、その標本があったのに、アカイシガニと思いこんでいた。私たちも同じ誤りをしてしまったが、その標本と川原慶賀の写生図とを比較してみた。その結果、甲幅が全く同じで、大きさが一致するのである。そればかりではなかった。標本の右ハサミ脚の長節にある1本の棘は奇形的になっていて、2本に分かれている。写生図も全く同じなのである。この一致から、慶賀は実物と同じ大きさで、実物そのままに甲殻類を描いていたことが判明した。従って、描かれた写生画53枚のそれぞれに対応する標本があるに違いない。

当時の日本では標本の保存は困難であった。日本は高温多湿であり、良好な状態で甲殻類の標本を長期保存することは容易ではなかった。液浸標本のためには適当な容器は無く、アルコールのようなものも入手困難であった。乾燥標本は一時的には保存できても、虫害を防ぎ、美しい状態に長期間保つことは難しかった。そのこともあって、自然史研究者や愛好家は自ら写生をしたり、させたりしたのである(山口・ホルトハウス, 2001)。写生画は標本の代用であるから、実物大に描かれる傾向があった。川原慶賀の写生図にもそうした当時の自然史研究者の傾向が反映されている。アカイシモドキの標本と川原慶賀の写生図は76, 77ページの**Plates 1 & 2**に示してある。なお、指摘して下さった永井誠二氏には最愛の一人息子が目前で車に轢かれるという痛ましい出来事があり、その後しばらくして亡くなられた。氏はアマチュアの甲殻類研究者であり、熱心な標本収集家として知られていた。

また、標本が完全に失われていたと考えられたものが見つかった場合がある。ヒメケブカガニは口器だけではあるが、標本が残っていることが判明したので、新規にリストした。これらの他に、ミナミベニツケモドキも1個体だけであるが、標本があることが判明した。さらに、標本が新規に見つかったものがあった。たとえば、チゴガニではそれまでは3個体の乾燥標本しか無いと思われていたが、別に一箱あることが判明して、一挙に6個体も増え、合計9個体になった。イシガニの場合には多数の標本が見つかっており、標本数は実に53個体も増加して、全部で122にもなっている。

一方、合計して7種の学名に関して変更があった。前回のリストの発表が1993年であり、今回が2003年なので、丁度10年が経過したが、すでに記載されて久しい種であっても、分類学的研究の進展に応じて、それなりの変化が生じるのである。イスラエルの海洋生物研究所のガリル女史(Dr. Bella S. Galil, National Institute of Oceanography, Haifa, Israel)はP. F. Clark氏と共著でキンセンガニ類の分類の再検討を行い、それまで*Matuta* 1属とされていたキンセンガニ類に3つの新属を設けた。その結果、コモンガニの属名が*Matuta* から*Ashtoret*に変更されることになった。また女史は日本産のテナゴコブシはFabriciusが記載した*Myra fugax*と異なった別種であると結論して、*Myra celeris*という新種を記載した。女史はライデンのシーボルト・ビュルゲルの標本を調べており、彼等の標本はその新種のタイプになったのである。また、ヒメヤマト

オサガニが新種として記載された。

ドロイシガニの場合には属名の変更があった。その事情はドロイシガニの標本リストの箇所述べているが、その属名がすでに別の生物に用いられていたことが判明したためである。

こうした分類学的な変更に加えて、ライデンの国立自然史博物館の新築と移転があった。1998年にRaamsteegのクラシックで広大な建物からライデン中央駅の西方のモダンな新館へ移転した。その結果、液浸標本は旧館では収容するスペースが不足して、他の動物の部屋も借りねばならない状態であったのが、現在は十分なスペースがあり、標本の探索も容易になっている。(新館の標本棟の床面積は全体として以前の70%程度に減少しており、甲殻類部門では状態が改善されたが、鳥類や哺乳類部門ではスペースの不足が生じて、深刻な問題が生じている。)

新館における標本の保存状態はPlate 3に示している。なお、現在の標本数であるが、箱あるいはピン、管ピンとして十脚甲殻類で19万ということである。個体数ではもちろん、それよりもはるかに多い。標本室は19度、湿度55%に常時保たれており、防火設備は完備している。液浸標本室は19階に、乾燥標本室は13階にある。どちらにも立派な棚や標本タンスがある。ただ、標本室内には小さな机しかないし、電源も無いので、室内でパソコンを使用したり、実体顕微鏡を用いて標本を調べたりするのは困難あるいは不可能なのは残念である。国立自然史博物館は移転の頃に日本の独立行政法人みたいな組織になった。名前は国立でも、運営には採算性も重視されるようになってきている。

前回のリストでは多くの種に解説を加えているが、今回の甲殻類標本リストは原則として学名と標本のリストだけである。しかし、新規に見つかったり、新事実が判ったり、あるいは学名が変更になったりした場合には、日本語による解説を加えた。また、前回は写真で全標本を紹介したが、今回はアカイシモドキに関したもののだけに留めている。

リストでは標本を所有している博物館を略号で示した。そうした表記は分類学の論文ではごく普通に行われている。それらは次の通りである。

RMNH, Nationaal Natuurhistorisch Museum, Leiden ライデンの国立自然史博物館

BM(NH), Natural History Museum, London ロンドンの自然史博物館

MNHN, Muséum National d'Histoire Naturelle, Paris パリの国立自然史博物館

ZMC: Zoologisk Museum at Copenhagen コペンハーゲン大学付属動物学博物館

SME, Forschungsinstitut Natur-Museum Senckenberg, Frankfurt a. M. ゼンケンベルク自然史博物館

MSR, Staatliches Museum für Naturkunde (Museum Schloß Rosenstein), Stuttgart ストゥットガルト自然史博物館

USNM, National Museum of Natural History, Smithsonian Institution, Washington D. C. スミソニアン自然史博物館

NSMT, National Science Museum, Tokyo 国立科学博物館

KPM, Kanagawa Prefectural Museum of Natural History 神奈川県立生命の星・地球博物館

標本がライデンの国立自然史博物館以外の博物館に保存されているのは、標本交換、寄贈等が行われたためである。標本商人に売却されたものもある。標本の点数が比較的多く、余裕がある種では、そうしたことが行われた。標本の売却は本来は認められてはいなかったが、それぞれの標本ごとに価格を設定して、別の欲しい標本と交換するという形式で、標本商人に売却し、見返りに標本商人から欲しいものを入手した。ロンドンの自然史博物館(以前の大英博物館)は交換

ではなく、商人を通じて標本をライデンから入手していた。

日本にも標本があるのは昭和天皇の還暦を記念して、1961年に読売新聞社から招待された大英博物館のイサベラ・ゴードン女史が持ってきたためである。ゴードン博士はライデンの国立自然史博物館のホルトハウス博士と親交があり、ライデンの標本を委託された。丁度その頃、日本甲殻類学会が発足したので、記念の展示会が開催され、そこで展示されたが、マメコブシガニ2点、イシガニ2点とヤマトオサガニ3点であった。本リストに示しているように、いずれも標本の点数が多い種である。国立科学博物館にはマメコブシガニとイシガニが各1点、神奈川県立生命の星・地球博物館にはイシガニが1点ある。残りの標本の所在は不明である。

ライデンの国立自然史博物館は名前が変更されている。現在は *Nationaal Natuurhistorisch Museum* となり、別に *Naturalis* という名前が与えられている。しかし、多くの館員は旧名の *Rijkmuseum van Natuurlike Historie* の略号の *RMNH* に愛着を抱いており、その略号は文献でもすでに定着している。甲殻類部門では現在でもその略号を継続して使用している。標本番号の前にはそれを加えるように要望された。

収集者が多くの場合 *Ph. F. von Siebold & H. Bürger* となっているのは、両名が共同で採集したということではなく、どちらが収集したのか不明であることを意味している。また、収集者がシーボルトなのかピュルゲルなのか区別できる場合であっても、採集された年は現在では全く判らなくなってしまっている。そのため、彼らが出島にいた期間が示されている。シーボルトは1823年8月から1829年の12月末まで出島に滞在していた。彼は1828年に離任の予定であったが、シーボルト事件のために1年遅れて出島を去った。ピュルゲルの場合は1825年から1834年であったので、それらの期間が採集年として示されている。

なお、ライデンにおける標本番号では *D* とか *S* といった大文字が数字の前に新規に加えられることになった。それは *Decapoda* あるいは *Stomatopoda* といった動物群の略称である。パリの自然史博物館でも同様に略号、カニ類 (*Brachyura*) の場合は *B*、が添えられている。

カニ類の乾燥標本は大部分を計測して数値を示している。*CW* は *Maximum carapace width* 最大甲幅で、*CL* は *Maximum carapace length* 最大甲長である。

標本そのものではないが、シーボルトとデ・ハーンが参照した図譜の『蟹蝦類写真』の研究が進み、報告されている。『蟹蝦類写真、かいかるいしゃしん』は日本の甲殻類研究において重要な文献であるので、酒井恒先生が生前に出版のためにずいぶんと努力されていた。一旦は講談社から刊行されるという段階にまで進んだ。講談社からスタッフがライデンに派遣され、シーボルト関係のいろいろな図譜類の撮影が行われて、『蟹蝦類写真』も対象の一つになっていた。

しかし、事情により図譜類出版の計画は中止された。そのことを国立自然史博物館のホルトハウス教授は極めて残念に思っていた。それで、山口は自ら調査研究をすることにして、ライデン大学図書館に保存されている『蟹蝦類写真』を調べ、そのスライドを入手した。調査は1987年に開始したのであったから、ずいぶんと年数がかかってしまったのであるが、2001年に成果を取りまとめて、山口・ホルトハウスの共著として成果を刊行することができた。残念ながら、カラーではない、白黒ではあるが、全図版を紹介し、細かく解説している (Yamaguchi & Holthuis, 2001; 山口, 2001)。山口が所属する熊本大学合津臨海実験所の刊行物カラヌス (*CALANUS*) の特別号 III としてであった。この図譜で扱われている種の同定には故三宅貞祥先生にお世話になった。三宅先生に出来上がった印刷物を御覧に入れることができなかったのは残念であった。

## I. Class Maxillipoda, Subclass Cirripedia

1. *Conchoderma auritum* (Linnaeus, 1767) (Japanese name: Mimi-eboshi) [ミミエボシ]  
1 lot; 5 specimens.  
RMNH C 17 (5 specimens in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
2. *Poecilasma kaempferi* Darwin, 1851 (Japanese name: Hime-eboshi) [ヒメエボシ]  
5 lots; total of 69 specimens (not including specimens in BM(NH)).
  - 1) RMNH C 15 (10 specimens in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
  - 2) RMNH C 254 (16 specimens, dry). = *Anatifa annulata* De Haan (MS). Found on *Portunus pelagicus* (Linnaeus). Japan.
  - 3) RMNH C 255 (7 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
  - 4) RMNH C 256 (6 specimens, dry). Japan, 1825–1834, H. Bürger.
  - 5) RMNH C 257 (30 specimens, dry). = *Anatifa annulata* De Haan (MS). Found on *Macrocheira kaempferi* (Temminck). Japan.
  - 6) BM(NH) (22 specimens, dry). Syntypes of *Poecilasma kaempferi* Darwin. Japan, 1823–1829, Ph. F. von Siebold.
3. *Coronula diadema* (Linnaeus, 1767) (Japanese name: Oni-fujitsubo) [オニフジツボ]  
3 lots; total of 18 specimens.
  - 1) RMNH C 52 (1 specimen in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
  - 2) RMNH C 510 (9 specimens, dry). Japan, 1825–1834, H. Bürger.
  - 3) RMNH C 513 (8 specimens, dry). Japan.
4. *Chelonibia patula* (Ranzani, 1818) (Japanese name: Gazami-fujitsubo) [ガザミフジツボ]  
2 lots; total of 5 specimens.
  - 1) RMNH C 506 (3 specimens, dry). Japan, 1825–1834, H. Bürger.
  - 2) RMNH C 507 (2 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
5. *Tetraclita japonica* Pilsbry, 1916 (Japanese name: Kuro-fujitsubo) [クロフジツボ]  
2 lots; total of 10 specimens.
  - 1) RMNH C 475 (4 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
  - 2) RMNH C 477 (6 specimens, dry). Japan.
6. *Balanus (Balanus) trigonus* Darwin, 1854 (Japanese name: Sankaku-fujitsubo) [サンカクフジツボ]  
1 lot; 7 specimens.  
RMNH C 375. (7 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
7. *Balanus (Balanus) rostratus* Hoek, 1883 (Japanese name: Mine-fujitsubo) [ミネフジツボ]  
[*Balanus rostratus* Hoek, 1883: Rep. Voy. Challenger, Zool., 8: 152–153, pl. 13, figs. 16–22]  
2 lots; total of 18 specimens.
  - 1) RMNH C 377 (12 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
  - 2) RMNH C 378 (6 specimens, dry). Japan.

8. *Megabalanus zebra* (Darwin, 1854) [和名?]

1 lot; 2 specimens.

RMNH C 423 (2 specimens, dry). Japan.

II. Class Malacostraca, Subclass Hoplocarida, Order Stomatopoda

9. *Odontodactylus japonicus* (De Haan, 1844) (Japanese name: Hana-shako) [ハナ  
シャコ]

[*Gonodactylus japonicus* De Haan: Fauna Japonica, text p. 225; pl. 51, fig. 7]

2 lots; total of 3 specimens.

1) RMNH 32 (1 specimen in alcohol). Lectotype of *Gonodactylus japonicus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH S 465 (1♂ & 1♀, dry). Paralectotypes of *Gonodactylus japonicus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

10. *Faughnia haani* (Holthuis, 1959) (Japanese name: Akashima-hosoyubi-shako) [ア  
カシマホソユビシャコ]

[*Squilla empusa* De Haan, 1849: Fauna Japonica, text pp. 224–225; pl. 51, fig. 6]

[*Pseudosquilla haani* Holthuis, 1959: Studies Fauna Suriname and other Guyanas, 3: 179]

1 lot; 1 specimen.

RMNH S 467 (1♀, dry). Holotype of *Pseudosquilla haani* Holthuis, and holotype of *Squilla empusa* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

11. *Harpisquilla harpax* (De Haan, 1844) (Japanese name: Toge-shako) [トゲシャ  
コ]

[*Squilla harpax* De Haan: Fauna Japonica, text pp. 222–223; pl. 51, fig. 1]

3 lots; total of 5 specimens.

1) RMNH S 28 (1 specimen in alcohol). Lectotype of *Squilla harpax* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH S 460 (1 specimen, dry). Paralectotype of *Squilla harpax* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

3) RMNH S 478 (3 specimens in alcohol). Paralectotypes of *Squilla harpax* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

12. *Anchisquilla fasciata* (De Haan, 1844) (Japanese name: Sujio-shako) [スジオシ  
ャコ]

[*Squilla fasciata* De Haan: Fauna Japonica, text p. 224; pl. 51, fig. 4]

2 lots; total of 2 specimens.

1) RMNH S 24 (1♂ in alcohol). Paratype (?) of *Squilla fasciata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH S 472 (1♀, dry). Holotype of *Squilla fasciata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

13. *Lophosquilla costata* (De Haan, 1844) (Japanese name: Sesuji-shako) [セスジ  
シャコ]

[*Squilla costata* De Haan: Fauna Japonica, text p. 223; pl. 51, fig. 5]

4 lots; total of 7 specimens.

1) RMNH S 23 (1♂ & 3♀ in alcohol). Paralectotypes of *Squilla costata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH S 452 (1♀ in alcohol). Lectotype of *Squilla costata* De Haan. Japan, 1823–1834,



Ph. F von Siebold & H. Bürger.

- 3) RMNH S 470 (1♀, dry). Paralectotype of *Squilla costata* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 4) MNHN St-424 (1 specimen in alcohol). Paralectotype of *Squilla costata* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.

**14. *Oratosquilla oratoria* (De Haan, 1844)** (Japanese name: Shako) [シヤコ]  
[*Squilla oratoria* De Haan: Fauna Japonica, text pp. 223–224; pl. 51, fig. 2]

8 lots; total of 80 specimens.

- 1) RMNH S 19 (3♂ & 1♀ in alcohol). Paralectotypes of *Squilla oratoria* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 2) RMNH S 84 (26♂ & 19♀ in alcohol). Japan.
- 3) RMNH S 451 (1♂ in alcohol). Lectotype of *Squilla oratoria* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 4-5) RMNH S 475 (2 lots; 13 + 12 specimens, dry). Paralectotypes of *Squilla oratoria* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 6) RMNH S 476 (1 specimen, dry). Paralectotype of *Squilla oratoria* De Haan. Japan, 1825–1834, H. Bürger. This specimen carries a special label showing the generic name and a local Japanese name (Sjakwa-ebi) of this animal written by Bürger.
- 7) MNHN-St-503 (2 specimens in alcohol). Paralectotypes of *Squilla oratoria* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 8) MNHN-St 504 (2 specimens in alcohol). Paralectotypes of *Squilla oratoria* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger. The label attached indicates that these specimens were sent from Leiden in 1899.

**15. *Acaenosquilla latifrons* (De Haan, 1844)** (Japanese name: Hizen-shako) [ヒゼンシヤコ]

[*Squilla latifrons* De Haan: Fauna Japonica, text p. 222; pl. 51, fig. 3]

[*Acaenosquilla latifrons* (De Haan): Manning, 1995, p. 22]

2 lots; total of 2 specimens.

- 1) RMNH S 8 (1♀ in alcohol). Paralectotype of *Squilla latifrons* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.
- 2) RMNH S 463 (1 specimen, dry). Lectotype of *Squilla latifrons* De Haan. Japan, 1823–1834, Ph. F von Siebold & H. Bürger.

本種は Manning (1995) が設けた新科の Heterosquillidae の中の同じく Manning (1991) が設けた新属の *Acaenosquilla* に含まれることになった。

**16. *Lysiosquilla sulcirostris* Kemp, 1913** (Japanese name: Mizotsuno-torafu-shako) [ミゾツノトラフシヤコ]

[*Squilla maculata* Lamarck: Fauna Japonica, text pp. 221–222]

[*Lysiosquilla maculata* var. *sulcirostris* Kemp, 1913: Mem. Ind. Mus., 4: 116. pl. 8, figs. 92, 93]

1 lot; 1 specimen.

RMNH S 12 (1♂ in alcohol). Japan, 1823–1834, Ph. F von Siebold & H. Bürger.

### III. Class Malacostraca, Subclass Eumalacostraca, Order Amphipoda

**17. *Caprella kroeyeri* De Haan, 1849** (Japanese name: Ô-warekara) [オオワレカラ]  
[*Caprella kroeyeri* De Haan: Fauna Japonica, text pp. 228–229; pl. 50, fig. 8 (♂ & ♀)]

1 lot; 6 specimens.

RMNH A 368 (6 specimens, dry). Syntypes of *Caprella kroeyeri* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

#### IV. Class Malacostraca, Subclass Eumalacostraca, Order Isopoda

**18. *Sphaeroma sieboldii* Dollfus, 1889** (Japanese name: Nanatsuba-kotsubu-mushi) [ナナツバコツブムシ]

[*Sphaeroma sieboldii* Dollfus, 1889: Notes Leyden Mus., 11: 93, pl. 5, fig. 3]

2 lots; total of 11 specimens.

1) RMNH I 104 (8 specimens in alcohol). Paralectotypes of *Sphaeroma sieboldii* Dollfus. Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH I 105 (3 specimens in alcohol). Lectotype and 2 paralectotypes of *Sphaeroma sieboldii* Dollfus. Japan, 1823–1829, Ph. F. von Siebold.

**19. *Meinertia trigonocephala* (Leach, 1818)** (Japanese name: Shima-aji-no-e) [シマアジノエ]

[*Cymothoa trigonocephala* Leach: Fauna Japonica, text p. 227; pl. 50, figs. 7a (young), 7b (adult)]

1 lot; 3 specimens.

RMNH I 41 (3 ♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

**20. *Meinertia oxyrhynchaena* (Koelbel, 1878)** (Japanese name: Sokouo-no-e) [ソコウオノエ]

[*Ceratothoa oxyrhynchaena* Koelbel, 1878: S. B. Kaiserl. Akad. Wissensch. Wien, (mathem.-naturwiss. Cl.) 78(1): 1–16, pls. 1,2]

1 lot; 1 specimen.

RMNH I 45 (1 ♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

**21. *Rhexanella verrucosa* (Schiödte & Meinert, 1883)** (Japanese name: Tai-no-e) [タイノエ]

[*Rhexana verrucosa* Schiödte & Meinert, 1883: Naturhist. Tidsskrift, Copenhagen, (3) 13: 291, pl. 11, figs. 5–10]

1 lots; 8 specimens.

RMNH I 39 (4 ♂ & 4 ♀ in alcohol). Lectotype (largest ♀) and paralectotypes of *Rhexana verrucosa* Schiödte & Meinert. Japan, 1823–1829, Ph. F. von Siebold.

**22. *Livoneca caudata* Schiödte & Meinert, 1884** (Japanese name: ?)

[*Livoneca caudata* Schiödte & Meinert, 1884: Naturhist. Tidsskrift, Copenhagen, (3) 14: 362]

1 lot; 1 specimen.

RMNH I 68 (1 ♀ in alcohol). Holotype. Japan.

#### V. Class Malacostraca, Subclass Eumalacostraca, Order Decapoda

**23. *Marsupenaeus japonicus* (Bate, 1888)** (Japanese name: Kuruma-ebi) [クルマエビ]

[*Penaeus canaliculatus* Olivier, 1811: Fauna Japonica, text pp. 190–191]

[*Penaeus canaliculatus* var. *japonicus* Bate, 1888: Rep. Voy. Challenger, Zool., 24: 245–248, pls. 31; 32: fig. 4, pl 37: fig. 2]

As Bate in the original description of *Penaeus canaliculatus* var. *japonicus* referred to De Haan, the present specimens in the Leiden Museum are syntypes of Bate's subspecies.

Bate believed that the present species is a variety (identical with subspecies); however, now it is regarded as a species.

2 lots; total of 3 specimens.

- 1) RMNH D 1108 (1 specimen in alcohol). Paralectotype of *Penaeus canaliculatus japonicus* Bate, 1888. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5551 (2 specimens, dry). Paralectotypes of *Penaeus canaliculatus japonicus* Bate, 1888. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

The present species is distributed in the Indo-Pacific region and partly penetrates into the Mediterranean (Hayashi, 1992). This is commercially the most important penaeid species in Japan. This species is reared and harvested in numerous aquacultural ponds constructed on the protected coasts or inner bays in the southern district of Japan.

本種は学名が変更になった。というよりも、亜属名が属名になったのである。その結果、*Penaeus (Marsupenaeus) japonicus* Bate としてリストしていたのであるが、上記のようになった。

**24. *Melicertus latisulcatus* (Kishinouye, 1896)** (Japanese name: Futomizo-ebi) [フトミゾエビ]

[*Penaeus canaliculatus* Olivier, 1811: Fauna Japonica, text pp. 190–191]

[*Penaeus latisulcatus* Kishinouye, 1896: Zool. Mag., 8: 372]

2 lots; total of 3 specimens.

- 1) RMNH D 3188 (2 specimens in alcohol). Japan.
- 2) RMNH D 5552 (1 specimen, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

本種も学名が変更になった。やはり、亜属名が属名になったのである。その結果、*Penaeus (Melicertus) latisulcatus* Kishinouye としてリストしていたのであるが、上記のようになった。

**25. *Penaeus semisulcatus* De Haan, 1844** (Japanese name: Kuma-ebi) [クマエビ]

[*Penaeus semisulcatus* De Haan, 1844: Fauna Japonica, pl. 46, fig.1]

[*Penaeus semisulcatus* De Haan, 1849: Fauna Japonica, text pp. 191–192; pl. P (mouthparts)]

3 lots; total of 10 specimens.

- 1) RMNH D 1129 (3 specimens in alcohol). Lectotype (♀) and paralectotypes of *Penaeus semisulcatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 1744 (2 specimens in alcohol). Paralectotypes of *Penaeus semisulcatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 5550 (5 specimens, dry). Paralectotypes of *Penaeus semisulcatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

The present species is distributed in the Indo-Pacific region and also penetrates into the Mediterranean through the Suez Canal (Hayashi, 1992).

本種でも亜属名が属名になった。その結果、*Penaeus (Penaeus) semisulcatus* De Haan としてリストしていたのであるが、上記のようになった。なお、下の種と同様に、ファウナ・ヤポニカ甲殻類編の図版では、デハーンは誤って属名を *Penaeus* としていた。

**26. *Metapenaeus ensis* (De Haan, 1844)** (Japanese name: Yoshi-ebi) [ヨシエビ]

[*Penaeus ensis* De Haan, 1844: Fauna Japonica, pl. 46, fig. 2]

[*Penaeus monoceros* Fabricius, 1798: Fauna Japonica, text p. 192; pl. P (mouthparts)]

After figuring the species as *Penaeus ensis* sp. nov. on Plate 46 in 1844, De Haan later (in 1849) synonymized it with *Penaeus monoceros* Fabricius. In the plate the generic name is misspelled as *Penaeus*.

3 lots; total of 8 specimens.

- 1) RMNH D 1121 (2 specimens in alcohol). Japan.
- 2) RMNH D 1124 (5 specimens in alcohol). Paratypes of *Penaeus ensis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 5581 (1 specimen, dry). Holotype of *Penaeus ensis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

The holotype of *Penaeus ensis* De Haan is a female of which only the dry cephalothorax is preserved. Originally, by mistake, it was glued to the abdomen of the lectotype of *Metapenaeus barbata* (De Haan). The specimen has been discussed and figured by Racek & Dall (1965).

**27. *Metapenaeus moyebi* (Kishinouye, 1896)** (Japanese name: Mo-ebi) [モエビ]  
[*Metapenaeus moyebi* Kishinouye, 1896: Zool. Mag., 8: 373]

It is possible or even likely that the specimen no. 27 (*Metapenaeus moyebi*) and no. 28 (*Trachypenaeus curvirostris*) were not distinguished by De Haan from "*Penaeus monoceros*" (= *Metapenaeus ensis*) and may have formed part of the lot that is now registered under RMNH D 1124. But this can not now be proved.

1 lot; 1 specimen.

RMNH D 3192 (1 specimen in alcohol). Japan.

**28. *Trachypenaeus curvirostris* (Stimpson, 1860)** (Japanese name: Saru-ebi) [サルエビ]

1 lot; 2 specimens.

RMNH D 3194 (2 specimens in alcohol). Japan.

**29. *Metapenaeopsis barbata* (De Haan, 1844)** (Japanese name: Aka-ebi) [アカエビ]  
[© *Penaeus barbatus* De Haan, 1844: Fauna Japonica, pl. 46, fig. 3]  
[*Penaeus affinis* H. Milne Edwards: Fauna Japonica, text pp. 192–193]

De Haan introduced the present species in Plate 46 as *Penaeus barbatus* in 1844, prior to the publication of the text in which he assigned it to *Penaeus affinis* H. Milne Edwards, 1837.

2 lots; total of 3 specimens.

- 1) RMNH D 5553 (2 specimens, dry). Paralectotypes of *Penaeus barbatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5554 (1 specimen, dry). Lectotype of *Penaeus barbatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**30. *Metapenaeopsis lamellata* (De Haan, 1844)** (Japanese name: Hokkoku-ebi) [ホッコクエビ]

[© *Penaeus lamellatus* De Haan, 1844: Fauna Japonica, pl. 46, figs. 4 & 5]  
[*Penaeus lamellatus* De Haan, 1849: Fauna Japonica, text p. 193]

5 lots; total of 18 specimens.

- 1) RMNH D 1120 (4 specimens in alcohol). Lectotype and paralectotypes of *Penaeus lamellatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 2464 (10 specimens in alcohol). Paralectotypes of *Penaeus lamellatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 555 (2 specimens, dry). Paralectotypes of *Penaeus lamellatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 4) SMF-1 (1 specimen in alcohol). Paralectotype of *Penaeus lamellatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.  
This specimen has a distorted carapace which may not allow correct identification; however, this species is found in the exchange list in the archives of the Leiden Museum, and there is little doubt that the present specimen is from von Siebold and Bürger collections.
- 5) MNHN-Na 153 (1 specimen in alcohol). Paralectotype of *Penaeus lamellatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

In Fauna Japonica De Haan stated that the locality of the specimens obtained is Sooja Point of Hokkaido Island, the northernmost place in the present Japanese territory. However, it is not true locality of the animal. He only cited the description added to one of the picture of *Kai-ka rui siya-sin*, collected pictures of crustaceans in colour edited by Kurimoto Suiken. It was the most important Japanese literature to De Haan and also to von Siebold. In his Crustacea Volume of Fauna Japonica De Haan usually showed the source by the first name of the author "Suiken," but sometimes he omitted citation of the source.

De Haan believed that the shrimp pictured is the present species. However, it is not certain whether the picture actually figured the present species, because the species is rare in the northern seas around Japan but common in the southern seas. For more details of *Kai-ka rui siya-sin* the reader is referred to the special number 3 of CALANUS by Yamaguchi & Holthuis (2001).

本種は決して北方産の種ではないのに、デ・ハーンは宗谷岬を基産地として記載した。そのために和名はホッコクエビとされることになった。そうしたことになったのは、シーボルトが江戸で将軍の奥医師で、著明な自然史研究者の栗本瑞見から貰った甲殻類の図譜『蟹蝦類写真』と関係している。その図譜には本種ではなくホッカイエビが図示されて、産地が宗谷岬と記されていた。デ・ハーンは本種と誤り、しかも出典を示すこと無く、宗谷岬が産地であるとして記述したのである。熊本大学合津臨海実験所の刊行物 CALANUS 特別号 III に詳しい解説がある。

- 31. *Sicyonia parvula* (De Haan, 1844)** (Japanese name: Chibi-ishi-ebi) [チビシエビ]  
[© *Hippolyte parvulus* De Haan, 1844: Fauna Japonica, pl. 45, fig. 6]  
[*Sicyonia parvula* De Haan, 1849: Fauna Japonica, text p. 195]

1 lot; 2 specimens.

- RMNH D 1106 (2 specimens in alcohol). Lectotype (upper specimen) and paralectotype of *Hippolyte parvulus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 32. *Sicyonia bispinosa* (De Haan, 1844)** (Japanese name: Futaba-ishi-ebi) [フタバイシエビ]

[© *Hippolyte bispinosus* De Haan, 1844: Fauna Japonica, pl. 45, fig. 9]

[*Sicyonia bispinosa* De Haan, 1849: Fauna Japonica, text p. 195]

1 lot; 1 specimen.

- RMNH D 1102 (1 specimen in alcohol). Lectotype of *Hippolyte bispinosa* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 33. *Sicyonia cristata* (De Haan, 1844)** (Japanese name: Ishi-ebi) [イシエビ]

[© *Hippolyte cristatus* De Haan, 1844: Fauna Japonica, pl. 45, fig. 10]

[*Sicyonia cristata* De Haan, 1849: Fauna Japonica, text pp. 194–195]

2 lots; total of 5 specimens.

- 1) RMNH D 21088 (1 specimen, dry). Lectotype of *Hippolyte cristatus* De Haan. Japan,

- 1823–1834, Ph. F. von Siebold & H. Bürger.  
2) RMNH D 5562 (4 specimens, dry). Paralectotypes of *Hippolyte cristatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**34. *Spongiicola venusta* De Haan, 1844** (Japanese name: Dô-ketsu-ebi) [ドウケツエビ]

[*Spongiicola venusta* De Haan: Fauna Japonica, text p. 194; pl. 46, fig. 9 (♂); pl. P (mouthparts)]

2 lots; total of 8 specimens.

- 1) RMNH D 1132 (2 specimens in alcohol). Lectotype and paralectotype of *Spongiicola venusta* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 2921 (6 specimens in alcohol). Paralectotypes of *Spongiicola venusta* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

It is well known that a couple of this shrimp live in the gastric cavity of the sponge. The Nationaal Natuurhistorisch Museum holds four type specimens of the sponge collected by von Siebold. One of them has a cut near the top, probably shrimps were taken out of it.

**35. *Paratya compressa compressa* (De Haan, 1844)** (Japanese name: Numa-ebi) [ヌマエビ]

[© *Ephyra compressa* De Haan, 1844: Fauna Japonica, pl. 46, fig. 7]

[? *Ephyra compressa* De Haan, 1849: Fauna Japonica, text p. 186; pl. 0 (mouthparts)]

1 lot; 8 specimens.

RMNH D 1007 (8 specimens in alcohol). Lectotype and paralectotypes of *Ephyra compressa* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**36. *Palaemon (Palaemon) paucidens* De Haan, 1844** (Japanese name: Suji-ebi) [スジエビ]

[*Palaemon paucidens* De Haan: Fauna Japonica, text p. 170; pl. 45, fig. 11]

1 lot; 3 specimens.

RMNH D 1027 (3 specimens in alcohol). Lectotype and paralectotypes of *Palaemon paucidens* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**37. *Leander tenuicornis* (Say, 1818)** (Japanese name: Mai-hime-ebi) [マイヒメエビ]

[*Palaemon latirostris* De Haan, 1844: Fauna Japonica, text p. 170; pl. 45, fig. 12; pl. P

(mouthparts)]

1 lot; 5 specimens.

RMNH D 1024 (5 specimens in alcohol). Lectotype and paralectotypes of *Palaemon latirostris* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**38. *Macrobrachium nipponense* (De Haan, 1849)** (Japanese name: Tenaga-ebi) [テナガエビ]

[*Palaemon\* nipponensis* De Haan: Fauna Japonica, text pp. 171–172]

\* In Fauna Japonica the generic name was spelt as "*Palaemon*" not "*Palaemon*."

2 lots; total of 13 specimens.

- 1) RMNH D 1762 (12 specimens in alcohol). Lectotype and paralectotypes of *Palaemon nipponensis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger. The lectotype bears a special label made of a thin piece of bamboo with the Japanese name of this shrimp, Kawaebi, in Katakana characters.
- 2) RMNH D 5489 (1 specimen, dry). Paralectotype of *Palaemon nipponensis* De Haan.

Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**39. *Macrobrachium japonicum* (De Haan, 1849)** (Japanese name: Hira-tenaga-ebi) [ヒラテナガエビ]

[*Palaemon japonicus* De Haan: Fauna Japonica, text p. 172]

2 lots; total of 13 specimens.

- 1) RMNH D 1075 (7♂ in alcohol). Lectotype and paralectotypes of *Palaemon japonicus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5492 (6 specimens, dry). Paralectotypes of *Palaemon japonicus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**40. *Macrobrachium formosense* Bate, 1868** (Japanese name: Minami-tenaga-ebi) [ミナミテナガエビ]

[*Palaemon longipes* De Haan, 1849: Fauna Japonica, text p. 171]

[*Macrobrachium formosense* Bate, 1868: Proc. zool. Soc. London, 1868: 363–368]

1 lot; 5 specimens.

RMNH D 1080 (5 specimens in alcohol). Lectotype and paralectotypes of *Palaemon longipes* De Haan, 1849. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**41. *Alpheus brevicristatus* De Haan, 1844** (Japanese name: Teppo-ebi) [テッポウエビ]

[© *Alpheus brevicristatus* De Haan: Fauna Japonica, pl. 45, fig. 1]

[*Alpheus malabaricus* Fabricius, 1798: Fauna Japonica, text, p. 177]

De Haan introduced the present species in Plate 45 as *A. brevicristatus* without text in 1844 earlier than the publication of text in which he described it as *A. malabaricus* Fabricius.

3 lots; total of 8 specimens.

- 1) RMNH D 1011 (1 specimen in alcohol). Paralectotype of *Alpheus brevicristatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5548 (6 specimens, dry). Paralectotypes of *Alpheus brevicristatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 21105 (1 specimen, dry). Lectotype of *Alpheus brevicristatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**42. *Alpheus disper* Randall, 1840** (Japanese name: Oni-teppo-ebi) [オニテッポウエビ]

[*Alpheus dispar* Randall, 1840]

[*Alpheus digitalis* De Haan: Fauna Japonica, text p. 178; pl. 45, fig. 4]

[*Alpheus rapax* Fabricius: Fauna Japonica, text pp. 177–178; pl. 45, fig. 2]

[*Alpheus distinguendus* De Man, 1909: Mém. Soc. Zool. France, 22 (1, 2): 155, pl. 7: figs. 9–14]

In the previous publication (Yamaguchi & Baba, 1993) we gave the following discussion: The nomenclature of this alpheid is rather complicated. All but one of his specimens were assigned by De Haan to *Alpheus rapax* Fabricius, 1798. The remaining one was abnormal because it has a small-sized first cheliped that was developed apparently after loss of the large cheliped and this was a kind of transformation of handedness. But the species was considered by De Haan to be new; he gave it the name *Alpheus digitalis* n. sp. De Man (1909) examined the material that De Haan had assigned to *A. rapax* and came to the conclusion that it was a distinct new species which he named *Alpheus distinguendus*. He figured the specimen from lot RMNH 5535 and named it "le type (male) de *Alpheus distinguendus*" and therefore this specimen is the holotype of De Man's new species, and the

other specimens named *Alpheus rapax* Fabr. by De Haan are paratypes of *A. distinguendus*. Inasmuch as the name *Alpheus digitalis* De Haan, 1844 is older than *Alpheus distinguendus* De Man, 1909, however, it has to be used, even if it is based on the abnormal specimen.

However, Chace (1988) showed that the species had been described by Randall in 1840 under the name *Alpheus dispar*.

4 lots; total of 6 specimens.

- 1) RMNH D 5534 (3 specimens, dry). Paratypes of *Alpheus distinguendus* De Man. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5535 (1 specimen, dry). Holotype of *Alpheus distinguendus* De Man. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 5536 (1 specimen, dry). Paratype of *Alpheus distinguendus* De Man. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 5547 (1 specimen, dry). Holotype of *Alpheus digitalis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

本種の場合、デ・ハーンは巨大ハサミが取れて再生中のものと、正常なものを別々に扱ったために混乱が生じた。正常なものをすでに記載された既知種と考え、再生中のものは新種として *Alpheus digitalis* の学名を与えた。その後既知種ではなかったことが判明したが、ドゥ・マンは正常ではないものに対して与えられた学名は不適切であるとして、*Alpheus distinguendus* の学名を与えた。しかし、たとえ巨大ハサミが十分に発達していない標本であっても、それに対して与えた学名は有効であるとして、我々は *Alpheus digitalis* としてリストしていた。しかし、デ・ハーンに先立ってすでに学名が与えられていたことが明らかになったのである (Chace, 1988).

**43. *Alpheus bisincisus* De Haan, 1844** (Japanese name: Futamizo-teppo-ebi) [フタミゾテッポウエビ]

[© *Alpheus bis-incisus* De Haan, 1844: Fauna Japonica, pl. 45, fig. 3]

[*Alpheus avarus* Fabricius, 1798: Fauna Japonica, text, p. 179]

De Haan introduced the present species on Plate 45 as *Alpheus bisincisus*. In the text, which appeared in 1849, De Haan synonymized *Alpheus bisincisus* with *Alpheus avarus* Fabricius, 1798. However, the name *bisincisus* is valid for the present species because the two are now considered to be distinct species.

1 lot; 1 specimen.

- RMNH D 5545 (1 specimen, dry). Holotype of *Alpheus bisincisus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**44. *Alpheus lobidens lobidens* De Haan, 1849** (Japanese name: Iso-teppo-ebi) [イソテッポウエビ]

[*Alpheus lobidens* De Haan: Fauna Japonica, text pp. 179–189]

1 lot; 1 specimen.

- RMNH D 5541 (1 specimen, dry). Holotype of *Alpheus lobidens* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**45. *Alpheus haanii* Ortmann, 1890** (Japanese name: Ko-teppo-ebi) [コテッポウエビ]

[*Alpheus minor* De Haan, 1844: Fauna Japonica, text p. 180; pl. 45, fig. 6]

[*Alpheus haanii* Ortmann, 1890: Zool. Jahrb. Syst., 5: 472]

1 lot; 1 specimen.

- RMNH D 1017 (1 specimen in alcohol). Holotype of *Alpheus haanii* Ortmann and holotype of *Alpheus minor* De Haan. Japan, 1823–1829, Ph. F. von Siebold.



**46. *Alpheus hoplocheles* Coutière, 1897** (Japanese name: ?)

[*Alpheus hoplocheles* Coutière, 1897: Notes Leyden Mus., 19: 197]

2 lots; total of 2 specimens.

- 1) RMNH D 2491 (1 specimen in alcohol). Paralectotype of *Alpheus hoplocheles* Coutière. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5543 (1 specimen, dry). Paralectotype of *Alpheus hoplocheles* Coutière. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**47. *Processa japonica* (De Haan, 1844)** (Japanese name: Rôsoke-ebi) [ロウソクエビ]

[*Nika japonica* De Haan: Fauna Japonica, text p. 184; pl. 46, fig. 6; pl. N (mouthparts)]

De Haan's material of *Nika japonica* consisted of two species: the true *Processa japonica* and *Processa sulcata* (see next species).

2 lots; total of 2 specimens.

- 1) RMNH D 5579 (1 specimen, dry). Lectotype of *Nika japonica* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 21110 (1 specimen, dry). Paralectotype of *Nika japonica* De Haan. Japan, 1823–1829, Ph. F. von Siebold.

**48. *Processa sulcata* Hayashi, 1975** (Japanese name: Hayashi-rôsoke-ebi) [ハヤシロウソクエビ]

[*Nika japonica* De Haan, 1849: Fauna Japonica, text p. 184, pro parte]

[*Processa sulcata* Hayashi, 1975: Journ. Shimonoseki Univ. Fish., 24 (1): 134]

1 lot; 1 specimen.

RMNH D 991 (1 specimen in alcohol). Paralectotype of *Nika japonica* De Haan, 1844 and paratype of *Processa sulcata* Hayashi, 1975. Japan, 1823–1829, Ph. F. von Siebold.

**49. *Plesionika spinipes* Bate, 1888** (Japanese name: Okino-suji-ebi) [オキノスジエビ]

[*Pandalus pristiis* Risso: Fauna Japonica, text p. 175]

[*Plesionika spinipes* Bate, 1888: Rep. Voy. Challenger, Zool., 24: 646–648; pl. 113, fig. 2]

1 lot; 1 specimen.

RMNH D 100 (1 specimen in alcohol). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**50. *Cambaroides japonicus* (De Haan, 1841)** (Japanese name: Zari-gani) [ザリガニ]

[*Astacus japonicus* De Haan: Fauna Japonica, text p. 164; pl. 35, fig. 9]

3 lots; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 2912 (3 specimens, dry). Paralectotypes of *Astacus japonicus* De Haan. Japan, 1823–1829, Ph. F. von Siebold. (A gastrolith, 4.5 mm in diameter, is preserved with this lot.)
- 2) RMNH D 5602 (1 specimen, dry). Lectotype of *Astacus japonicus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 5603 (Mouthparts). From lectotype of *Astacus japonicus* De Haan, RMNH 5602. Japan, 1823–1829, Ph. F. von Siebold.

This species occurs in Hokkaido, but was artificially transferred to the northern part of the Tohoku District and spread to three prefectures: Aomori, Iwate and Akita (Kawai et al., 1990). The Rijksmuseum voor Volkenkunde (National Ethnological Museum) at Leiden holds various material of Japanese medicines collected by von Siebold. Among them are two gastroliths preserved in a small jar. The label pasted on the jar shows that the name of the

material is Kani-tama, which means "crab ball." Another accompanying label bears a short description mentioning the donor (Mr. Zenbee Kusano) of the material. Von Siebold believed that the gastrolith was good medicine and prescribed it fairly frequently to Japanese patients. Prior to the arrival of von Siebold in Deshima, Japanese physicians who were interested in European medical science learned that the gastrolith was a useful medication, so it was then one of the most important medical imports from the Netherlands. Von Siebold reported in his well-known record of the journey to Edo included in his famous publication "Nippon" that he had a visit from a physician (Kosai Yamaguchi) on 23 February 1827 at Shimonoseki, and was given various kinds of natural products: "Kosai und mein übrigen Schüler brachten mir nach Landessitte Begrüßungs-geschenke, welche in einigen ihnen merkwürdig erscheinenden Naturalien und sonstigen Erzeugnissen ihres Landes bestanden. Darunter befanden sich eine seltene wild Ente (*Anas tadorna*), Seekrabben (*Dorippe callida*, *sima* und *quadridentis*), Seepferdchen und Seeadeln und eine neue Art Flußkrabbe (*Astacus Japonicus*), nebst vielen getrockneten Pflanzen, Keulenschwämmen und Mineralien. Krebsaugen sind ein bedeutender Artikel der Einfuhr in Japan, und sie stehen oft hoch im Preise. Zu meiner Zeit schwankte der Preis für das japanische Pfund (Kin) zwischen 12 bis 27 Gulden. Die Entdeckung eines Flußkrebsses, der dieses kostbare Mittel liefert, war also eine Sache von großer Wichtigkeit für meine Schüler. Diese Crustacee kommt übrigens dort zu selten vor, um das entdeckte Surrogat im hinreichender Menge zu liefern; häufiger soll es sich in den Flüssen von Jezo, also im Norden des Japanischen Reiches finden." Von Siebold was shown the gastroliths taken from this crayfish, and learned that it lives in the rivers of Hokkaido. He noted that the gastrolith was an important item of imported material for medicine and was very expensive in Japan; 1 Kin (= 600 g) of them cost between 12 and 27 guilders (a large sum at that time). However, it is hard to be sure whether von Siebold's material was taken from this astacid or originated from imports from abroad. These gastroliths have a diameter of about 6 mm and are considerably larger than the one that is now retained with the specimens of D 2912.

T. Kawai (Hokkaido Nuclear Reserach Center), a specialist of Japanese crayfish, visited the Leiden Museum on 21 and 22 September 1999 to examine the types and the gastrolith. He confirmed that the types have a short slit at the centre of the telson, which is known only to be present specimens occuring around Hirosaki of Aomori Prefecture. Therefore, Kawai (2000) suggested that the specimens obtained by von Siebold were collected there.

日本在来のザリガニは東北地方から北海道にかけて分布している。ライデンにある標本はタイプであり、特に重要なので、ザリガニの研究者として知られる川井唯史氏は 1999 年の 9 月にライデンを訪問して、標本の調査を行った。その結果、青森県の弘前市付近で得られたらしいことが判明した。そこのザリガニは尾節中央に浅い切れ込みがあるので、他地方のものと同様に区別できる。氏の努力によって基産地が明らかになった意義は大きい。詳細は川井 (2000) に記述されている。なお、熊本大学合津臨海実験所の刊行物 CALANUS 特別号 III にザリガニに関する記述がある。

**51. *Linuparus trigonus* (Von Siebold, 1824)** (Japanese name: Hako-ebi) [ハコエビ]  
[*Palinurus trigonus* Von Siebold: 1824, p. 15]  
[*Palinurus trigonus* Von Siebold: Fauna Japonica, text pp. 157–158; pls. 39–40; pls. L, M (mouthparts)]

7 lots; total of 15 specimens and displayed mouthparts.

1) RMNH D 5610 (3 specimens, dry). Paralectotypes of *Palinurus trigonus* Von Siebold.

- Japan, 1823, Ph. F. von Siebold.
- 2) RMNH D 5611 (1 specimen, dry). Lectotype of *Palinurus trigonus* Von Siebold. Japan, 1823, Ph. F. von Siebold.
  - 3) RMNH D 5612 (2 specimens, dry). Japan, 1825–1834, H. Bürger.
  - 4) RMNH D 21124 (7 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 5) RMNH D 5609 (Mouthparts). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 6) BM(NH) 936-a (1 specimen, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 7) USNM 104121 (1♀, dry). Paralectotype of *Palinurus trigonus* Von Siebold. CL: 110 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**52. *Panulirus homarus* (Linnaeus, 1758)** (Japanese name: Kebuka-ise-ebi) [ケブカイセエビ]

[*Palinurus Burgeri* De Haan, 1841: Fauna Japonica, text p. 159]

[*Palinurus Bürgeri* De Haan, 1844: Fauna Japonica, pls. 43, 44, fig. 1]

De Haan's species was synonymized with *Panulirus homarus* by Holthuis (1946). He looked into the pertinent literature and concluded that de Haan's specimen should be *P. homarus*. This species was established by Linnaeus as *Cancer homarus* referring to Rumphius (1705, pl. 1, fig. A). The animal illustrated there has crenulated grooves on the abdominal somites and undoubtedly is identified with the present species.

1 lot; 1 specimen.

RMNH D 21129 (1 specimen, dry). Holotype of *Palinurus Bürgeri* De Haan. Japan, 1825–1834, H. Bürger.

**53. *Panulirus versicolor* (Latreille, 1804)** (Japanese name: Goshiki-ebi) [ゴシキエビ]

[*Palinurus fasciatus* Fabricius: Von Siebold, 1824, p. 15]

[*Palinurus fasciatus* Fabricius: Fauna Japonica, text p. 159; pls. 43 & 44, fig. 2 (young)]

1 lot; 3 specimens.

RMNH D 5632 (3 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.

**54. *Panulirus japonicus* (Von Siebold, 1824)** (Japanese name: Ise-ebi) [イセエビ]

[*Palinurus japonicus* Von Siebold: 1824, p. 15]

[*Palinurus japonicus* Von Siebold: Fauna Japonica, text pp. 158–159; pls. 41–42; pls. L & M (mouthparts)]

11 lots; total of 52 specimens and displayed mouthparts.

- 1) RMNH D 960 (1♂ in alcohol). Lectotype of *Palinurus japonicus* Von Siebold. Japan, 1823, Ph. F. von Siebold.
- 2-3) RMNH D 1672 (2 lots; total of 3♂ & 3♀ (1 ovigerous), in alcohol). Paralectotypes of *Palinurus japonicus* Von Siebold. Japan, 1823, Ph. F. von Siebold.
- 4) RMNH D 5621 (8 specimens, dry). Paralectotypes of *Palinurus japonicus* Von Siebold. Japan, 1823, Ph. F. von Siebold.
- 5) RMNH D 5622 (Mouthparts). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) RMNH D 5623 (1 specimen, dry). Japan, 1825–1834, H. Bürger. This specimen bears a label written by H. Bürger showing its local Japanese name (Ebigane).
- 7) RMNH D 5624 (30 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger. The antennae of one of the specimens are protected by special protector\* made of bamboo.
- 8) RMNH D 5620 (2 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold and H. Bürger.
- 9) BM(NH) 937-a (1 specimen, dry). Japan, 1823–1834, Ph. F. von Siebold and H. Bürger.
- 10) MNHN-Pa 429 (1 specimen, dry). Japan, 1823–1834, Ph. F. von Siebold and H. Bürger.

- 11) USNM 104120 (2♂, dry). Paralectotypes of *Palinurus japonicus* Von Siebold. CL: 77.5 & 97.3 mm. Japan, 1823, Ph. F. von Siebold.

\*The bamboo protector used for the lot RMNH D 5624 shows how careful von Siebold and Bürger were in packaging fragile dry specimens. Considering the very good condition of most of the dry specimens it is very probable that they paid much attention to the careful protection of other parts of the specimens by using such a special device when specimens were shipped off from Deshima.

**55. *Panulirus femoristriga* (Von Martens, 1872)** (Japanese name: Kanoko-ise-ebi) [カノコイセエビ]

George and Holthuis (1965: 72) revised the *japonicus* group of the genus *Panulirus* and showed that the specimens which had been named *P. japonicus* and *P. longipes* belong to at least five species: *P. japonicus*, *P. cygnus*, *P. marginatus*, *P. pascuensis* and *P. longipes*. They recognized in the latter species two subspecies. The western form *P. longipes longipes* inhabits the coasts of the Indian Ocean (E. Africa, Western Indian Ocean, Madagascar, Seychelles, Ceylon, Thailand (W. coast), Malaysia, W. Australia, Taiwan and the Philippines. The eastern form *P. longipes femoristriga* is known from Japan, Indonesia, E. Australia (Queensland, New S. Wales), New Caledonia and New Hebrides.

Chan & Chu (1996) recognized two forms of coloration in the material identified as *P. longipes femoristriga*, namely the banded whisker form and the white whisker form. Then, they described the latter form as new species, *Panulirus albiflagellum*. Chan & Ng (2001) examined the rediscovered holotype of *P. longipes femoristriga* (von Martens), which had been regarded to be lost. They concluded that white whisker form is *P. femoristriga* (von Martens) and the new species, *Panulirus albiflagellum*, is a junior subjective synonym of it.

1 lot; 1 specimen.

RMNH D 20387 (1 specimen, dry). Japan, 1823–1829, Ph. F. von Siebold.

本種の場合、学名が *Panulirus longipes femoristriga* (von Martens, 1872) から上記のものになったのであるが、それには複雑な事情がある。これまで本亜種と考えられてきたものには実は色彩や形態が異なる2つのものが認められることが判明して来た。それらを種、亜種としてきちんと区別するためには、フォン・マルテンスが記載に使用したタイプを調べる必要があった。その標本はベルリンの自然史博物館（これはフンボルト大学付属の博物館で、旧東ベルリン地区に位置している。山口は2002年にこの博物館を訪問して、ライデンから移管されたシーボルト収集の魚類標本の調査を実施しており、簡単な紹介は、この号の魚類標本の記述の中にあるので、参照されたい。）にあるはずであった。

ところが、見つからないということであった。しかし、二つのものをきちんと区別して扱うためには、そのままではどうにもならないので、失われたタイプに替わるものとして、ネオタイプが指定された。分類学の専門家は誰でも知っていることであるが、このリストの読者には専門家で無い人もいと考えられるので、簡単に説明をしておきたい。種を記載する時に基準にした標本をタイプ (type) という。日本語では模式標本とされる。これは動物の場合で、植物の場合にはなぜか訳語が異なり、基準標本とされている。このカノコイセエビの場合のような問題が生じた時に参照できるように、タイプはなるべく自然史博物館のようなところで大切に管理されることが望ましいと国際動物命名規約では定められている。この甲殻類標本リストにあるように、シーボルトとビュルゲルの標本には多くのタイプが含まれている。タイプが紛失してしまった場合、研究に支障が生じたら、新規にタイプを指定することができる。それは、どうしても必要な場合に限られ、安易な指定は認められない、そのタイプのことをネオタイプ (neotype) という。

Chan & Chu (1996) はやむを得ず、ネオタイプを指定して形態の比較を行い、新種を記載したのである。彼等は行方不明の標本とは別ということでも新種を記載したのであった。ところが失

われていたと思われていたフォン・マルテンスが用いたタイプが見つかった。タイプは大切に保存される一方で、専門家には公開されることになっている。フォン・マルテンスが用いたタイプが借り出されて調べられた (Chan & Ng, 2001)。その結果、意外にも、記載された新種とフォン・マルテンスが記載していた種が同じものであることが判明した。違うと思っていたのに反対だったのである。記載された新種の命名もネオタイプも共に無効になった。そして、上記に示すように学名の変更があった。詳細は Chan & Ng (2001) を参照してほしい。

**56. *Scyllarus martensii* Pfeffer, 1881** (Japanese name: ?)

[*Scyllarus arctus* Fabricius var.: Fauna Japonica, text p. 154; pl. 38, fig. 2; pls. J, L (mouthparts)]

[*Scyllarus martensii* Pfeffer, 1881: Verhandl. naturwiss. Ver. Hamburg, 5: 22–55]

De Haan recognized three East Asian varieties of *Scyllarus arctus* to which he gave no scientific names. These "varieties" proved to be good species (Paulson, 1875; Pfeffer, 1881; De Man, 1905); *S. bicuspidatus* (De Man), *S. martensii*, and *S. bertholdii*.

2 lots; total of 4 specimens.

- 1) RMNH D 5509 (3 specimens, dry). Types of *Scyllarus arctus* (L.) var. b De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5512 (1 specimen, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**57. *Scyllarus bertholdii* Paulson, 1875** (Japanese name: ?)

[*Scyllarus arctus* Fabricius var.: Fauna Japonica, text p. 154; pl. 38, fig. 2; pls. J & L (mouthparts)]

[*Scyllarus bertholdii* Paulson, 1875: Studies on Crustacea of the Red Sea with notes regarding other seas, Part 1: 97]

This is one of the three varieties of *Scyllarus arctus* which appeared in Fauna Japonica. The material was obtained from China, not from Japan.

1 lots; 1 specimen.

RMNH D 5518 (1 specimen, dry). Type of *Scyllarus arctus* (L.) var. c De Haan. China.

**58. *Scyllarus bicuspidatus* (De Man, 1905)** (Japanese name: Futaba-hime-semi-ebi)

[フタバヒメセミアビ]

[*Scyllarus arctus* Fabricius var.: Fauna Japonica, text p. 154; pl. 38, fig. 2; pls. J, L (mouthparts)]

[*Scyllarus bicuspidatus* De Man, 1905: Tijdschr. Nederl. dierk. Ver., (2) 9: 589]

1 lot; 1 specimen.

RMNH D 5513 (1 specimen, dry). Type of *Scyllarus arctus* (L.) var. a De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**59. *Scyllarides squammosus* (H. Milne Edwards, 1837)** (Japanese name: Semi-ebi)

[セミアビ]

[*Scyllarus orientalis* Fabricius: Von Siebold, 1824, p. 15].

[*Scyllarus Sieboldi* De Haan, 1841: Fauna Japonica, text p. 152; pls. 36–37, fig. 1]

[*Scyllarides squammosus* H. Milne Edwards, 1837: Hist. nat. Crust., 2: 284]

6 lots; total of 13 specimens and displayed mouthparts.

- 1) RMNH D 959 (1 specimen in alcohol). Lectotype of *Scyllarus sieboldi* De Haan. Nagasaki\*, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 971 (2 specimens in alcohol). Paralectotypes of *Scyllarus sieboldi* De Haan. Nagasaki, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 1861 (3 specimens in alcohol). Paralectotypes of *Scyllarus sieboldi* De Haan.

- Nagasaki, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 5515 (Mouthparts of paralectotypes of *Scyllarus sieboldi* De Haan). Nagasaki, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 5) RMNH D 5516 (3♂ & 3♀ dry). Paralectotypes of *Scyllarus sieboldi* De Haan. Nagasaki, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 6) MNHN-Pa 242 (1 specimen in alcohol). Paralectotype of *Scyllarus sieboldi* De Haan. Nagasaki, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

\*This is one of the only six species for which the locality of the material in Japan was mentioned in Fauna Japonica.

**60. *Scyllarides haanii* (De Haan, 1841)** (Japanese name: Kobu-semi-ebi) [コブセミエビ]

[*Scyllarus haanii* Von Siebold: Fauna Japonica, text p. 152; pl. 38, fig. 1]  
2 lots; total of 3 specimens.

- 1) RMNH D 5519 (1 specimen, dry). Paralectotype of *Scyllarus haanii* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5520 (2 specimens, dry) Lectotype (largest specimen) and paralectotype (smallest specimen) of *Scyllarus haanii* De Haan. Japan, 1825–1834, H. Bürger.

**61. *Ibacus ciliatus ciliatus* (Von Siebold, 1824)** (Japanese name: Uchiwa-ebi) [ウチワエビ]

[*Scyllarus ciliatus* Von Siebold: 1824, p. 15]

[*Scyllarus ciliatus* Von Siebold: Fauna Japonica, text pp. 153–154; pls. 36–37, figs. 2 (♂ & ♀); pls. J & L *Scyllarus*-3 (mouthparts)]

[*Phyllosoma guerini* De Haan: Fauna Japonica, pp. 226–227; pl. 50, figs. 6-a & 6-b]

[*Ibacus ciliatus ciliatus* (Von Siebold, 1824): Holthuis, 1985, Zool. Verh., Leiden, 218: 24-36, figs. 5-8]

12 lots; total of 30 specimens (including 3 phyllosoma larvae) and displayed mouthparts.

- 1) RMNH D 969 (1 specimen in alcohol). Lectotype of *Scyllarus ciliatus* Von Siebold. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 2826 (3 specimens in alcohol). Paralectotypes of *Scyllarus ciliatus* Von Siebold. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 5583 (3 specimens, dry). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 5584 (2 specimens, dry). Paralectotypes of *Scyllarus ciliatus* Von Siebold. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 5585 (3♂ & 3♀, dry). Japan, 1825–1834, H. Bürger.
- 6) RMNH D 5586 (Mouthparts of a paralectotype). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7–8) RMNH D 5587 (2 lots; 4 + 5 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) RMNH D 5588 (1 specimen, dry). Lectotype of *Phyllosoma guerini* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) RMNH D 21086 (2 specimens, dry). Paralectotypes of *Phyllosoma guerini* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 11) BM(NH) 712-a, b (2 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 12) USNM 1104119 (1♀, dry). Paralectotype of *Scyllarus ciliatus* Von Siebold. CL: 65.9 mm. Japan, 1823–1829, Ph. F. von Siebold.

It is noteworthy that von Siebold and/or Bürger collected very fragile specimens of phyllosoma larvae of the present species and shipped them off to Leiden. Tokioka (1954) examined a very large phyllosoma larva caught near the Seto Marine Biological Laboratory of Kyoto University and described it as *Phyllosoma utivaebi*. He noted that its morphological features agree well with those of *Phyllosoma guerini*, the species having been reported in Fauna Japonica (Tokioka and Harada, 1954). Dotsu et al. (1966, 1967) confirmed that *Phyllosoma utivaebi* is identical with *Phyllosoma guerini*. The phyllosoma larvae of this species have been reared up to the reptant stage under laboratory conditions (Takahashi and Saisho, 1978).

This species is abundant in the East China Sea and its larvae can be found on shore. In the East China Sea, another species, *Ibacus novemdentatus* Gibbes, 1850, is also known (Baba et al., 1986) and is often caught together with *I. ciliatus ciliatus*. According to Takahashi and Saisho (1978), these two species are sold at fish markets, but fishermen do not perceive them as being two distinct species. No specimens of *Ibacus novemdentatus* are found in the von Siebold and Bürger collection.

**62. *Parribacus japonicus* Holthuis, 1960** (Japanese name: Zôri-ebi) [ゾウリエビ]  
[*Scyllarus antarcticus* Fabricius: Fauna Japonica, text p. 153; pl. J & L *Scyllarus*-2  
(mouthparts)]

[*Parribacus japonicus* Holthuis, 1960: Proc. Biol. Soc. Washington, 73: 148]

3 lots; total of 3 specimens and displayed mouthparts.

- 1) RMNH D 5495 (1 specimen, dry). Paratype of *Parribacus japonicus* Holthuis. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 5498 (2 specimens, dry). Paratypes of *Parribacus japonicus* Holthuis. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 5642 (Mouthparts of D 5495). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**63. *Laomedea astacina* De Haan, 1841** (Japanese name: Hasami-shako-ebi) [ハサミ  
シャコエビ]

[*Laomedea astacina* De Haan: Fauna Japonica, text p. 165; pl. 35, fig. 8 (♀); pl. N  
(mouthparts)]

1 lot; mouthparts only.

RMNH D 35151 (Mouthparts of holotype). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger. Holotype of this species is missing.

**64. *Aniculus miyakei* Forest, 1984** (Japanese name: Hondo-oni-yadokari) [ホンドオ  
ニヤドカリ]

[*Pagurus aniculus* Fabricius: Fauna Japonica, text pp. 209–210; pl. P (mouthparts)]

[*Aniculus miyakei* Forest, 1984: Crustaceana, suppl., 8: 36–41, figs. 10, 18, 37–40]

3 lots; total of 4 specimens.

- 1) RMNH D 921 (1 specimen in alcohol). Paratype of *Aniculus miyakei* Forest. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23154 (1 specimen, dry). Paratype of *Aniculus miyakei* Forest. Padang, Sumatra, Indonesia (locality record probably erroneous, specimen most probably from Japan), 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 23155 (2 specimens, dry). Paratypes of *Aniculus miyakei* Forest. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

This species was dedicated to the Late Prof. Sadayoshi Miyake (1909–1997) the

second president of the Carcinological Society of Japan and a specialist of decapod Crustacea especially Anomura.

**65. *Diogenes edwardsii* (De Haan, 1849)** (Japanese name: Toge-tsuno-yadokari) [トゲツノヤドカリ]

[*Pagurus edwardsii* De Haan: Fauna Japonica, text pp. 211–212; pl. 50, fig. 1]

1 lot; 1 specimen.

RMNH D 23191 (1 specimen, dry). Holotype of *Pagurus edwardsii* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**66. *Clibanarius inaequalis* (De Haan, 1849)** (Japanese name: Fudô-yokobasami) [フドウヨコバサミ]

[© *Pagurus inaequalis* De Haan, 1849: Fauna Japonica, text p. 210; pl. 50, fig. 2]

[*Pagurus rufus* De Haan, 1849: Fauna Japonica, text pp. 206 & 210]

The morphological descriptions of *Pagurus rufus* De Haan, 1849, and *P. inaequalis* De Haan, 1849, clearly indicate that they are identical. Probably De Haan originally used the name *rufus* and later changed it to *inaequalis* but forgot to make the change in the key on p. 206, and in line 7 of p. 210. As the name *rufus* is an available name, it should be a synonym of *P. inaequalis*.

1 lot; 1 specimen.

RMNH D 23171 (1 specimen, dry). Holotype of *Pagurus inaequalis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**67. *Clibanarius longitarsus* (De Haan, 1849)** (Japanese name: Tsunome-yokobasami) [ツメナガヨコバサミ]

[*Pagurus longitarsus* De Haan: Fauna Japonica, text p. 211; pl. 50, fig. 3; pl. Q (mouthparts)]

1 lot; 1 specimen.

RMNH D 23176 (1 specimen, dry). Lectotype of *Pagurus longitarsus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**68. *Dardanus arrosor* (Herbst, 1796)** (Japanese name: Kesuji-yokobasami) [ケスジヤドカリ]

[*Pagurus striatus* Latreille: Fauna Japonica, text pp. 206–207; pl. 49, fig. 1]

3 lots; total of 5 specimens.

1) RMNH D 910 (1 specimen in alcohol). Japan.

2) RMNH D 911 (1 specimen in alcohol). Japan, 1825–1834, H. Bürger.

3) RMNH D 23177 (3 specimens, dry). Japan.

**69. *Dardanus crassimanus* (H. Milne Edwards, 1836)** (Japanese name: Ishidatami)

[*Pagurus setifer* Edwards: Fauna Japonica, text p. 209]

[*Dardanus crassimanus* H. Milne Edwards, 1836: Ann. Sci. nat. Zool. Paris, (2) 6: 277]

1 lot; 2 specimens.

RMNH D 23181 (2 specimens, dry). Japan.

**70. *Dardanus aspersus* (Berthold, 1846)** (Japanese name: Akaboshi-yokobasami) [アカボシヤドカリ]

[*Pagurus diogenes* Fabricius: Fauna Japonica, text pp. 208–209]

[*Dardanus aspersus* Berthold, 1846: Abh. Ges. Wissensch. Göttingen, 3: 21, pl. 2: fig. 1]

1 lot; 3 specimens.



RMNH D 23180 (3 specimens, dry). Japan and China.

**71. *Dardanus impressus* (De Haan, 1849)** (Japanese name: Iboashi-yokobasami) [イボアシヤドカリ]

[© *Pagurus impressus* De Haan, 1849: Fauna Japonica, text pp. 207–208; pl. 49, fig. 3]

[*Pagurus latimanus* De Haan, 1849: Fauna Japonica, text p. 202; pl. Q (mouthparts)]

De Haan described two species as listed above in the seventh fascicle published in 1849. As the shape of the third maxilliped of *P. latimanus* as figured by De Haan agrees entirely with that of *P. impressus*, there can be little doubt about the synonymy.

2 lots; total of 3 specimens.

- 1) RMNH D 23185 (1 specimen, dry). Lectotype of *Pagurus impressus* De Haan and lectotype of *Pagurus latimanus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23186 (2 specimens, dry). Paralectotypes of *Pagurus impressus* De Haan and paralectotype of *Pagurus latimanus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**72. *Coenobita rugosus* H. Milne Edwards, 1837** (Japanese name: Naki-oka-yokobasami) [ナキオカヤドカリ]

[*Cenobita rugosa* Edwards: Fauna Japonica, text pp. 212–213]

[*Coenobita rugosus* H. Milne Edwards, 1837: Hist. nat. Crust., 2: 241]

1 lot; 2 specimens.

RMNH D 887 (2 specimens in alcohol). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

The gastropod shell occupied by the animal is *Glossaulax didyma hosoyai* Kuroda & Kira.

**73. *Coenobita cavipes* Stimpson, 1858** (Japanese name: Oka-yokobasami) [オカヤドカリ]

[*Cenobita compressa* Edwards: Fauna Japonica, text p. 213]

[*Coenobita cavipes* Stimpson, 1858b: Proc. Acad. nat. Sci. Philadelphia, 1858: 245]

2 lot; 8 specimens.

RMNH D 23237 (1 specimen, dry). Japan.

RMNH D 46088 (7 specimens in alcohol). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger. Taken from lot D 887.

液浸標本は前種とされていたが、1993年に自然史博物館に来訪して調べた千葉中央博物館の朝倉彰氏によって、本種が混じっていることが指摘され、現在は別々にされている。

**74. *Birgus latro* (Linnaeus, 1767)** (Japanese name: Yashi-ganii) [ヤシガニ]

[*Birgus latro* Fabricius: Fauna Japonica, text p. 212; pl. Q (mouthparts)]

1 lot; 2 specimens.

RMNH D 857 (2 specimens in alcohol). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**75. *Pagurus conformis* De Haan, 1849** (Japanese name: Narabi-hon-yokobasami) [ナラビホンヤドカリ]

[*Pagurus conformis* De Haan: Fauna Japonica, text p. 206]

1 lot; 1 specimen.

RMNH D 23228 (1 specimen, dry). Holotype of *Pagurus conformis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**76. *Hapalogaster dentata* (De Haan, 1844)** (Japanese name: Hira-toge-gani) [ヒラトゲガニ]

[*Lomis dentata* De Haan: Fauna Japonica, text pp. 219–220; pl. 48, fig. 2; pl. Q (mouthparts and abdomen)]

2 lots; total of 2 specimens.

- 1) RMNH D 23244 (1 specimen, dry). Lectotype of *Lomis dentata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23245 (1 specimen, dry). Paralectotype of *Lomis dentata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**77. *Paralomis histrix* (De Haan, 1844)** (Japanese name: Igaguri-gani) [イガグリガニ]

[*Lithodes arctica*, Latreille: Von Siebold, 1824, p. 15]

[*Lithodes histrix* De Haan: Fauna Japonica, text pp. 218–219; pl. 48, figs. 1 & 1a–1c]

[*Paralithodes histrix* (De Haan): Ortmann, 1892: Zool. Jahrb. Syst., VI(2): 321]

2 lots; total of 2 specimens.

- 1) RMNH D 23254 (1 specimen, dry). Lectotype of *Lithodes histrix* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23255 (1 specimen, dry). Paralectotype of *Lithodes histrix* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

In many publications the specific name of this species is spelled *hystrix*. However, De Haan used the spelling *histrix* consistently, and in his publication there is no clear evidence that an inadvertent error was made (Code, Art. 32c). Therefore the original spelling has to be maintained.

**78. *Paralithodes camtschaticus* (Tilesius, 1815)** (Japanese name: Taraba-gani) [タラバガニ]

[*Maja camtschatica* Tilesius, 1815: Mém. Acad. Sci. St. Petersburg, 5: 336, pls. 5, 6]

[*Lithodes japonica* Von Siebold, 1824, p. 15]

[*Lithodes camtschatica* Tilesius: Fauna Japonica, text pp. 217–218; pl. 47]

1 lot; 1 specimen.

RMNH D 23256 (1 specimen, dry). Holotype of *Lithodes japonica* Von Siebold. CW (max. including spines): 151.3 mm. Japan, 1823–1829, Ph. F. von Siebold.

This specimen was collected by J. Cock Blomhoff, who first came to Deshima in 1809 and stayed there for about 11 years, serving as the chief of the Dutch trading post during 1817–1823. He made an extensive collection of various kinds of Japanese materials and documents, including zoological specimens (Mac Lean, 1975). The author of the species, the Russian W. G. Tilesius, came to Nagasaki in 1804 on board the ship "Nadeshda" under the leadership of Captain A. J. von Krusenstern (Krusenstern, 1810–1814). Working under severe restrictions Tilesius collected a few animals at Nagasaki during his half-year stay there (Holthuis and Sakai, 1970). Since the Russians were not allowed to have free contact with the members of the Dutch trading post, it seems highly unlikely that the present specimen was handed by Tilesius to the staff of the Dutch trading post as a souvenir. Considering the existence of a beautifully-drawn figure of the present animal in *Kai-ka rui siya-sin* (Yamaguchi & Holthuis, 2001), this species was already known among the naturalists in Edo when Cock Blomhoff visited there in 1818 and 1822.

**79. *Petrolisthes japonicus* (De Haan, 1849)** (Japanese name: Iso-kani-damashi) [イ

ソカニダマシ]

[*Porcellana japonica* De Haan: Fauna Japonica, text pp. 199–200; pl. 50, fig. 5]

2 lots; total of 8 specimens.

- 1) RMNH D 23147 (1 specimen, dry). Lectotype of *Porcellana japonica* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23148 (7 specimens, dry). Paralectotypes of *Porcellana japonica* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**80. *Dromia dehaani* Rathbun, 1923** (Japanese name: Kai-kamuri) [カイカムリ]

[*Dromia rumphii* Fabricius: Fauna Japonica, text p. 107; pl. 32 (♂); pl. H (mouthparts)]

[*Dromia dehaani* Rathbun, 1923a: Proc. Biol. Soc. Washington, 36: 67–68]

4 lots; total of 14 specimens and displayed mouthparts.

- 1) RMNH D 35585 (3♂ & 4♀, dry). Paratypes of *Dromia dehaani* Rathbun. CW (max.): 95.0 mm (♂), 82.9 mm (♀). Japan, 1825–1834, H. Bürger. One of the specimens bears a label written by H. Bürger showing the Japanese name "Kengane" of this animal.
- 2) RMNH D 35586 (4♂, 1♀ and mouthparts, dry). Paratypes of *Dromia dehaani* Rathbun. CW (max.): 97.6 mm (♂), 82.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) BM(NH) 736 (1♂, dry). Paratype of *Dromia dehaani* Rathbun. CW: 80.0 mm and CL: 68.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) USNM 104126 (1♀, dry). Paratype of *Dromia dehaani* Rathbun. CL: 54.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**81. *Eplumula phalangium* (De Haan, 1839)** (Japanese name: Mizuhiki-gani) [ミズヒキガニ]

[*Latreillia phalangium* De Haan: Fauna Japonica, text p. 108; pl. 30, figs. 2 (♂ & ♀); pl. H (mouthparts)]

1 lot; 5 specimens.

RMNH D 44205 (5 specimens, dry). Lectotype and paralectotypes of *Latreillia phalangium* De Haan. Japan, 1825–1834, H. Bürger.

**82. *Latreillia valida* De Haan, 1839** (Japanese name: Sanada-mizuhiki-gani) [サナダミズヒキガニ]

[*Latreillia valida* De Haan: Fauna Japonica, text pp. 107–108; pl. 30, fig. 1 (♀)]

2 lots; 2 specimens and displayed mouthparts.

- 1) RMNH D 42206 (2 specimens, dry). Lectotype and paralectotype of *Latreillia valida* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42207 (Mouthparts of paralectotype of *Latreillia valida* De Haan).

**83. *Ranina ranina* (Linnaeus, 1758)** (Japanese name: Asahi-gani) [アサヒガニ]

[*Ranina serrata* Lamarck: Von Siebold, 1824 p. 15]

[*Ranina dentata* Latreille: Fauna Japonica, text p. 139; pl. 34 (♂); pl. 35, figs. 1–3, fig. 4 (♀); pl. J (mouthparts)]

5 lots total of 14 specimens and displayed mouthparts.

- 1) RMNH D 814 (1♂ in alcohol). Japan.
- 2) RMNH D 31722 (3♂ & 2♀, dry). CL: (max.): 148 mm. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 43025 (5 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 43026 (2♂ & 1♀, dry). CW x CL: 88.8 x 103.5 mm (♂), 65.2 x 78.2 mm (♀). Japan, 1825–1834, H. Bürger.

5) RMNH D 43027 (Mouthparts).

**84. *Lyreidus tridentatus* De Haan, 1841** (Japanese name: Biwa-gani) [ピワガニ]  
[*Lyreidus tridentatus* De Haan: Fauna Japonica, text p. 140; pl. 35, fig. 6 (♂); pl. J  
(mouthparts)]

4 lots; total of 6 specimens and displayed mouthparts.

- 1) RMNH D 23017 (1 ♀, dry). Lectotype of *Lyreidus tridentatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 23018 (Mouthparts). Taken from lectotype and paralectotype. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 23019 (2♂, dry). Paralectotypes of *Lyreidus tridentatus* De Haan. CL: 36.6 and 29.85 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 23020 (2♂ & 1♀, dry). Paralectotypes of *Lyreidus tridentatus* De Haan. CL: 44.6–31.3 mm. Japan, 1825–1834, H. Bürger.

**85. *Dorippe sinica* Chen, 1980** (Japanese name: Kimen-gani) [キメンガニ]  
[*Dorippe quadridens* Fabricius: Fauna Japonica, text p. 121; pl. 31, fig. 3 (♂); pl. I  
(mouthparts)]

[*Dorippe sinica* Chen, 1980: Oceanol. Limnol. Sinica, 11 (2): 159–160]

7 lots; total of 17 specimens and displayed mouthparts.

- 1) RMNH D 821 (2 specimens in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 43032 (5♂, 5♀ and 1 spec. (sex indet.), dry). CW (max.): 28.3 mm (♂), 34.4 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 43033 (1♂, dry). CW: 33.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 43034 (Mouthparts). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) BM(NH) 305-a (1♂, dry). CW: 27.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) BM(NH) 733-a (1♀, dry). CW: 33.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) USNM 1041273 (1♂, dry). CL: 44.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**86. *Heikea japonica* (Von Siebold, 1824)** (Japanese name: Heike-gani) [ヘイケガニ]  
[*Dorippe japonica* Von Siebold: 1824, p. 15]

[*Dorippe japonica* Von Siebold: Fauna Japonica, text p. 122; pl. 31, fig. 1 (♀)]

[*Heikea japonica* (Von Siebold): Holthuis and Manning, 1990: Res. Crust., Spec. No. 3: 75–88, figs. 29–35]

7 lots; total of 31 specimens and displayed mouthparts.

- 1) RMNH D 822 (2♂ & 2♀ in alcohol). Lectotype and paralectotypes of *Dorippe japonica* Von Siebold. CW (max.): 28.5 mm (♂), 29.5 mm (♀). Japan, 1823, Ph. F. von Siebold.
- 2) RMNH D 1605 (3♂ & 4♀ in alcohol). Paralectotypes of *Dorippe japonica* Von Siebold. Japan, 1823, Ph. F. von Siebold.
- 3) RMNH D 3042 (9♂ & 4♀, dry). CW (max.): 28.6 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 42167 (2♂ & 3♀, dry). Paralectotypes of *Dorippe japonica* Von Siebold. CW (max.): 26.5 mm (♂), 27.6 mm (♀). Japan, 1823, Ph. F. von Siebold.
- 5) RMNH D 42168 (Mouthparts of paralectotype of *Dorippe japonica* Von Siebold). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 6) SMF-77 (1 ♀ in alcohol). Paralectotype of *Dorippe japonica* Von Siebold. CW: 24.5 mm. Japan, 1823, Ph. F. von Siebold.
- 7) MNHN-B 34 (1 ♀, dry). CL: 16.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**87. *Paradorippe granulata* (De Haan, 1839)** (Japanese name: Samehada-heike-gani) [サメハダヘイケガニ]

[*Dorippe granulata* De Haan: Fauna Japonica, text pp. 122–123; pl. 31, fig. 2 (♀)]

[*Paradorippe granulata* (De Haan): Serène and Romimohtarto, 1969: Mar. Res. Indonesia, 9: 3, 6, 15]

5 lots; total of 38 specimens.

- 1) RMNH D 817 (1 ♂ & 2 ♀ in alcohol). Lectotype and paralectotypes of *Dorippe granulata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 1540 (4 ♂ & 3 ♀ (ovigerous) in alcohol). Paralectotypes of *Dorippe granulata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42165 (11 ♂ & 10 ♀, dry). Paralectotypes of *Dorippe granulata* De Haan. CW (max.): 27.0 mm (♂), 24.8 mm (♀). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42166 (4 ♂ & 2 ♀, dry). Paralectotypes of *Dorippe granulata* De Haan. CW (max.): 22.0 mm (♂), 27.8 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) MNHN-B 11383 (1 ♂, dry). Paralectotype of *Dorippe granulata* De Haan. CW: 19.9 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**88. *Calappa calappa* (Linnaeus, 1758)** (Japanese name: marusode-karappa) [マルソデカラッパ]

1 lot; 1 specimen.

RMNH D 762 (1 ♂ in alcohol). Japan.

**89. *Calappa philargius* (Linnaeus, 1758)** (Japanese name: Megane-karappa) [メガネカラッパ]

[*Calappa (Lophos) philargius* Linnaeus: Fauna Japonica, text pp. 71–72; pl. 19, figs. 1 (young & adult); pl. E (mouthparts)]

7 lots; total of 37 specimens and displayed mouthparts

- 1) RMNH D 770 (6 specimens in alcohol). Japan.
- 2) RMNH D 1688 (8 specimens in alcohol). Japan.
- 3) RMNH D 43215 (1 ♂ & 1 ♀, dry). CW: 75.6 mm (♂), 51.6 mm (♀). Japan, 1823–1829, Ph. F. von Siebold. "*Calappa kabutogane*" is written on the label. This is the combination of the genus *Calappa* to which this species belongs, and a local Japanese name Kabuto-gane.
- 4) RMNH D 43121 (6 ♂, 3 ♀ and 3 spec. (sex indet.), dry). CW (max.): 120.5 mm (♂), 120.0 mm (♀). Japan, 1825–1834, H. Bürger. Three specimens lack the abdomen and appendages; sex is indeterminate.
- 5) RMNH D 43122 (1 ♂, 3 ♀ and 4 spec. (sex indet.), dry). CW: ca. 105 mm (♀)–29.6 mm (♂). Japan. Four specimens lack the abdomen and appendages; sex is indeterminate.
- 6) RMNH D 43128 (1 ♂, dry). CW: 43.7 mm. Japan, 1825–1834, H. Bürger.
- 7) RMNH D 43126 (Mouthparts). Japan.

**90. *Calappa lophos* (Herbst, 1785)** (Japanese name: Torafu-karappa) [トラフカラッパ]

[*Calappa (Lophos) lophos* Herbst: Fauna Japonica, text pp. 72–73; pl. 20, figs. 1 (young & adult); pl. E (mouthparts)]

6 lots; total of 22 specimens and displayed mouthparts.

1) RMNH D 768 (5 specimens in alcohol). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH D 1628 (2♂ & 1♀ in alcohol). Japan.

3) RMNH D 43107 (2♀ and 4 spec. (sex indet.), dry). CW: 126.2–60.7 mm. Japan, 1825–1834, H. Bürger.

This lot carries two labels prepared at Deshima by Bürger: one showing the generic name of this species, and the other showing the generic name and a local Japanese name, Kabutogane.

4) RMNH D 43108 (5♂ & 2♀ dry). CW: 117.3 mm (largest ♂)–31.2 mm (smallest ♀). Japan, 1823–1829, Ph. F. von Siebold.

5) RMNH D 43109 (1♂, dry). CW: 32.1 mm. Japan, 1825–1834, H. Bürger.

6) RMNH D 43112 (Mouthparts).

**91. *Calappa terraereginae* Ward, 1936** (Japanese name: Hime-karappa) [ヒメカラッパ]

[*Calappa (Lophos) philargius* Linnaeus: Fauna Japonica, text p. 71, in part]

[*Calappa terraereginae* Ward, 1936: Mem. Queensland Mus., 11: 1-13]

1 lot; 2 specimens.

RMNH D 43131 (2♂, dry). CW: 49.0 mm and 46.1 mm. Japan, 1825–1834, H. Bürger.

These two specimens were found among specimens of *Calappa philargius* identified by De Haan.

**92. *Mursia armata* De Haan, 1837** (Japanese name: Kinsen-modoki) [キンセンモドキ]

[*Mursia armata* De Haan: Fauna Japonica, text p. 73; pl. 19, fig. 2; pl. E (mouthparts)]

3 lot; 7 specimens and displayed mouthparts.

1) RMNH D 38155 (1♂ & 5♀, dry). Paralectotypes of *Mursia armata* De Haan. (1♀ with rhizocephalan parasite). Japan, 1825–1834, H. Bürger.

2) RMNH D 42103 (1♀, dry). Lectotype of *Mursia armata* De Haan. CW: 57.5 mm Japan, 1825–1834, H. Bürger.

2) RMNH D 42104 (Mouthparts of paralectotype of *Mursia armata* De Haan).

**93. *Cyclöes granulosa* De Haan, 1837** (Japanese name: Karappa-modoki) [カラッパモドキ]

[*Cyclöes granulosa* De Haan: Fauna Japonica, text p. 71; Pl. 19; pl. E (mouthparts)]

2 lot; 1 specimen and displayed mouthparts.

1) RMNH D 42161 (1♀, dry). Holotype of *Cyclöes granulosa* De Haan. CW: 21.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

2) RMNH D 42162 (Mouthparts of holotype of *Cyclöes granulosa* De Haan).

**94. *Matuta victor* Fabricius, 1798** (Japanese name: Kinsen-gani) [キンセンガニ]

[*Matuta victor* Fabricius (p.p.): Fauna Japonica, text p. 127; pl. I (mouthparts)]

4 lots; total of 46 specimens and displayed mouthparts.

1) RMNH D 38343 (7♂ & 6♀, dry). CW: 68.4–39.4 mm (♂), 63.7–54.6 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH D 38176 (10♂ & 19♀, dry). CW: 68.0–51.3 mm (♂), 68.4–40.8 mm (♀). Japan.

3) RMNH D 38179 (1♂ & 2♀, dry). CW: 22.9 mm (♂), 62.0 mm (largest ♀). Japan.

- 4) RMNH D 38180 (Mouthparts), Japan, 1825-1834, H. Bürger.
- 5) MNHN-B 121 (1♀, dry). CW: 38.8 mm. Japan, 1825-1834, H. Bürger.

The label of lot 5 shows only the locality "Japan." Inasmuch as *Matuta victor* is found in the list of specimens sent to Paris in 1852 and no other specimens from Japan are preserved in the Paris Museum, it is highly probable that this specimen originates from the collection of von Siebold and Bürger.

**95. *Matuta planipes* Fabricius, 1798** (Japanese name: Amime-kinsen-gani) [アミメキンセンガニ]

[*Matuta victor* Fabricius (p.p.): Fauna Japonica, text pp. 127-128]

1 lot; 3 specimens.

RMNH D 38171 (3♂, dry). CW: 48.45-44.7 mm. Japan.

**96. *Ashtoret lunaris* (Forskål, 1775)** (Japanese name: Komon-gani) [コモンガニ]

[*Matuta victor* Fabricius (p.p.): Fauna Japonica, text pp. 127-128]

[*Ashtoret lunaris* Galil & Clark: Zoologische Verhandelingen, 294: 1-55, 1994]

1 lot; 1 specimen.

RMNH D 38160 (1♂, dry). CW: 42.0 mm. Japan, 1823-1829, Ph. F. von Siebold.

デ・ハーンはキンセンガニに6つの亜種を認めている。従って、それなりに区別していたのであるが、種としての区別はしていなかった。キンセンガニ類の甲は丸く、形が美しい。色彩も優美である。しかし、各種の形態が似ているので、分類学的にはかなり混乱していた。Galil & Clark (1994) は *Matuta* 属について入念な研究を行い、新たに3新属を設けた。それまで *Matuta* だけであったのに、*Ashtoret*, *Izanami*, *Mebeli* が加わったのである。*Matuta lunaris* とされてきたコモンガニは *Ashtoret lunaris* とされた。*Matuta* がイタリアの女神の名前なので、それにちなんで属名が選ばれた。*Ashtoret* はフェニキアの、*Izanami* は日本の、*Mebeli* はコンゴの女神の名前である。[Galil, B. S., & P. F. Clark: A revision of the genus *Matuta* Weber, 1795 (Crustacea: Brachyura: Calappidae). Zoologische Verhandelingen, 294: 1-55, 1994]

**97. *Arcania undecimspinosa* De Haan, 1841** (Japanese name: Jûichi-toge-kobushi-gani) [ジュウイチトゲコブシガニ]

[*Arcania 11. spinosa* De Haan: Fauna Japonica, text p. 135; pl. 33, fig. 8 (♂); pl. J (mouthparts)]

[*Arcania undecimspinosa* De Haan: Galil, Zool. Mede. Leiden, 75 (11): 169-206, figs. 1-7, 2001]

5 lots; total of 15 specimens and displayed mouthparts.

- 1) RMNH D 790 (5 specimens in alcohol). Lectotype and paralectotypes of *Arcania 11. spinosa* De Haan. Japan, 1825-1834, H. Bürger.
- 2) RMNH D 42114 (1♂ & 4♀, dry). Paralectotypes of *Arcania 11. spinosa* De Haan. CW: 21.4-16.8 mm (♀). Japan, 1825-1834, H. Bürger.
- 3) RMNH D 43115 (1♂, dry). Paralectotype of *Arcania 11. spinosa* De Haan. CW: 20.5 mm. Japan, 1823-1829, Ph. F. von Siebold.
- 4) RMNH D 42116 (3♂ & 1♀, dry). Paralectotypes of *Arcania 11. spinosa* De Haan. CW: 19.5 mm (largest ♂), 11.1 mm (♀). Japan, 1823-1829, Ph. F. von Siebold.
- 5) RMNH D 42117 (Mouthparts of paralectotype of *Arcania 11. spinosa* De Haan).

Galil (2001) revised the genus *Arcania* and established four new species. A detailed discussion of the present species is included in her paper.

イスラエルの Galil 女史は *Arcania* 属のモノグラフを書き、4新種を記載した (Galil, 2001).

上記の標本類を調べ、本種についても詳しい考察を行っている。

**98. *Myra cerelis* Galil, 2001** (Japanese name: Tenaga-kobushi) [テナガコブシ]  
[*Myra fugax* Fabricius,; Fauna Japonica, text p. 134; pl. 33, figs. 1 (♂ & ♀); pl. I (mouthparts)]  
[*Myra cerelis* Galil,; Zool. Med. Leiden 75 (24), 2001; pp. 409-446, figs. 1-19]

6 lots; total of 20 specimens and displayed mouthparts.

- 1) RMNH D 48659 (1♂ dry). Paratype of *Myra cerelis* Galil, 2001. CL: 44.1 mm Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 43202 (4♂ & 3♀, dry). Holotype and Paratypes of *Myra cerelis* Galil, 2001. Japan, 1823–1829, Ph. F. von Siebold. A male with CL of 44.1 mm was designated to be the holotype.
- 3) RMNH D 43203 (5♂ & 3♀, dry). Paratypes of *Myra cerelis* Galil, 2001. CL: 41.3–23.7 mm (♂), 33.5 mm (largest ♀). Japan. 1825–1834, H. Bürger.
- 4) RMNH D 43204 (1♂ & 2♀, dry). Paratypes of *Myra cerelis* Galil, 2001. CL: 23.5 mm (♂), 32.9 mm (larger ♀). Japan, 1825–1834, H. Bürger.
- 5) RMNH D 43206 (Mouthparts of paratypes of *Myra cerelis* Galil, 2001).
- 6) BM(NH) 92-e (1♀, dry). CL: 34.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

Galil (2001) revised the genus *Myra* and established a new genus *Myrine* and four new species. She found morphological differences between the present specimens and *Myra fugax* (Fabricius, 1798) and established a new species *Myra cerelis*. On the morphological differences from *M. fugax* she wrote as follows: *M. celeris* spec. new is distinguished from *M. fugax* by its longer cheliped merus, proportionally shorter fingers, granule-like subdistal denticle on the fused abdominal segment, and in the form of the apical process of the first male pleopod. The type material of the new species includes the specimens that de Haan identified with *M. fugax* Fabricius.

イスラエルの Galil 女史は *Myra* 属の考察を行い、新属 *Myrine* を設け、4 新種を記載した。本標本類はデ・ハーンによって既知種の *Myra fugax* と同定されていた。しかし、はさみ脚の形態や雄の第一腹肢の形態の違いから、別種とされ、新種 *Myra celeris* が記載された。その際に本標本類が研究に用いられたので、その新種のタイプとなったのである。彼らの標本のうちの1点がホロタイプである。なお、記載にあたっては、日本産以外のものも参照されている。

**99. *Philyra pisum* De Haan, 1841** (Japanese name: Mama-kobushi-gani) [マメコブシガニ]

[*Philyra pisum* De Haan, 1841, 1844: Fauna Japonica, text p. 131; pl. 33, figs. 7 (♂ & ♀); pl. I (mouthparts)]

8 lots; total of 161 specimens.

- 1) RMNH D 797 (7♂ & 4♀ in alcohol). Lectotype and paralectotypes of *Philyra pisum* De Haan. Japan.
- 2) RMNH D 42269 (13♂ & 10♀, dry). Paralectotypes of *Philyra pisum* De Haan. CL: 18.65–10.50 mm (♂), 16.4–11.5 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42270 (8♂, dry). Paralectotypes of *Philyra pisum* De Haan. CL: 17.0–12.0 mm. Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42271 (83♂ & 26♀, dry). Paralectotypes of *Philyra pisum* De Haan. CL: 17.0–10.8 mm (♂), 15.5–11.2 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) NSMT (1♀, dry). Paralectotype of *Philyra pisum* De Haan. Japan, 1823–1829, Ph. F. von Siebold.



This specimen was brought to Japan by Dr. I. Gordon of the British Museum (Natural History) at the request of the Leiden Museum and was exhibited at the celebration of the establishment of the Carcinological Society of Japan in 1961. It is now housed in the National Science Museum, Tokyo.

- 6) SMF-66 (5♂ in alcohol). Paralectotypes of *Philyra pisum* De Haan. CW: 16.30–13.50 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) MNHN-B 201 (2♂, dry). Paralectotypes of *Philyra pisum* De Haan. CW: 17.3 mm and 15.8 mm. Japan, 1825–1834, H. Bürger.
- 8) USNM 104124. (1♂ & 1♀, dry). Paralectotypes of *Philyra pisum* De Haan. CL: 17.1 mm (♂), 15.4 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.

**100. *Philyra platycheir* De Haan, 1841** (Japanese name: Hirate-kobushi) [ヒラテコブシ]

[*Philyra platycheir* De Haan: Fauna Japonica, text p. 132; pl. 33, figs. 6 (♂ & ♀)]  
3 lots; total of 17 specimens.

- 1) RMNH D 793 (4 specimens in alcohol). Lectotype and paralectotypes of *Philyra platycheir* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42272 (1♂ & 1♀, dry). Paralectotypes of *Philyra platycheir* De Haan. CL: 10.7 mm (♂), 14.5 mm (♀). Japan, 1825–1834, H. Bürger.
- 3) RMNH D 42273 (7♂ & 4♀, dry). Paralectotypes of *Philyra platycheir* De Haan. CL (max.): 11.5 mm (♂), 10.8 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**101. *Leucosia anatum* (Herbst, 1783)** (Japanese name: Tsuonaga-kobushi) [ツノナガコブシ]

[*Leucosia longifrons* De Haan: Fauna Japonica, text pp. 132–133; pl. 33, fig. 4 (♂)]  
8 lots; total of 22 specimens and displayed mouthparts.

- 1) RMNH D 803 (3 specimens in alcohol). Lectotype and paralectotypes of *Leucosia longifrons* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42210 (6♂ & 2♀, dry). Paralectotypes of *Leucosia longifrons* De Haan. CL (max.): 27.3 mm (♂), 27.3 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42211 (1♂, dry). Paralectotype of *Leucosia longifrons* De Haan. CL: 25.6 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42212 (4♂ & 3♀, dry). Paralectotypes of *Leucosia longifrons* De Haan. CL: 26.0 mm–17.5 mm (♂), 26.9 mm (largest ♀). Japan, 1825–1834, H. Bürger.
- 5) RMNH D 42213. (Mouthparts of paralectotypes of *Leucosia longifrons* De Haan).
- 6) BM(NH) 722-a (1♂, dry). Paralectotype of *Leucosia longifrons* De Haan. CL: 27.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) MNHN-B 178 (1♀, dry). Paralectotype of *Leucosia longifrons* De Haan. CL: 24.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) USNM 104123 (1♂, dry). Paralectotype of *Leucosia longifrons* De Haan. CL: 25.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**102. *Leucosia obtusifrons* De Haan, 1841** (Japanese name: Kobushi-gani) [コブシガニ]

[*Leucosia obtusifrons* De Haan: Fauna Japonica, text p. 133; pl. 33, fig. 2 (♂); pl. I (mouthparts)]

3 lot; total of 10 specimens and displayed mouthparts.

- 1) RMNH D 42214 (8♂ & 1♀, dry). Lectotype and paralectotypes of *Leucosia obtusifrons* De Haan. CL: 30.4–26.2 mm (♂), 35.4 mm (♀). Japan, 1823–1829, Ph. F. von

Siebold.

- 2) RMNH D 42215 (Mouthparts of paralectotype of *Leucosia obtusifrons* De Haan).
- 3) BM(NH) 178-c (1♂, dry). Paralectotype of *Leucosia obtusifrons* De Haan. CL: 29.6 mm. Japan, 1823–1829, Ph. F. von Siebold.

**103. *Leucosia rhomboidalis* De Haan, 1841** (Japanese name: Hishigata-kobushi-gani) [ヒシガタコブシ]

[*Leucosia rhomboidalis* De Haan: Fauna Japonica, text p. 134; pl. 33, fig. 5]

2 lots; total of 6 specimens.

- 1) RMNH D 807 (1 specimen in alcohol). Lectotype of *Leucosia rhomboidalis* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42216 (3♂ & 2♀, dry). Paralectotypes of *Leucosia rhomboidalis* De Haan. CL (max.): 14.4 mm (♂), 15.5 mm (♀). Japan, 1825–1834, H. Bürger.

**104. *Leucosia unidentata* De Haan, 1841** (Japanese name: Yotsume-kobushi-gani) [ヨツメコブシ]

[*Leucosia unidentata* De Haan: Fauna Japonica, text p. 133; pl. 33, fig. 3 (♂)]

3 lots; total of 3 specimens and displayed mouthparts.

- 1) RMNH D 808 (1♂ in alcohol). Lectotype of *Leucosia unidentata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42217 (2♂, dry). Paralectotypes of *Leucosia unidentata* De Haan. CL: 29.9 mm and 28.5 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42218 (Mouthparts of paralectotype of *Leucosia unidentata* De Haan).

**105. *Oncinopus aranea* (De Haan, 1839)** (Japanese name: Kumo-gani) [クモガニ]

[*Inachus (Oncinopus) aranea* De Haan: Fauna Japonica, text p. 100; pl. 29, fig. 2 (♀); pl. H (mouthparts)]

2 lots; total of 3 specimens and displayed mouthparts.

- 1) RMNH D 42248 (2♂ & 1♀, dry). Lectotype and paralectotypes of *Inachus (Oncinopus) aranea* De Haan. CL (max.): 17.0 mm, ♀ (lectotype). Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42249 (Mouthparts of paralectotype of *Inachus (Oncinopus) aranea* De Haan).

**106. *Achaeus japonicus* (De Haan, 1839)** (Japanese name: Akeusu) [アケウス]

[*Inachus (Achaeus) japonicus* De Haan: Fauna Japonica, text pp. 99–100; pl. 29, fig. 3 (♀); pl. H (mouthparts)]

1 lot; mouthparts only.

RMNH D 42106 (Mouthparts of syntype). Japan, 1823–1834, Ph. F. von Siebold and H. Bürger. Specimens are missing.

**107. *Macrocheira kaempferi* (Temminck, 1836)** (Japanese name: Takaashi-gani) [タカアシガニ]

[*Inachus (Macrocheira) kaempferi* De Haan, 1839: Fauna Japonica, text pp. 100–101; pls. 25 & 26 (♂); pls. 27 & 28 (♀); pl. H (mouthparts)]

[*Maja kaempferi* Temminck, 1836: Coup-d'oeil sur la faune des îles de la Sonde et de l'Empire du Japon: p. xxvi, in Fauna Japonica]

Engelbert Kämpfer (1651–1716), a German naturalist and explorer, stayed in Japan as a physician at Deshima for two years from 1690 to 1692 and visited Edo twice. His original manuscript on Japan, written in German, was not published during his lifetime and was bought by an English collector, Sir Hans Sloane in 1725. It was translated into English by a young Swiss physician, J. C. Scheuchzer, and the original English edition "History of

Japan" was published in 1727. It deals with the history, ethnology, politics, geography and natural history of Japan so it is one of the most important sources of information about Japan during the reign of the Tokugawa government. By this publication the present species was first made known to Europe. Kämpfer noted that he was surprised to see this large majid crab at Suruga Bay on his way to Edo (present Tokyo).

11 lots?: total of 8 complete, 4 nearly complete and 1 incomplete specimens; some legs of other specimens and displayed mouthparts.

- 1) RMNH D 10616 (1♂, dry). Lectotype of *Macrocheira kaempferi* Temminck. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 10617-a (1♂ & 1♀, dry). Paralectotypes of *Macrocheira kaempferi* Temminck. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 10617-b (1♀, dry). Paralectotype of *Macrocheira kaempferi* Temminck. CW: 18.2 cm. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 10617-c (1♀, dry). Paralectotype of *Macrocheira kaempferi* Temminck. CW: 20.2 cm. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 10617-d (1♂, dry). Paralectotype of *Macrocheira kaempferi* Temminck. CW: 20.5 cm. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 10617-f (This lot comprises 3 incomplete specimens (1♂ & 2♀) that lack one or two legs, and appendages of other specimens, dry). Paralectotypes of *Macrocheira kaempferi* Temminck. CW: ca. 18.4 cm (♂); ca. 20.2 cm and 17.3 cm (♀). Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.
- 7) RMNH D 10617-g (Mouthparts of a paralectotype of *Macrocheira kaempferi* Temminck).
- 8) MNHN-B (1♂, dry). Paralectotype of *Macrocheira kaempferi* Temminck. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.  
This specimen, obtained from the Rijksmuseum van Natuurlijke Historie (present Nationaal Natuurhistorisch Museum) in 1861 through Schlegel, is now on display in the exhibition building of the Paris Museum (Muséum National d'Histoire Naturelle).
- 9) MNHN B-4113 (1♀, dry). Possibly paralectotype. CW: ca. 21 cm.  
There is no indication that this specimen originated from von Siebold's collection. On the label only the locality name, Japan, is written; however, the specimen looks very old and is probably the one that was sold by the Leiden Museum to G. A. Frank in 1850.
- 10) BM(NH) (Carapace only (sex indet.), dry). Possible paralectotype. CW: 20.6 cm.  
No records exist to indicate that this is a part of von Siebold's collection. This specimen also looks very old, and it is highly probable that the specimen was listed in White's catalogue (1847, List Crust. Brit. Mus., p. 3).
- 11) MSR (1♂, dry). Paralectotype of *Macrocheira kaempferi* Temminck. CW: ca. 20.5 cm. Suruga Province, Eastern Japan, 1823–1829, Ph. F. von Siebold.

Crustacean specimens of 13 species collected by von Siebold and Bürger were sent to Stuttgart in 1841 or 1842. This is the sole specimen in the museum that originated from von Siebold and Bürger's Crustacea and that survived World War II.

**108. *Pugettia incisa* (De Haan, 1837)** (Japanese name: Yahazu-mo-gani) [ヤハズモガニ]

[*Pisa (Halimus) incisus* De Haan, 1837: Fauna Japonica, pl. 24, fig. 3 (♀)]

[*Pisa (Menoethius) incisus* De Haan, 1839: Fauna Japonica, text p. 98; pl. G (mouthparts)]  
2 lots; total of 2 specimens and displayed mouthparts.

- 1) RMNH D 42296 (2♀, dry). Lectotype and paralectotype of *Pisa (Menoethius) incisus* De Haan. CL: 14.0 mm and 13.0 mm. Japan, 1825–1834, H. Bürger.

- 2) RMNH D 42297 (Mouthparts of paralectotype of *Pisa (Menoethius) incisus* De Haan).  
Japan, 1825–1834, H. Bürger.

**109. *Pugettia quadridens* (De Haan, 1837)** (Japanese name: Yotsuba-mo-gani) [ヨツバモガニ]

[*Pisa (Halimus) quadridens* De Haan, 1837: Fauna Japonica, pl. 24, fig. 2 (♂)]

[*Pisa (Halimus) quadridens* De Haan, 1839: Fauna Japonica, text pp. 97–98; pl. G (mouthparts)]

2 lots; total of 6 specimens and displayed mouthparts.

- 1) RMNH D 42297 (2♂ & 4♀, dry). Lectotype and paralectotypes of *Pisa (Menoethius) quadridens* De Haan. CL: 24.2 mm (largest ♂), 23.6–16.9 mm (♀). Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42299 (Mouthparts of paralectotype of *Pisa (Menoethius) quadridens* De Haan).

**110. *Huenia heraldica* (De Haan, 1837)** (Japanese name: Konoha-gani) [コノハガニ]

[*Maja (Huenina) heraldica* De Haan, 1837: Fauna Japonica, pl. 23, fig. 6 (♀): pl. G (mouthparts)]

[*Maja (Huenina) elongata* De Haan, 1837: Fauna Japonica, pl. 23, figs. 4 & 6 (♂): pl. G (mouthparts)]

[*Maja (Huenina) proteus* De Haan, 1837: Fauna Japonica, text pp. 95–96)]

In Fauna Japonica De Haan gave three different scientific names to the same species because morphological differences between the two sexes are so large; the male has a long triangular carapace but the female has a broad hexagonal one. He gave scientific names independently to the male and female in the fourth fascicle published in 1837. Later he noticed his mistake and gave them the replacement name, *Maja (Huenia) proteus*. However, the names *Maja (Huenia) heraldica* (for ♀) and *Maja (Huenia) elongata* (for ♂) have two year's priority over *Maja (Huenia) proteus*. The problem was settled by Holthuis (1987) who chose *Huenia heraldica* as the valid name.

5 lots; total of 10 specimens and displayed mouthparts.

- 1) RMNH D 42129 (1♀, dry). Lectotype of *Maja (Huenia) heraldica* De Haan. CL: 33.4 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42191 (6♀, dry). Paralectotypes of *Maja (Huenia) heraldica* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42192 (1♂, dry). Lectotype of *Maja (Huenia) proteus* De Haan and *Maja (Huenia) elongata* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 42193 (2♂, dry). Paralectotypes of *Maja (Huenia) proteus* De Haan and *Maja (Huenia) elongata* De Haan. CW: 16.5 mm and CL (max.): 28.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42194 (Mouthparts of lectotype of *Maja (Huenia) elongata* De Haan and lectotype of *Maja (Huenia) heraldica* De Haan).

**111. *Hyastenus diacanthus* (De Haan, 1837)** (Japanese name: Tsuno-gani) [ツノガニ]

[*Pisa (Naxia) diacantha* De Haan: Fauna Japonica, text pp. 96–97; pl. 24, fig. 1 (♂); pl. G (mouthparts)]

4 lots; total of 18 specimens and displayed mouthparts.

- 1) RMNH D 742 (6 specimens in alcohol). Lectotype and paralectotypes of *Pisa (Naxia)*

*diacantha* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 2) RMNH D 42195 (5♂ & 1♀, dry). Paralectotypes of *Pisa (Naxia) diacantha* De Haan. Size (max.): 59.3 mm CL x 39.1 mm CW (♂). Japan, 1825–1834, H. Bürger. One male bears a label written by H. Bürger as *Maja* species.
- 3) RMNH D 42196 (3♂ & 3♀, dry). Paralectotypes of *Pisa (Naxia) diacantha* De Haan. CL: 61.1–25.5 mm (♂), 42.1 mm (♀). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42197 (Mouthparts of paralectotype of *Pisa (Naxia) diacantha* De Haan).

**112. *Maja spinigera* De Haan, 1837** (Japanese name: Keashi-gani) [ケアシガニ]

[*Maja (Paramaja) spinigera* De Haan, 1837: Fauna Japonica, pl. 24, fig. 4 (♀)]

[*Maja (Maja) spinigera* De Haan, 1837: Fauna Japonica, text pp. 93–94; pl. G (mouthparts)]  
2 lots; total of 2 specimens and displayed mouthparts.

- 1) RMNH D 42231 (2♀, dry). Lectotype (largest specimen) and paralectotype of *Maja (Maja) spinigera* De Haan. CL x CW: 87.4 x 72.9 mm and 76.9 x 66.4 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42232 (Mouthparts of lectotype of *Maja (Maja) spinigera* De Haan).

**113. *Schizophrys aspera* (H. Milne Edwards, 1834)** (Japanese name: Nokogiri-gani) [ノコギリガニ]

[*Schizophrys aspera* H. Milne Edwards, 1834: Hist. nat. Crust., 1: 320]

[*Maja (Dione) affinis* De Haan, 1839: Fauna Japonica, text p. 94; pl. 22, fig. 4 (♂); pl. G (mouthparts)]

5 lots; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 42300 (1♂, dry). Lectotype of *Maja (Dione) affinis* De Haan. CW: 47.9 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42301 (1 specimen, dry). Paralectotype of *Maja (Dione) affinis* De Haan. CL x CW: 54.9 x 50.4 mm. Japan, 1823–183, Ph. F. von Siebold & H. Bürger. This specimen is not intact, consisting of two chelipeds and a carapace.
- 3) RMNH D 42302 (1♂, dry). Paralectotype of *Maja (Dione) affinis* De Haan. CW: 56.6 mm. Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42303 (Mouthparts of lectotype of *Maja (Dione) affinis* De Haan).
- 5) RMNH No reg. no. (1♂, dry). Paralectotype of *Maja (Dione) affinis* De Haan. CL: 48.6 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**114. *Leptomithrax edwardsii* (De Haan, 1839)** (Japanese name: Koshima-gani) [コシマガニ]

[*Maja (Paramithrax) Peronii* M. Edwards: Fauna Japonica, text pp. 92–93; pl. G (mouthparts)]

[*Maja (Paramithrax) edwardsii* De Haan, 1839: Fauna Japonica, pl. 21, fig. 2 (♂)]

2 lots; total of 2 specimens and displayed mouthparts.

- 1) RMNH D 42258 (2♂, dry). Lectotype and paralectotype of *Maja (Paramithrax) edwardsii* De Haan. CW: 57.4 mm and 55.7 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42259 (Mouthparts of lectotype of *Maja (Paramithrax) edwardsii* De Haan).

**115. *Chlorinoides longispinus* (De Haan, 1839)** (Japanese name: Kaimen-gani) [カイメンガニ]

[*Maja (Chorinus) aculeata* M. Edwards: Fauna Japonica, pl. 23, fig. 2 (♂)]

[*Maja (Chorinus) longispina* De Haan, 1839: Fauna Japonica, text pp. 94–95; pl. G (mouthparts)]

3 lot; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 42158 (2♂, dry). Lectotype (largest specimen) and paralectotype of *Maja*

(*Chorinus*) *longispina* De Haan. CL x CW: 51.5 x 39.8 mm. Japan, 1825–1834, H. Bürger.

- 2) RMNH No reg. no. (Mouthparts of lectotype of *Maja* (*Chorinus*) *longispina* De Haan).
- 3) MNHN-B 4468 (2♂, dry). Paralectotypes of *Maja* (*Chorinus*) *longispina* De Haan. CW: 28.8 mm and 26.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

It is very remarkable that a Japanese paper label bearing the name in Katakana characters "Kiku-mon-gani," which means a crab with chrysanthemum crest, is preserved with this lot. The sole Japanese label written in Katakana characters that is now in Leiden is made of bamboo.

**116. *Micippa thalia* (Herbst, 1803)** (Japanese name: Watakuzu-gani) [ワタクズガニ] [*Pisa* (*Micippe*) *thalia* (Herbst): Fauna Japonica, text pp. 98–99; pl. 23, fig. 3 (♂); pl. G (mouthparts)]

[*Micippa haanii* Stimpson, 1857: Proc. Acad. nat. Sci. Philadelphia, 1857: 217]

3 lots; total of 2 specimens and displayed mouthparts.

- 1) RMNH D 738 (1 specimen in alcohol). Lectotype of *Micippa haanii* Stimpson. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 43538 (1♀, dry). Paralectotype of *Micippa haanii* Stimpson. CW: 26.6 mm. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 43540 (Mouthparts of paralectotype of *Micippa haanii* Stimpson).

**117. *Micippa philyra* (Herbst, 1803)** (Japanese name: Ko-watakuzu-gani) [コワタクズガニ]

[*Micippe philyra*: Fauna Japonica, text p. 99]

1 lot; 1 specimen.

RMNH D 43536 (1♀, dry). CW: 21.1 mm. Japan, 1825–1834, H. Bürger.

Prof. Holthuis added following remarks in the label attached to this specimen: Label in all probability incorrect as De Haan in Fauna Japonica did not mention this species in his material, although he may have had material from outside Japan, since he compared his material of *M. thalia* with *M. philyra*. Herklots (1861) does not list *M. philyra* either.

上記のような問題はあるが、本種は日本では稀な種ではないし、またワタクズガニとよく似ていることを考えると、シーボルトあるいはビュルゲルが収集していた可能性がある。従って、リストから除外せず残すことにした。

**118. *Trigonoplax unguiformis* (De Haan, 1839)** (Japanese name: Sobagara-gani) [ソバガラガニ]

[*Inachus* (*Elamene*) *unguiformis* De Haan: Fauna Japonica, text pp. 75–76; pl. 29, figs. 1 (♂ & ♀); pl. H (mouthparts)]

2 lot; 8 specimens.

- 1) RMNH D 43574 (1♀, dry). Lectotype of *Inachus* (*Elamene*) *unguiformis* De Haan. CW (max.): ca. 17 mm.
- 2) RMNH D 42323 (2♂ & 5♀, dry). Paralectotypes of *Inachus* (*Elamene*) *unguiformis* De Haan. CW (max.): ca. 17 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**119. *Parthenope (Platylambrus) valida* De Haan, 1837** (Japanese name: Hishi-gani) [ヒシガニ]

[*Parthenope* (*Lambrus*) *valida* De Haan: Fauna Japonica, text pp. 90–91; pl. 21, fig. 1 (♀); pl. 22, fig. 1 (♂); pl. F (mouthparts)]

5 lots; total of 12 specimens and displayed mouthparts.

- 1) RMNH D 701 (3♀ in alcohol). Lectotype and paralectotypes of *Parthenope (Lambrus) valida* De Haan. CW: 82.3 mm (Lectotype) and 65.6–39.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42260 (1♂ & 3♀, dry). Paralectotypes of *Parthenope (Lambrus) valida* De Haan. CW: 82.4 mm (♂), 80.6–44.8 mm (♀). Japan, 1825–1834, H. Bürger.
- 3) RMNH D 42261 (2♂ & 1♀, dry). Paralectotypes of *Parthenope (Lambrus) valida* De Haan. CW: 81.5 & 77.9 mm (♂), 68.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 42262 (1♀, dry). Paralectotype of *Parthenope (Lambrus) valida* De Haan. CW: 47.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42263 (Mouthparts of paralectotypes of *Parthenope (Lambrus) valida* De Haan).

**120. *Parthenope (Platylambrus) laciniata* De Haan, 1839** (Japanese name: Hosoude-hishi-gani) [ホソウデヒシガニ]

[*Parthenope (Lambrus) valida* De Haan, 1837: Fauna Japonica, pl. 22, figs. 2 & 3 (♂)]

[*Parthenope (Lambrus) laciniata* De Haan, 1839: Fauna Japonica, text pp. 91–92]

4 lot; 15 specimens.

- 1) RMNH D 39124 (1♂ in alcohol). Lectotype of *Parthenope (Lambrus) laciniata* De Haan. CW: 37.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42264 (3♂, 4♀ & 1 spec. (sex indet.), dry). Paralectotypes of *Parthenope (Lambrus) laciniata* De Haan. CW: 39.9–17.4 mm (♂), 29.2 mm (smallest ♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42265 (3♂ & 3♀ dry). Paralectotypes of *Parthenope (Lambrus) laciniata* De Haan. CW: 47.7–14.4 mm (♂), 39.9–19.3 mm (♀). Japan, 1825–1834, H. Bürger.
- 4) USNM 104125 (1♂, dry). Paralectotype of *Parthenope (Lambrus) laciniata* De Haan. CL: 28.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**121. *Parthenope (Pseudolambrus) beaumontii* (Alcock, 1895)** (Japanese name: Kobu-hishi-gani) [コブヒシガニ]

1 lot; 20 specimens.

D 1606 (9♂ & 11♀ in alcohol). Japan.

**122. *Parthenope (Aulacolambrus) diacantha* De Haan, 1837** (Japanese name: Sankaku-hishi-gani) [サンカクヒシガニ]

[*Parthenope (Lambrus) diacantha* De Haan: Fauna Japonica, text p. 92; pl. 23, fig. 1 (♂); pl. F (mouthparts)]

2 lot; 1 specimen and displayed mouthparts.

- 1) RMNH D 42128 (1♂, dry). Holotype of *Parthenope (Lambrus) diacantha* De Haan. CW: 10.4 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42129 (Mouthparts of Holotype of *Parthenope (Lambrus) diacantha* De Haan).

**123. *Cancer gibbosulus* (De Haan, 1833)** (Japanese name: Ibo-ichô-gani) [イボイチヨウガニ]

[*Corystes (Trichocera) gibbosula* De Haan: Fauna Japonica, text p. 45; pl. 2, fig. 4; pl. 13, fig. 3; pl. A (mouthparts)]

5 lots; total of 7 specimens and displayed mouthparts.

- 1) RMNH D 353 (1♀ in alcohol). Lectotype of *Corystes (Trichocera) gibbosula* De Haan. CW: 18.8 mm. Japan, 1823–1829, Ph. F. von Siebold.

- 2) RMNH D 354 (1♂ in alcohol). Paralectotype of *Corystes (Trichocera) gibbosula* De Haan. CW: 15.3 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42321 (1♂ & 1♀, dry). Paralectotypes of *Corystes (Trichocera) gibbosula* De Haan. CW: 31.2 mm (♂), 30.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH No reg. no. (3♂). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42322 (Mouthparts of paralectotype of *Corystes (Trichocera) gibbosula* De Haan).

**124. *Gomezia bicornis* Gray, 1831** (Japanese name: Tama-hige-gani) [タマヒゲガニ]  
[*Corystes (Oeides) 20-spinosa* De Haan: Fauna Japonica, text p. 44-45; pl. 2, figs. 5 (♂ & ♀); pl. A (mouthparts)]

[*Gomezia bicornis* Gray: 1831: Zool. Misc., London: 39]

3 lots; total of 5 specimens and displayed mouthparts.

- 1) RMNH D 800 (2 specimens in alcohol). Lectotype and paralectotype of *Corystes (Oeidea) 20-spinosa* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42181 (3 specimens, dry). Paralectotypes of *Corystes (Oeidea) 20-spinosa* De Haan. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 42182 (Mouthparts of lectotype of *Corystes (Oeidea) 20-spinosa* De Haan).

**125. *Kraussia integra* (De Haan, 1837)** (Japanese name: Goishi-gani) [ゴイシガニ]  
[*Cancer (Xantho) integer* De Haan: Fauna Japonica, text p. 66; pl. 18, fig. 6]

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 42201 (1♀, dry). Holotype of *Cancer (Xantho) integer* De Haan. CW: 12.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42202 (Mouthparts of holotype of *Cancer (Xantho) integer* De Haan).

**126. *Ovalipes punctatus* (De Haan, 1833)** (Japanese name: Hiratsume-gani) [ヒラツメガニ]

[*Corystes (Anisopus) punctata* De Haan: Fauna Japonica, text p. 44; pl. 2, fig. 1 (♂); pl. A (mouthparts)]

[*Ovalipes punctatus* (De Haan): Rathbun, 1930: Bull. U. S. natn. Mus., 152: 24]

6 lots; total of 12 specimens and displayed mouthparts.

- 1) RMNH D 365 (1♂ in alcohol). Lectotype of *Corystes (Anisopus) punctata* De Haan. CW: 48.1 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 1717 (4♂ in alcohol). Paralectotypes of *Corystes (Anisopus) punctata* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42250 (4♂, dry). Paralectotypes of *Corystes (Anisopus) punctata* De Haan. CW (max.): 53.6 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42251 (2♂, dry). Paralectotypes of *Corystes (Anisopus) punctata* De Haan. CL: 32.8 mm and 25.4 mm. Japan, 1823–183, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42252 (Mouthparts of lectotype of *Corystes (Anisopus) punctata* De Haan). Japan, 1823–1829, Ph. F. von Siebold.
- 6) BM(NH) 915-a (1♂, dry). Paralectotype of *Corystes (Anisopus) punctata* De Haan. CW: 31.0 mm. Japan, 1823–1829, Ph. F. von Siebold.

**127. *Liocarcinus corrugatus* (Pennant, 1777)** (Japanese name: Shiwa-gazami) [シワガザミ]

[*Portunus deprator* Fabricius; Von Siebold, 1824, p. 14]

[*Portunus (Portunus) corrugatus* Pennant: Fauna Japonica, text p. 40; pl. A (mothparts)]



6 lots; total of 21 specimens and displayed mouthparts.

- 1) RMNH D 405 (1 ♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 406 (1 ♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42225 (4 ♀, dry). Syntypes of *Portunus (Portunus) corrugatus* var. b De Haan. CW: 32.3–17.9 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42226 (1 ♀, dry). Syntype of *Portunus (Portunus) corrugatus* var. b De Haan. CW: 32.7 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 44005 (6 ♂, 7 ♀ & 1 spec. (sex indet.), dry). CW: 23.9–16.8 mm (♂), 21.7–15.5 mm (♀). Japan, 1823–183, Ph. F. von Siebold & H. Bürger.
- 6) RMNH D 44006 (Mouthparts of *Portunus (Portunus) corrugatus* var. b De Haan). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**128. *Scylla serrata* (Forskål, 1775) \*** (Japanese name: Nokogiri-gazami) [ノコギリガザミ]

[*Portunus (Scylla) serratus* Forskahl: Fauna Japonica, text p. 44]

\* The taxonomy of the present species is very confused. Stephenson & Campbell (1960) keep it to be a single species though Estampador (1949) and Serène (1952) divided it into three species and one subspecies. The specimens in the Leiden Museum are classified into two species: *Scylla oceanica* and *Scylla serrata*; however, we followed a personal opinion of Prof. Holthuis who believes that it might be better not to split it into two or more species until the taxonomical problems are settled.

9 lots; total of 28 specimens, one pair of chelipeds and displayed mouthparts.

- 1) RMNH D 486 (2 ♀ in alcohol). Japan.
- 2) RMNH D 31728 (2 ♂, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 44313 (2 chelipeds only, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 44311 (1 ♂, dry). CW: 195 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 44312 (1 ♀, dry). CW: 112.7 mm. Japan, 1825–1834, H. Bürger.
- 6) RMNH D 44314 (10 ♂ & 10 ♀, dry). CW: 110.2–31.9 mm (♂), 79.0–30.4 mm (♀). Japan.
- 7) RMNH D 44315 (Mouthparts), Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) MNHN-B 1080 (1 ♀ dry). CW: 143 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) MNHN-B 1090 (1 ♂, dry). CW: 159 mm. Japan.

Possibly received from Leiden. The label indicates only the locality, Japan. However, the exchange list in the archives of the Leiden Museum shows that two specimens were sent to Paris in 1837.

ノコギリガザミとされてきた種は現在では4種からなるという見解が一般的になってきている。ライデンにある標本は少なくとも2種から構成されていると思われる。しかし、本種の場合、標本はパリにもあり、再同定してきちんとリストするのは容易ではない。さしあたり、1種として扱っている。

**129. *Portunus (Portunus) pelagicus* (Linnaeus, 1758)** (Japanese name: Taiwan-gazami) [タイワンガザミ]

[*Portunus (Neptunus) pelagicus* Linnaeus: Fauna Japonica, text pp. 37–38 (in part); pl. 10 (♀); pl. A (mouthparts)]

10 lots; total of 22 specimens and displayed mouthparts.

- 1) RMNH D 1586 (1 ♀ in alcohol). Japan.
- 2) RMNH D 44260 (1 specimen, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 44261 (2 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.

- 4) RMNH D 44264 (Mouthparts). Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 44265 (fragments, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 44266 (3 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 7) RMNH D 44267 (6 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 8) RMNH D 44268 (7 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold.
- 9) BM(NH) 24-k (1 ♂, dry). CW: 157.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) MNHN-B 901 (1 ♂, dry). CW: 131.7 mm.

The label of specimen (10) shows only the locality name, Japan; however, from the appearance and the condition of the specimen it is highly probable that this is one of the three specimens obtained from Leiden in 1852 as *Neptunus pelagicus*.

**130. *Portunus (Portunus) sanguinolentus* (Herbst, 1783)** (Japanese name: Janomegazami) [ジャノメガザミ]

[*Portunus (Neptunus) sanguinolentus*, Linnaeus: Fauna Japonica, text p. 38]

4 lots; total of 13 specimens.

- 1) RMNH D 398 (1♂ in alcohol). Japan, 1825–1834, H. Bürger.
- 2) RMNH D 1574 (2♂ & 1♀ in alcohol). Japan.
- 3) RMNH D 44287 (5♂ & 1♀, dry). CW: 92.9–37.9 mm (♂), 59.9 mm (♀). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 44284 (3 specimens, dry). CW: 106.7–28.2 mm Japan, 1823–1829, Ph. F. von Siebold.

**131. *Portunus (Portunus) trituberculatus* (Miers, 1876)** (Japanese name: Gazami) [ガザミ]

[*Portunus (Neptunus) pelagicus* Linnaeus: Fauna Japonica, text pp. 37–38 (in part); pl. 9 (♂); pl. 10 (♀); pl. A (mouthparts)]

[*Portunus (Portunus) trituberculatus* Miers, 1876: Ann. Mag. nat. Hist., (4) 17: 221]

De Haan did not distinguish this species from *P. pelagicus*. In Plates 9 and 10 of Fauna Japonica he introduced this species as *Portunus pelagicus*. The picture in Pl. 10 is unusual because it has an extra spine on the left half of the front. It looks like a hybrid of *P. pelagicus* and the present species, but as the actual specimen still in the Leiden Museum collection shows, it is just an abnormal specimen of *Portunus trituberculatus*.

12 lots; total of 46 specimens.

- 1) RMNH D 387 (1♂ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 388 (1♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 389 (1♀ in alcohol). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 2144 (1♂ & 1♀ in alcohol). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 44298 (7 specimens, dry). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 6) RMNH D 44299 (8 specimens, dry). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 7) RMNH D 44300 (8 specimens, dry). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 8) RMNH D 44301 (12 specimens, dry). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 9) RMNH D 44302 (3 specimens, dry). Japan. 1823-1834, Ph. F. von Siebold & H. Bürger.
- 10) RMNH D 44303 (1 specimen, dry). Paratype of *Neptunus trituberculatus* Miers, 1876. Japan, 1823-1834, Ph. F. von Siebold & H. Bürger. Specimen figured by De Haan, 1835, Fauna Jap. Crust., pl. 10, as *Portunus (Neptunus) pelagicus*. Specimen shows aberration in teeth of frontal lobe.
- 11) MNHN-B 889 (1♀, dry). CW: 186 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger The present and next specimens seem to be two of the three specimens that

were received from Leiden in in 1852 as *Neptunus pelagicus*.

- 12) MNHN-B 4206 (1♂, dry). CW: 181.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**132. *Portunus (Monomia) haanii* (Stimpson, 1858)** (Japanese name: Ibo-gazami) [イボガザミ]

[*Portunus (Amphitrite) gladiator* Fabricius: Fauna Japonica, text p. 39; pl. 1, fig. 5 (♀); pl. A (mouthparts)]

[*Amphitrite haanii* Stimpson, 1858a: Proc. Acad. nat. Sci. Philadelphia, 1858: 38]

Stephenson & Cook (1973) studied the '*Portunus gladiator* complex' and came to the conclusion that Fabricius' species is a junior synonym of *P. sanguinolentus* and the accepted name of the present species is *Amphitrite haanii* Stimpson, 1858.

8 lots; total of 55 specimens and displayed mouthparts.

- 1) RMNH D 379 (1♂ & 1♀ in alcohol). Lectotype (♂) and paralectotype (♀) of *Amphitrite haanii* Stimpson. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 1569 (1♂ & 1♀ in alcohol). Paralectotypes of *Amphitrite haanii* Stimpson. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42248 (17♂ & 11♀, dry). Paralectotypes of *Amphitrite haanii* Stimpson. CW: 45.4–25.5 mm (♂), 44.8–33.4 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 42306 (1 specimen, dry). Paralectotype of *Amphitrite haanii* Stimpson. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42394 (7♂ & 12♀, 1 spec. (sex indet.), dry). Paralectotypes of *Amphitrite haanii* Stimpson. CW: 42.4–28.0 mm (♂). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) RMNH D 44249 (Mouthparts of paralectotype of *Amphitrite haanii* Stimpson).
- 7) BM(NH) 922-a (1♂, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) ZMC (1♂ & 1♀ in alcohol). CW: 36.5 mm (♂), 38.1 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**133. *Portunus (Monomia) tenuipes* De Haan, 1833** (Japanese name: Kebuk-ibo-gazami) [ケブカイボガザミ]

[*Portunus (Amphitrite) tenuipes* De Haan: Fauna Japonica, text p. 39; pl. 1, fig. 4 (♂)]

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 400 (1♂ in alcohol). Holotype of *Portunus (Amphitrite) tenuipes* De Haan. CW: 34.9 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42291 (Mouthparts of holotype of *Portunus (Amphitrite) tenuipes* De Haan).

**134. *Portunus (Xiphonectes) hastatoides* Fabricius, 1798** (Japanese name: Hime-gazami) [ヒメガザミ]

[*Portunus (Amphitrite) hastatoides* Fabricius: Fauna Japonica, text p. 39-40; pl. 1, fig. 3 (♂)]

7 lots; total of 44 specimens.

- 1) RMNH D 378 (1♂ in alcohol). Japan.
- 2) RMNH D 1530 (5♂ & 4♀ in alcohol). Japan.
- 3) RMNH D 44251 (3♂ & 4♀, dry). CW (max.): 38.6 mm (♂). Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 44230 (9♂ & 14♀, dry). CW (max.): 36.0 mm (♂), 43.3 mm (♀). Japan.
- 5) MNHN-B 882 (1♀, dry). CW: 35.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) MNHN-B 884 (2 specimens, dry). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

7) MNHN-B 891 (1♂, dry). CW: 37.4 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**135. *Portunus (Cycloachelous) orbitosinus* Rathbun, 1911** (Japanese name: Hedama-hime-gazami) [メダマヒメガザミ]

[*Portunus (Amphitrite) gladiator* Fabricius: Fauna Japonica, text p. 65; pl. 18, fig. 1]

[*Portunus orbitosinus* Rathbun, 1911: Trans. Linnean Soc. London, (2) (Zool.) 14(2): 205; pl. 15, fig. 11]

1 lot; 1 specimen.

RMNH D 44290 (1♀, dry). Syntype of *Portunus orbitosinus* Rathbun and syntype of *Portunus (Amphitrite) gladiator* var. De Haan. CW: 21.7 mm. Japan, 1825–1834, H. Bürger.

**136. *Charybdis (Charybdis) feriata* (Linnaeus, 1758)** (Japanese name: Shima-ishigani) [シマイシガニ]

[*Portunus cruxiger* Von Siebold, 1824, p. 24]

[*Portunus (Oceanus) crucifer* Daldorf, De Haan, 1833, 1835, Fauna Japonica, text pp. 40-41: Pl. A (mouthparts).]

5 lots ; total of 5 specimens and displayed mouthparts.

1) RMNH D 458 (1♂ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH D 36606 (1♂, dry). CW: 32.3 mm. Japan, 1825–1834, H. Bürger.

3) RMNH D 44199 (1♀, dry). CW: ca. 105.5 mm. Japan, 1823–1829, Ph. F. von Siebold

4) RMNH D 44201 (1♂ & 1♀, dry). CW: 139.0 mm (♂), 103.7 mm (♀). Japan, 1825–1834, H. Bürger.

5) RMNH D 44200 (Mouthparts).

**137. *Charybdis (Charybdis) granulata* (De Haan, 1833)** (Japanese name: Tsubu-watari-ishigani) [ツブワタリイシガニ]

[*Portunus (Charybdis) granulata* De Haan: Fauna Japonica, text p. 42; pl. 1, fig. 1 (♂)]

3 lots; total of 3 specimens and displayed mouthparts.

1) RMNH D 468 (1♂ in alcohol). Lectotype of *Portunus (Charybdis) granulatus* De Haan. CW: 84.7 mm. Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH D 1616 (1♂ & 1♀ in alcohol). Paralectotypes of *Portunus (Charybdis) granulatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

3) RMNH D 44226 (Mouthparts of paralectotype of *Portunus (Charybdis) granulatus* De Haan).

**138. *Charybdis (Charybdis) variegata* (Fabricius, 1798)** (Japanese name: Kawari-ishigani) [カワリイシガニ]

[*Portunus (Charybdis) variegatus* Fabricius: Fauna Japonica, text p. 42; pl. 1, fig. 2]

4 lots; total of 5 specimens and displayed mouthparts.

1) RMNH D 456 (1♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH D 1736 (1♂ & 1♀ in alcohol). CW: 20.6 mm (♂), 21.3 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.

3) RMNH D 44228 (1♂ & 1♀, dry). Japan, 1823–1829, Ph. F. von Siebold.

4) RMNH D 44228 (Mouthparts of *Portunus (Charybdis) variegata* Fabricius). Japan, 1823–1829, Ph. F. von Siebold.

**139. *Charybdis (Charybdis) miles* (De Haan, 1835)** (Japanese name: Aka-ishigani) [アカイシガニ]

[*Portunus (Charybdis) miles* De Haan: Fauna Japonica, text p. 41; pl. 11, fig. 1]

9 lots; total of 25 specimens.

- 1) RMNH D 465 (1♂ in alcohol). Lectotype of *Portunus (Charybdis) miles* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 466 (1♀ in alcohol). Paralectotype of *Portunus (Charybdis) miles* De Haan. Japan, 1823–1829, Ph. F. von Siebold
- 3) RMNH D 1691 (3♂ in alcohol). Japan.
- 4) RMNH D 42147 (2♂ & 4♀, dry). Paralectotypes of *Portunus (Charybdis) miles* De Haan. CW: 90.8 and 66.5 mm (♂), 76.6–51.5 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 42148 (9♂ & 2♀, dry). Paralectotypes of *Portunus (Charybdis) miles* De Haan. CW: 85.7–42.3 mm (♂), 64.5 and 54.7 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) BM(NH) 324-a (1♂, dry). Paralectotype of *Portunus (Charybdis) miles* De Haan. CW: 82.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) MNHN-B 766 (1♂, dry). Paralectotype of *Portunus (Charybdis) miles* De Haan. CW: .71.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.  
Labels of the present and the next specimens have no record other than the locality; however, according to the exchange list in the archives of the Leiden Museum, two specimens of the present species were sent on exchange to Paris.
- 8) MNHN-B 4196 (1♂, dry). Paralectotype of *Portunus (Charybdis) miles* De Haan. CW: 75.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) MNHN B 11236 (1♀, in alcohol). Paralectotype of *Portunus (Charybdis) miles* De Haan. CW: 64.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) RMNH D 466 (1 specimen in alcohol). Japan, 1860, Kattendijke.

This is not a specimen from the von Siebold and Bürger collection, but comes from Kattendijke's collection. W. J. C. Ridder Huysen van Kattendijke is one of the famous foreigners in the history of Japan. He came to Japan in 1857, from the Netherlands, commanding the "Japan," a small warship built in the Netherlands on the request of the Tokugawa government. On arrival at Nagasaki Kattendijke was appointed chief of the naval school founded there to educate Japanese pupils. He stayed in Nagasaki until November 1859. Temminck asked him to collect specimens of Japanese animals (Fransen et al., 1997). This is one of his zoological collections donated to the Leiden Museum. It is interesting to note that Kattendijke, well known as a naval officer who later became minister of the navy of his country and who made considerable efforts for the foundation of the Japanese navy, also contributed to some extent to the natural history of Japan.

最後にリストしている標本はシーボルト、ピュルゲルのものではなく、幕末に長崎に設立された海軍伝習所の教官として有名な海軍士官カッテンダイケのものである。彼は勝海舟らを教育し、日本に大きな影響を残した。後に海軍大臣、外務大臣にもなった。国立自然史博物館の館長のテンミンクの依頼で標本の収集を行った。彼の甲殻類標本としてはこれだけで、他には無い。

**140. *Charybdis (Charybdis) riversandersoni* Alcock, 1899** (Japanese name: Akaishimodoki) [アカイシモドキ]

1 lot; 1 specimen.

- RMNH D 45440 (1♂, dry). Redet. T. Yamaguchi & L.B. Holthuis. Cat. b. Paralectotype of *Portunus (Charybdis) miles* De Haan. CW: 78.2 mm. Japan, 1825–1834, H. Bürger.  
Taken from lot D 42148.

This specimen was figured by Kawahara Keiga (figure published in colour in Holthuis & Sakai, 1970, Ph. F. von Siebold and Fauna Japonica, p. 126 & 318. pl. 22) and in black and white by Yamaguchi (ed.), (1993, p. 408, (*Charybdis miles* pp.), fig. 144 B

(photograph of lot D 42148: the present specimen is shown in the central figure of upper row)). The late Mr. Seiji Nagai of Kushimoto, Wakayama Prefecture, Japan, who had a great interest in crabs, spotted the figure of this specimen in Yamaguchi's book and informed him of the true identity of the specimen. Checking of this specimen by T. Yamaguchi showed it to be the exact specimen figured by Kawahara Keiga, as witnessed by the presence of an abnormal (bifurcate) spine on the merus of the right cheliped and the arrangement of the other spines (see **Plates 1 & 2**).

この種は前回はリストしていない。アカイシガニの標本の中に本種が混じっていることを指摘したのは故永井誠二氏である。写真を見て、本種があることを見つけたのである。氏の慧眼に驚かされたが、この標本は川原慶賀によって実物大に描かれていた。この標本にははさみ脚に奇型が生じているが、慶賀はそれもその通りに描いている。彼が標本をそのままの大きさで、その通りに描いていたことを証明する標本になった。 **Plates 1 & 2** (76, 77 ページ) を見て頂きたい。

**141. *Charybdis (Charybdis) japonica* (A. Milne Edwards, 1861)** (Japanese name: Ishigani) [イシガニ]

[*Portunus (Charybdis) 6-dentatus* Herbst: De Haan, 1835, Fauna Japonica, text p. 41-42; pl. 12, fig. 1 (♀)]

[*Goniosoma japonicus* A. Milne-Edwards, 1861: Arch. Mus. Hist. nat. Paris, 10: 373]  
22 lots; total of 122 specimens and displayed mouthparts.

- 1) RMNH D 461 (1♂ in alcohol). Lectotype of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 462 (1♀ in alcohol). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 464 (1♂ in alcohol). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 1619 (13♂ & 16♀ in alcohol). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 42145 (1♂ & 1♀, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) RMNH D 42146 (13♂ & 11♀ + fragments, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) RMNH D 42207 (19 specimens, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) RMNH D 42210 (3 specimens, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) RMNH D 42211 (5 specimens, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) RMNH D 42213 (11 specimens + fragments, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 11) RMNH D 42214 (10 specimens, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 12) RMNH D 42215 (1♂, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 13) RMNH D 42216 (4 specimens, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 14) RMNH D 42212 (Mouthparts of Paralectotype of *Goniosoma japonicus* A. Milne Edwards).
- 15) NSMT (1♀, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. Japan, 1823–1829, Ph. F. von Siebold.

Dr. Isabella Gordon brought to Japan on behalf of the Leiden Museum some crustacean specimens including a pair of the present species in 1961. One of these (female) was handed to the National Science Museum, Tokyo by Dr. T. Sakai.

- 16) KPM NH 107264 (1♂, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. CW: 54.1 mm. Japan, 1823–1829, Ph. F. von Siebold.  
This is another specimen (male) that was brought to Japan by Dr. I. Gordon and now preserved in the Kanagawa Prefectural Museum of Natural History in Odawa.
- 17) ZMC (1♂ & 1♀, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. CW: 57.1 mm (♂), 61.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 18) BM(NH) 925-a (1♀, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. CW: 74.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 19) MNHN-B 762 (1♀, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. CW: 75.45 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 20) MNHN-B 4200 (1♂, dry). Paralectotype of *Goniosoma japonicus* A. Milne Edwards. CW: 88.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 21) MNHN-B 4192 (2♀, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. CW: 64.8 mm and 64.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.  
A Japanese label with the local name of this species, Yagani, written in Ka-takana characters is preserved. Almost all such labels seem to have been discarded. We found only three Japanese labels in the crustacean collection of von Siebold and Bürger; one in Leiden and two in Paris.
- 22) USNM 104122 (1♂ & 1♀, dry). Paralectotypes of *Goniosoma japonicus* A. Milne Edwards. CL: 40.2 mm (♂), 47.2 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**142. *Charybdis (Goniohellenus) truncata* (Fabricius, 1798)** (Japanese name: Hiroba-ishigani) [ヒロバイシガニ]

[*Portunus (Thalamita) truncatus* Fabricius: De Haan, 1835, Fauna Japonica, text p. 43; pl. 12, fig. 3 (♂)]

[*Goniosoma ornatum* A. Milne-Edwards, 1861: Arch. Mus. Hist. nat. Paris, 10: 376]

12 lots; total of 87 specimens and displayed mouthparts.

- 1) RMNH D 474 (1♂ & 1♀ in alcohol). Syntypes of *Goniosoma ornatum* A. Milne Edwards. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 1587 (61 specimens in alcohol). Japan.
- 3) RMNH D 42151 (1♂, dry). Syntype of *Goniosoma ornatum* A. Milne Edwards. CW: 36.3 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42152 (1♀, dry). Syntype of *Goniosoma ornatum* A. Milne Edwards. CW: 23.8 mm. Japan, 1825–1834, H. Bürger.
- 5) RMNH D 42153 (6♂ & 3♀, dry). Syntypes of *Goniosoma ornatum* A. Milne Edwards. CW: 36.8–22.5 mm (♂), 23.1–16.9 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 42154 (1♀, dry). Syntype of *Goniosoma ornatum* A. Milne Edwards. CW: 24.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) RMNH D 42155 (Mouthparts of syntype of *Goniosoma ornatum* A. Milne Edwards).
- 8) RMNH D 42150 (5♂ & 3♀, dry). CW (max.): 24.5 mm (♂). Japan
- 9) RMNH D 44221 (1♂, dry). CW: 34.2 mm. Japan.
- 10) BM(NH) No reg. no. (1♂, dry). Syntype of *Goniosoma ornatum* A. Milne Edwards. CW: 35.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 11) MNHN-B 777 (1♂, dry). CW: 36.2 mm. Japan.

The specimen possibly originated from von Siebold and Bürger's crustacean collections. The label bears only the locality record "Japan" and no indication of the

collector. However, the exchange list in the Leiden Museum shows that three specimens of the present species were sent to Paris in 1878. Very possibly this is one of those specimens.

12) MNHN-B 778 (1 ♂, dry). CW: 30.2 mm. Japan.

This is also the specimen possibly received on exchange in 1878.

**143. *Charybdis (Gonioneptunus) bimaculata* (Miers, 1886)** (Japanese name: Futahoshi-ishigani) [フタホシイシガニ]

[*Portunus (Charybdis) truncatus* Fabricius var.: De Haan, 1837, Fauna Japonica, text p. 65; pl. 18, fig. 2 (♂)]

[*Goniosoma variegatum* var. *bimaculata* Miers, 1886: Rep. Voy. Challenger, (Zool.), 191; Pl. 15, figs. 3, 3a-c]

1 lot; 1 specimen.

RMNH No reg. no. (1♂, dry). CW: 27.3 mm. Japan, 1823–1829, Ph. F. von Siebold.

**144. *Thalamita prymna* (Herbst, 1803)** (Japanese name: Benitsuke-gani) [ベニツケガニ]

[*Portunus (Thalamita) prymna* Herbst: Fauna Japonica, text p. 43; pl. 12, fig. 2; pl. A (mouthparts)]

3 lots; total of 5 specimens.

1) RMNH D 436 (1♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

2) RMNH D 46800 (1♀, dry). CW: 79.2 mm. Japan, 1823–1829, Ph. F. von Siebold.

3) RMNH D 46801 (2♂, dry). Japan.

**145. *Thalamita danae* (Stimpson, 1858)** (Japanese name: Minami-benitsuke-modoki) [ミナミベニツケモドキ]

1 lot; 1 specimen.

RMNH D 44326 (1♀, dry). CW: 22.1 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**146. *Thalamita sima* H. Milne Edwards, 1834** (Japanese name: Futaba-benitsuke-gani) [フタバベニツケガニ]

[*Portunus (Thalamita) arcuatus* De Haan, 1833: Fauna Japonica, text pp. 43–44; pl. 2, fig. 2; pl. 13, fig. 1]

[*Thalamita sima* H. Milne Edwards, 1834: Hist. nat. Crust., 1: 460]

The name *Portunus (Thalamita) arcuatus* De Haan, on Plate 2 of the Crustacea volume of Fauna Japonica, which carries both the name and the figure, was published in 1833. *Portunus arcuatus* De Haan, 1833, is older than its synonym *Thalamita sima* H. Milne Edwards, 1834, but it cannot be used as it is a junior primary homonym of *Portunus arcuatus* Leach, 1814.

7 lots; total of 11 specimens and displayed mouthparts.

1) RMNH D 442 (1♂ in alcohol). Lectotype of *Portunus (Thalamita) arcuatus* De Haan. CW: 42.2 mm. Japan, 1825–1834, H. Bürger.

2) RMNH D 443 (1♂ in alcohol). Paralectotype of *Portunus (Thalamita) arcuatus* De Haan. CW: 23.5 mm. Japan, 1823–1829, Ph. F. von Siebold.

3) RMNH D 1739 (2♂ in alcohol). Japan.

4) RMNH D 443 (1♂, dry). Paralectotype of *Portunus (Thalamita) arcuatus* De Haan. CW: 23.5 mm. Japan, 1823–1829, Ph. F. von Siebold.

4) RMNH D 42317 (2♂ & 2♀, dry). Paralectotypes of *Portunus (Thalamita) arcuatus* De Haan. CW: 27.0 and 26.6 mm (♂), 34.7 and 22.8 mm (♀). Japan, 1823–1829, Ph. F.



von Siebold.

- 5) RMNH D 42319 (Mouthparts of paralectotype of *Portunus (Thalamita) arcuatus* De Haan).
- 6) MNHN-B 2071 (1♂, dry). Paralectotype of *Portunus (Thalamita) arcuatus* De Haan. CW: 35.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) MNHN-B 2065 (1♂, dry). Paralectotype of *Portunus (Thalamita) arcuatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**147. *Thalamita adomete* (Herbst, 1803)** (Japanese name: Futaba-benitsuke-modoki) [フタバベニツケモドキ]

[*Portunus (Thalamita) arcuatus* De Haan, 1833: Fauna Japonica, text pp. 43–44; pl. 2, fig. 2; pl. 13, fig. 1]

1 lot; 19 specimens.

RMNH D 42318 (8♂ & 11♀, dry). Paralectotypes of *Portunus (Thalamita) arcuatus* De Haan. CW (max.): 23.6 mm (♂), 23.1 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**148. *Podophthalmus vigil* (Fabricius, 1798)** (Japanese name: Menga-gazami) [メナガガザミ]

[*Podophthalmus spinosus* Lamarck: Von Siebold, 1824, p. 14]

[*Portunus (Podophthalmus) vigil* Fabricius; De Haan, 1833, 1835, Fauna Japonica, text p. 44; pl. A (mouthparts)]

3 lots; total of 3 specimens.

- 1) RMNH D 485 (1♂ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 1738 (1♂ in alcohol). Japan.
- 3) RMNH D 42287 (1♂, dry). CW: 105.3 mm. Japan, 1823–1829, Ph. F. von Siebold.

**149. *Carcinoplax longimanus* (De Haan, 1833)** (Japanese name: Enkô-gani) [エンコウガニ]

[*Cancer (Curtonotus) longimanus* De Haan: Fauna Japonica, text pp. 50–51; pl. 6, figs. 1; pl. B (mouthparts)]

[*Carcinoplax longimana* (De Haan): Ortmann, 1894: Zool. Jahrb., Syst., 7: 688]

H. Milne Edwards (1852: 164) replaced *Curtonotus* De Haan, 1833, by *Carcinoplax* because the name *Curtonotus* had already been used by Stephens, 1827, for a genus of Coleoptera. A monograph of the species belong to the genus *Carcinoplax* was published by D. Guinot (1989).

6 lots; total of 12 specimens and displayed mouthparts.

- 1) RMNH D 308 (2♂ in alcohol). Lectotype and paralectotype of *Cancer (Curtonotus) longimanus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42139 (5♂ & 1♀, dry). Paralectotypes of *Cancer (Curtonotus) longimanus* De Haan. CW: 69.6–33.7 mm (♂), 28.6 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 44436 (2♂, dry). CW: 53.1 mm and 38.9 mm. Japan.
- 4) RMNH D 42140. (Mouthparts of paralectotypes of *Cancer (Curtonotus) longimanus* De Haan).
- 5) BM(NH) 899-a (1♂, dry). Paralectotype of *Cancer (Curtonotus) longimanus* De Haan. CW: ca. 63 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) MNHN-B 2956 (1♂, dry). Paralectotype of *Cancer (Curtonotus) longimanus* De Haan. CW: 66.3 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**150. *Carcinoplax vestita* (De Haan, 1833)** (Japanese name: Kebuka-enkô-gani) [ケ

ブカエンコウガニ]

[*Cancer (Curtonotus) vestitus* De Haan: Fauna Japonica, text p. 51; pl. 5, fig. 3 (♀)]

[*Carcinoplax vestiata* (De Haan): H. Milne Edwards, 1852: Ann. Sci. Nat., ser. 3: 164]

4 lots; total of 6 specimens and displayed mouthparts.

- 1) RMNH D 311 (1♀ in alcohol). Lectotype of *Cancer (Curtonotus) vestitus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42274 (2♂ & 2♀, dry). Paralectotypes of *Cancer (Curtonotus) vestitus* De Haan. CW: 23.2 mm and 18.3 mm (♂), 25.0 mm and 24.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 44443 (Mouthparts of paralectotype of *Cancer (Curtonotus) vestitus* De Haan).
- 4) MNHN-B 2958 (1♂, dry). Paralectotype of *Cancer (Curtonotus) vestitus* De Haan. CW: 17.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**151. *Eucrate crenata* (De Haan, 1835)** (Japanese name: Maruba-gani) [マルバガニ]

[*Cancer (Eucrate) crenatus* De Haan: Fauna Japonica, text pp. 51–52; pl. 15, fig. 1 (♂)]

3 lots; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 287 (1♂ & 1♀ in alcohol). Lectotype and paralectotype of *Cancer (Eucrate) crenatus* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42176 (2♀, dry). Paralectotypes of *Cancer (Eucrate) crenatus* De Haan. CW: 31.3 mm and 30.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42177 (Mouthparts of paralectotype of *Cancer (Eucrate) crenatus* De Haan).

**152. *Hexapinus latipes* (De Haan, 1835)** (Japanese name: Mutsuashi-gani) [ムツアシガニ]

[*Hexapus latipes* De Haan, 1835: Fauna Japonica, pl. D (mouthparts)]

[*Hexapus sexpes* Fabricius: Fauna Japonica, text pp. 63–64; pl. 11, fig. 6]

As pointed out by Manning and Holthuis (1981), the specimen that De Haan in his text of Fauna Japonica (and on pl. 11, fig. 6) assigned to *Hexapus sexpes* (Fabr.) is actually a species of the genus *Hexapinus*, different from Fabricius's species. The specific name *latipes*, that De Haan used for it on Plate D, now becomes available for it. The correct name for the species thus is *Hexapinus latipes* (De Haan, 1835).

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 31783 (1 specimen, dry). Holotype of *Hexapus latipes* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 31783 (Mouthparts of holotype of *Hexapus latipes* De Haan).

**153. *Halimede fragifer* (De Haan, 1835)** (Japanese name: Gokaku-ibo-ôgi-gani) [ゴカクイボオウギガニ]

[*Cancer (Halimede) fragifer* De Haan: Fauna Japonica, text p. 47; pl. 13, fig. 4]

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 42183 (1♂, dry). Holotype of *Cancer (Halimede) fragifer* De Haan. CL: 16.1 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 31784 (Mouthparts of holotype of *Cancer (Halimede) fragifer* De Haan).

**154. *Liagore rubromaculatus* (De Haan, 1833)** (Japanese name: Benihoshi-manjû-gani) [ベニホシマンジュウガニ]

[*Cancer (Liagore) rubromaculatus* De Haan: Fauna Japonica, text p. 49; pl. 5, fig. 1; pl. B (mouthparts)]

3 lots; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 42220 (2♂ & 1♀, dry). Paralectotypes of *Cancer (Liagore) rubromaculatus* De Haan. CW: 38.9 and 37.3 mm (♂), 34.5 mm (♀). China and Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42221 (1♂, dry). Lectotype of *Cancer (Liagore) rubromaculatus* De Haan. CW: 37.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42223 (Mouthparts of paralectotype of *Cancer (Liagore) rubromaculatus* De Haan).

**155. *Liomera venosa* (H. Milne Edwards, 1834)** (Japanese name: Benit-ôgi-gani) [ベニオウギガニ]

[*Cancer (Xantho) obtusus* De Haan: Fauna Japonica, text pp. 47-48; pl. 13, fig. 5]

[*Liomera venosa* H. Milne Edwards, 1834: Hist. nat. Crust., 1: 383]

1 lot; 1 specimen.

RMNH D 42141 (1♂, dry). Holotype of *Cancer (Xantho) obtusus* De Haan. CW: 42.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**156. *Atergatis floridus* (Linnaeus, 1767)** (Japanese name: subesube-manjû-gani) [スベスマンジュウガニ]

[*Cancer (Atergatis) floridus* Linnaeus: Fauna Japonica, text p. 46]

6 lots; total of 17? specimens

- 1) RMNH D 646 (1♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 44473 (3♂ & 2♀, dry). CW: 48.3–24.3 mm (♂), 48.2 and 42.7 mm (♀). Japan, Moluccas (Indonesia), Red Sea.
- 3) RMNH D 44474 (3♂ & 1♀, dry). CW: 46.7–37.2 mm (♂), 26.1 mm (♀). Japan.
- 4) RMNH D 44477 (2♂ & 1♀, dry). CW: 44.4 and 15.4 mm (♂), 33.4 mm (♀). Japan.
- 5) RMNH D 44490 (2♂ & 1♀, dry). CW: 29.3 and 28.7 mm (♂), 40.4 mm (♀). Japan and Moluccas (Indonesia).
- 6) MNHN-B 4248 (1♂, dry). CW: 51.1 mm. Japan.

The present species is not found in the 1852 exchange list of the Leiden Museum; however, the age of the specimen suggests that it possibly originated from von Siebold and Bürger's collection.

**157 *Atergatis integerrimus* (Lamarck, 1801)** (Japanese name: Hoshi-manjû-gani) [ホシマンジュウガニ]

[*Cancer (Atergatis) integerrimus* Lamarck: De Haan, 1835, Fauna Japonica, text pp. 45-46; pl. 14, fig. 1]

1 lot; 1 specimen.

RMNH D 641 (1♀ in alcohol). Japan, 1823–1829, Ph. F. von Siebold.

**158. *Atergatis subdentatus* (De Haan, 1833)** (Japanese name: Aka-manjû-gani) [アカマンジュウガニ]

[*Cancer (Atergatis) subdentatus* De Haan, 1833, 1835, Fauna Japonica, text p. 46; pl. 3, fig. 1]

[*Cancer (Atergatis) subspinosus* (error pro subdentatus) De Haan, 1833, Fauna Japonica, pl. B (mouthparts)]

On Plate B in Fauna Japonica a species is figured as *Cancer (Atergatis) subspinosus*. The name *subspinosus* is used nowhere else. It must be a lapsus for *Cancer (Atergatis) subdentatus*.

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 42124 (1♂, dry). Holotype of *Cancer (Atergatis) subdentatus* De Haan. CW:

78.0 mm. Japan, 1825–1834, H. Bürger.

2) RMNH D 42126 (Mouthparts of holotype of *Cancer (Atergatis) subdentatus* De Haan).

**159. *Atergatis reticulatus* (De Haan, 1833)** (Japanese name: Heritori-manjû-gani) [ヘリトリマンジュウガニ]

[*Cancer (Atergatis) reticulatus* De Haan: Fauna Japonica, text p. 47; pl. 3, fig. 4]

3 lots; total of 3 specimens and displayed mouthparts.

- 1) RMNH D 644 (2♀ in alcohol). Lectotype and paralectotype of *Cancer (Atergatis) reticulatus* De Haan. CW: 75.8 mm and 63.5 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42120 (1♂, dry). Paralectotype of *Cancer (Atergatis) reticulatus* De Haan. CW: 77.1 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42121 (Mouthparts of paralectotype of *Cancer (Atergatis) reticulatus* De Haan).

**160. *Hypocolpus haanii* Rathbun, 1909** (Japanese name: Kubomi-ôgi-gani) [クボミオウギガニ]

[*Cancer (Xantho) granulatus* De Haan, 1837: Fauna Japonica, text p. 65; pl. 18, fig. 3 (♂)]

[*Hypocolpus haanii* Rathbun, 1909: Proc. Biol. Soc. Washington, 22: 114]

1 lot; 1 specimen.

RMNH D 42198 (1♂, dry). Lectotype of *Hypocolpus haanii* Rathbun and I lectotype of *Cancer (Xantho) granulatus* De Haan, 1837. Not *Cancer granulatus* Linnaeus, 1758. CW: 46.0 mm. Japan, 1825–1834, H. Bürger.

**161. *Macromedaeus distinguendus* (De Haan, 1835)** (Japanese name: Shiwa-ôgi-gani) [シワオウギガニ]

[*Cancer (Xantho) distinguendus* De Haan, 1835: Fauna Japonica, text pp. 48; pl. 13, fig. 7]

[*Macromedaeus distinguendus* (De Haan), Guinot, 1968: Bull. Mus. Hist. Nat., (2), 39 (4): 708]

3 lots; total of 5 specimens.

- 1) RMNH D 42331 (1♂ & 1 spec. (sex indet.), dry). Paralectotypes of *Cancer (Xantho) distinguendus* De Haan. CW: 25.5 mm and 23.3 mm. 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42332 (2♂, dry). Paralectotypes of *Cancer (Xantho) distinguendus* De Haan. CW: 25.5 mm and 23.3 mm. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 42657 (1♂, dry). Lectotype of *Cancer (Xantho) distinguendus* De Haan. CW: 24.5 mm. 1823–1834, Ph. F. von Siebold & H. Bürger.

**162. *Leptodius exaratus* (H. Milne Edwards, 1834)** (Japanese name: Ôgi-gani) [オウギガニ]

[*Cancer (Xantho) lividus* De Haan, 1835: Fauna Japonica, text pp. 48–49; pl. 13, fig. 6]

[*Cancer (Xantho) affinis* De Haan, 1835: Fauna Japonica, text p. 48; pl. 13, fig. 8]

[*Leptodius exaratus* H. Milne Edwards, 1834: Hist. nat. Crust., 1: 402]

De Haan believed that the present material consists of two species: *C. (X.) lividus* and *C. (X.) affinis*, both shown on Plate 13 of the Crustacea volume of Fauna Japonica. At present, however, these names are considered to be synonyms of *Leptodius exaratus* which has one year's priority.

5 lots; total of 6 specimens.

- 1) RMNH D 42333 (1♂, dry). Lectotype of *Cancer (Xantho) lividus* De Haan. CW: 21.3 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 42335. (1♀, dry). Paralectotype of *Cancer (Xantho) affinis* De Haan. CW: 31.5

mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 3) RMNH D 42336 (1♀, dry). Paralectotype of *Cancer (Xantho) lividus* De Haan. CW: 13.0 mm, Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 44643 (1♂ & 1♀, dry). CW: 12.1 mm (♀). Japan (Probably 1823–1834, Ph. F. von Siebold & H. Bürger.)
- 5) RMNH D 44644 (1♂, dry). Lectotype of *Cancer (Xantho) affinis* De Haan. CW: 31.9 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**163. *Leptodius sanguineus* (H. Milne Edwards, 1834)** (Japanese name: Mutsuba-ôgi-gani) [ムツバオウギガニ]

lots; total of 4 specimens.

- 1) RMNH D 5656 (1♂ & 2♀, dry). CW: 33.4 mm (♂), 22.9 and 18.2 mm (♀). Japan.
- 2) RMNH D 5657 (1♂, dry). CW: 34.4 mm. Japan, 1825–1834, H. Bürger.

**164. *Cycloxanthops truncatus* (De Haan, 1837)** (Japanese name: Togari-ôgi-gani) [トガリオウギガニ]

[*Cancer (Xantho) truncatus* De Haan: Fauna Japonica, text p. 66; pl. 18, fig. 4 (♂)]

[*Cycloxanthops truncatus* (De Haan): Guinot, 1968: Bull. Mus. Hist. Nat., (2), 39(4): 700]

1 lot; 2 specimens.

RMNH D 42337 (1♂ & 1♀, dry). Lectotype (♂) and paralectotype of *Cancer (Xantho) truncatus* De Haan. CW: 15.4 mm (♂), 12.1 mm (♀). Japan, 1825–1834, H. Bürger.

**165. *Actaea semblatae* Guinot, 1976** (Japanese name: Samehada-ôgi-gani) [サメハダオウギガニ]

[*Cancer (Actaea) granulatus* Savigny: Fauna Japonica, text p. 47]

[*Actaea semblatae* Guinot, 1976: Mém. Mus. Hist. nat. Paris Sér. A, Zool., 97: 225–226; pl. 11, figs. 4, 4a, 5 & 6]

2 lots: 3 specimens and displayed mouthparts.

- 1) RMNH D 44461 (2♂ & 1♀, dry). CW: 15.5 and 13.9 mm (♂), 19.5 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 44462 (Mouthparts).

**166. *Hypothalassia armata* (De Haan, 1833)** (Japanese name: Matsuba-gani) [マツバガニ]

[*Cancer (Acanthodes) armatus* De Haan, 1833: Fauna Japonica, text p. 52; pl. 4, pl. B (mouthparts)]

[*Hypothalassia armatus* (De Haan): Gordon, 1954: West Austr. Naturalist, 4 (4): 97]

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 21219 (1♀, dry). Holotype of *Cancer (Acanthodes) armatus* De Haan. CW: 109.8 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42105 (Mouthparts of holotype of *Cancer (Acanthodes) armatus* De Haan).

**167. *Actumnus setifer* (De Haan, 1833)** (Japanese name: Suehiro-ibote-gani) [スエヒロイボテガニ]

[© *Cancer (Xantho) setifer* De Haan, 1833: Fauna Japonica, pl. 3, fig. 3]

[*Cancer (Pilumnus) setifer* De Haan, 1835: Fauna Japonica, text p. 50]

[*Actumnus setifer* (De Haan): A. Milne Edwards, 1865: Nouv. Arch. Mus. d'Hist. Nat., Paris, 1: 287]

3 lots; 3 specimens and displayed mouthparts.

- 1) RMNH D 42108 (2♂, dry). Lectotype and paralectotype of *Cancer (Pilumnus) setifer* De

Haan. CW (max.): 20.9 mm. Japan, 1823–1829, Ph. F. von Siebold.

- 2) RMNH D 43109 (Mouthparts of lectotype of *Cancer (Pilumnus) setifer* De Haan.
- 3) MNHN-B B7041 (1♀, dry). Paralectotype of *Cancer (Pilumnus) setifer* De Haan. CW (max.): 13.8 mm. Japan, 1823–1829, Ph. F. von Siebold.

The label of this lot shows that this specimen was received from Leiden through J. A. Herklots. He was the successor of De Haan as the curator of the Invertebrate division of the Leiden Museum.

**168. *Actumnus squamosus* (De Haan, 1835)** (Japanese name: Ibote-gani) [イボテガニ]

[*Cancer (Pilumnus) squamosus* De Haan: Fauna Japonica, text p. 50]

[*Actumnus squamosus* (De Haan): Ortmann, 1893: Zool. Jahrb., Syst., 7(II): 475]

1 lot; mouthparts only.

RMNH D 44480 (Mouthparts of holotype). Holotype is missing.

**169. *Pilumnus habererianus* Doflein, 1902** (Japanese name: Hime-kebuka-gani) [ヒメケブカガニ]

[*Cancer (Pilumnus) minutus* De Haan: Fauna Japonica, text p. 50; pl. 3, fig. 2]

1 lot; mouthparts only.

RMNH D 44770. (Mouthparts of holotype of *Cancer (Pilumnus) minutus* De Haan, 1833).

Specimens are missing. The explanation attached to the specimen is as follows:

*Cancer (Pilumnus) minutus* De Haan is a junior primary homonym of *Cancer minutus* Linnaeus, 1758 (now *Planes minutus* (Linnaeus, 1758)), *Pilumnus habererianus* Doflein, 1902 is evidently the correct name of the species.

**170. *Zalasia dromiaeformis* De Haan, 1839** (Japanese name: Doro-ishi-gani) [ドロイシガニ]

[*Trichia dromiaeformis* De Haan: Fauna Japonica, text p. 110; pl. 29, figs. 4 (♂ & ♀); pl. H (mouthparts)]

[*Zalasia dromiaeformis* (De Haan): Rathbun, 1897: Proc. Biol. Soc. Washington, 11: 166]

3 lots; total of 2 specimens and displayed mouthparts.

- 1) RMNH D 831 (1 specimen in alcohol). Lectotype of *Trichia dromiaeformis* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42338 (1♂, dry). Paralectotype of *Trichia dromiaeformis* De Haan. CW: 50.5 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42339 (Mouthparts of paralectotypes of *Trichia dromiaeformis* De Haan).

A detailed discussion on the change of the generic name of the present species was given by Holthuis (1996),

デ・ハーンはドロイシガニを彼が新しく設けた Trichidea 科に含まれる新属の新種として記載した。これはデ・ハーンが優れた観察眼を持っていたため、その種が極めて特徴的であることを知ったのである。その後 Trichidea という科名は綴りがおかしいということで Ortmann (1893) によって Trichiidae に修正されたのである。その後に記載年の問題が生じた。デ・ハーンは本種をファウナ・ヤポニカ甲殻類編の三ヶ所で記載している。図版の H 29, とテキストである。いずれも発行年は 1839 年であった。しかし、ファウナ・ヤポニカ甲殻類編は分冊形式で長い年月を費やして刊行され、各分冊がいつ刊行されたのか、かならずしも明らかでないという問題があった。Rathbun (1887) は *Tichius* という属名がすでに 1775 年に甲虫に用いられていると勘違いして、*Zalasia* という新しい属名を提案した。しかし、その見解は受け入れられなかった。ところが、*Trichia* という属名が貝類でも用いられていることが判明した。そちらは

1840年に命名され、ドロイシガニよりも後である。しかし、ドロイシガニの記載があるファウナ・ヤボニカ甲殻類編の箇所は過って1841年と思われていたので、ドロイシガニの属名は *Zalasius* に変更されることになった。その属名がもっぱら使用されてきた。

しかし、その後実際刊行年は1839年と判明したので、当初の属名の *Trichia* が復活することになった。山口・馬場の1993年のリストでは、そちらの名前を使用したのである。けれども、その貝類の方がより普通であり、属名の *Trichia* はすでにヨーロッパで広く用いられている。特殊なカニの一種に *Trichia* を用いるのではなく、そちらは *Zalasius* にするのが望ましいと動物命名規約委員会に提案された。ところが、委員会事務局で調べたところ、*Trichia* という属名は1768年に別の生物に対して使用されており、ドロイシガニにも、またその貝類にも使用することはできないことが明らかになった。そのため、ドロイシガニの属名は *Zalasius* に最終的に落ち着くことになったのである。Holthuis (1996) に解説がある。

**171. *Planes cyaneus* Dana, 1851** (Japanese name: Oki-nagare-gani) [オキナガレガニ]  
[*Grapsus (Grapsus) pusillus* Fabricius: Fauna Japonica, text p. 59; pl. 16, fig. 2 (♂)]  
[*Planes cyaneus* Dana, 1851: Proc. Acad. Nat. Sci. Philadelphia, 5: 250]

1 lot; 6 specimens.

RMNH D 107 (2♂ & 4♀ in alcohol). CW (max.): 14.6 mm (♂), 13.1 mm (♀). Japan, 1825–1834, H. Bürger.

**172. *Metopograpsus thukuhar* (Owen, 1839)** (Japanese name: Hashiri-iwagani-modoki) [ハシリイワガニモドキ]

1 lot; 2 specimens.

RMNH D 79 (1♂ & 1♀ in alcohol). Japan.

**173. *Eriocheir japonicus* (De Haan, 1835)** (Japanese name: Mokuzu-gani) [モクスガニ]

[*Grapsus (Eriocheir) japonicus* De Haan: Fauna Japonica, text pp. 59–60; pl. 17; pl. D (mouthparts)]

All the specimens of *Eriocheir japonicus* in the collection of the Leiden Museum are paralectotypes. The lectotype of the species is a dry male specimen in the collection of the Museum National d'Historie Naturelle in Paris; it was obtained on exchange from the Leiden Museum in 1837. In his study of the biology of *Eriocheir sinensis* H. Milne Edwards, 1837, Hoestlandt (1948: 8, 9, fig. 6) mentioned the specimen in the Paris Museum as "le type de l'*Eriocheir japonicus*" and figured it as "Holotype de *Eriocheir japonicus*." Although it clearly was not the intention of Hoestlandt to select a lectotype for the species, his action citing the specimen as "holotype" makes it ipso facto the lectotype (see Art. 746 of the International Code of Zoological Nomenclature, ed. 3, p. 74). Consequently all the other syntypes now become paralectotypes.

11 lots; total of 19 specimens and displayed mouthparts.

- 1) RMNH D 113 (1♀ in alcohol). Paralectotype of *Grapsus (Eriocheir) japonicus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 114 (1♂ in alcohol). Paralectotype of *Grapsus (Eriocheir) japonicus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 1618 (1♂ in alcohol). Japan.
- 4) RMNH D 42173 (3♂ & 3♀, dry). Paralectotypes of *Grapsus (Eriocheir) japonicus* De Haan. CW: 77.2–41.6 mm (♂), 63.4–36.2 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 42174 (1♂ & 3♀, dry). CW: 40.1 mm (♂), 53.0–40.1 mm (♀). Japan.
- 6) RMNH D 42175 (Mouthparts of paralectotypes of *Grapsus (Eriocheir) japonicus* De

- Haan).
- 7) BM(NH) 754-a, b (1♂ & 1♀, dry). Paralectotypes of *Grapsus (Eriocheir) japonicus* De Haan. CW: 55.0 mm (♂), 50.8 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 8) ZMC (1♂ in alcohol). Paralectotype of *Grapsus (Eriocheir) japonicus* De Haan. CW: 68.9 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 9) MNHN-B 3382 (1♂, dry). Lectotype of *Grapsus (Eriocheir) japonicus* De Haan. CW: 66.2 mm. Japan.  
Only the locality name, Japan, is written on the label. There is no indication to show that this specimen was from Leiden. The appearance is somewhat different from those of the above listed specimens, but it is very probable that the specimen originated from the collection in Leiden. However, if this is not the case, then it can not be the type specimen of the present species.
  - 10) MNHN-B 3385 (1♂, dry). Paralectotype of *Grapsus (Eriocheir) japonicus* De Haan. CW: 45.00 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
  - 11) MNHN-B 3386 (1♀, dry). Possible paralectotype of *Grapsus (Eriocheir) japonicus* De Haan. CW: 58.0 mm. Japan.  
The label indicates only the locality, Japan. However, from the appearance very similar to those of dry specimens in Leiden, it is highly probable that this is one of the three specimens received from Leiden in 1837 and 1852.

**174. *Hemigrapsus sanguineus* (De Haan, 1835)** (Japanese name: Iso-gani) [イソガニ]

[*Grapsus (Grapsus) sanguineus* De Haan: Fauna Japonica, text pp. 58–59; pl. 16, fig. 3 (♀)]  
[*Hemigrapsus sanguineus* (De Haan): Rathbun, 1902: Bull. Mus. Comp. Zool. Harvard College, 39(5): 151]

4 lots; total of 4 specimens and displayed mouthparts.

- 1) RMNH D 42132 (1♂ & 1♀, dry). Lectotype (♂) and paralectotype (♀) of *Grapsus (Grapsus) sanguineus* De Haan. CW: 28.0 mm (♂), 19.7 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42133 (1♀, dry). Paralectotype of *Grapsus (Grapsus) sanguineus* De Haan. CW: 25.1 mm. Japan, 1825–1834, H. Bürger.
- 3) RMNH D 42134 (Mouthparts of paralectotype of *Grapsus (Grapsus) sanguineus* De Haan).
- 4) RMNH D 45222 (1♂, dry). CW: 23.6 mm. Japan. Specimen looks slightly to fresh to be a von Siebold specimens, but that possibility cannot be excluded.

**175. *Hemigrapsus penicillatus* (De Haan, 1835)** (Japanese name: Kefusa-iso-gani) [ケフサイソガニ]

[*Grapsus (Eriocheir) penicillatus* De Haan: Fauna Japonica, text p. 60; pl. 11, fig. 5; pl. D (mouthparts)]

10 lots; total of 23 specimens and displayed mouthparts.

- 1) RMNH D 164 (8 specimens in alcohol). Paralectotypes of *Grapsus (Eriocheir) penicillatus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 200 (1♂ in alcohol). Lectotype of *Grapsus (Eriocheir) penicillatus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 201 (1♂ in alcohol). Paralectotype of *Grapsus (Eriocheir) penicillatus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 203 (2♂ & 2♀ in alcohol). Paralectotypes of *Grapsus (Eriocheir) penicillatus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.



- 5) RMNH D 42130 (2♂ & 2♀, dry). Paralectotypes of *Grapsus (Eriocheir) penicillatus* De Haan. CW: 18.1 and 13.8 mm (♂), 16.9 and 12.9 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 42131 (Mouthparts of paralectotype of *Grapsus (Eriocheir) penicillatus* De Haan).
- 7) RMNH D 45224 (1♂ & 1♀, dry). Paralectotypes of *Grapsus (Eriocheir) penicillatus* De Haan. Japan, 1825–1834, H. Bürger. Male specimen bears a label with a handwriting of Bürger, "Grapsus species."
- 8) MNHN-B 3506 (1♂, dry). Paralectotype of *Grapsus (Eriocheir) penicillatus* De Haan. CW: 19.9 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) MNHN-B 11012 (1♂, dry). Possible paralectotype of *Grapsus (Eriocheir) penicillatus* De Haan. CW: 23.4 mm. Japan.  
Only the locality, Japan, is written on the label. However, this specimen is probably one of the two specimens received from Leiden in 1837 and 1878.
- 10) MNHN-B 12837 (1♂ in alcohol). Paralectotype of *Grapsus (Eriocheir) penicillatus* De Haan. CW: 16.4 mm. Japan.  
The label of this specimen indicates that the specimen was received from Leiden in 1880.

**176. *Gaetice depressus* (De Haan, 1833)** (Japanese name: Hira-iso-gani) [ヒライソガニ]

[*Grapsus (Platynotus) depressus* De Haan: Fauna Japonica, text p. 63; pl. 8, fig. 2 (♂); pl. D (mouthparts)]

9 lots; total of 22 specimens and displayed mouthparts.

- 1) RMNH D 1226 (1♂ in alcohol). Lectotype of *Grapsus (Platynotus) depressus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 1227 (1♀ in alcohol). Paralectotype of *Grapsus (Platynotus) depressus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 1737 (1♂ & 2 ovigerous ♀ in alcohol). Japan.
- 4) RMNH D 42279 (4♂, dry). Paralectotypes of *Grapsus (Platynotus) depressus* De Haan. CW: 21.8–12.2 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 42280 (Mouthparts of paralectotype of *Grapsus (Platynotus) depressus* De Haan).
- 6) RMNH D 45219 (1♂, dry). ?Paralectotype of *Grapsus (Platynotus) depressus* De Haan, 1841. ?Japan, 1823–1829, Ph. F. von Siebold & H. Bürger. The specimen was found in an unlabelled mixed lot among which 1 specimen of *Hemigrapsus penicillatus* with a Von Siebold label was found. It is possible that this is also the specimen from Japan and is a paralectotype.
- 7) RMNH D 45157 (5♂ & 3♀, dry). ?Paralectotypes of *Grapsus (Platynotus) depressus* De Haan, 1841. CW: 19.6–13.3 mm (♂), 16.5 and 12.4 mm (♀). Japan ?1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) MNHN-B 3519 (1?♂, dry). Paralectotype of *Grapsus (Platynotus) depressus* De Haan. CW: ca. 13.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.  
The size of chelipeds is disproportionate to that of carapace. There is no doubt that this resulted from the combination of two incomplete specimens.
- 9) MNHN-B 10808 (2♂ & 1 spec. (sex indet.), dry). Paralectotypes of *Grapsus (Platynotus) depressus* De Haan. CW: 16.9–12.4 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**177. *Sesarma (Chiromantes) haematocheir* (De Haan, 1833)** (Japanese name:

Akate-gani) [アカテガニ]

[*Grapsus (Pachysoma) haematocheir* De Haan: Fauna Japonica, text p. 62; pl. 7, fig. 4 (♂)]

[*Sesarma (Holometopus) haematocheir* (De Haan): Tesch, 1917: Zool. Meded., Leiden, 3: 156 (lit.)]

10 lots; total of 30 specimens and displayed mouthparts.

- 1) RMNH D 158 (1♀ in alcohol). Paralectotype of *Grapsus (Pachysoma) haematocheir* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 159 (6 specimens in alcohol). Paralectotypes of *Grapsus (Pachysoma) haematocheir* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 160 (1♂ in alcohol). Lectotype of *Grapsus (Pachysoma) haematocheir* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42311 (5♂ & 2♀, dry). Paralectotypes of *Grapsus (Pachysoma) haematocheir* De Haan. CW: 36.0–22.5 mm (♂), 22.4 and 22.1 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 45152 (Mouthparts of *Grapsus (Pachysoma) haematocheir* De Haan).
- 6) RMNH D 45153 (9♂ & 1♀, dry). CW: 34.9–15.6 mm (♂). Japan.
- 7) BM(NH) 752-a (1♂, dry). Paralectotype of *Grapsus (Pachysoma) haematocheir* De Haan. CW: 28.4 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) MNHN-B 10888 (1♂ & 1♀, dry). Paralectotypes of *Grapsus (Pachysoma) haematocheir* De Haan. CW: 29.2 mm (♂), 16.2 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) MNHN-B 10889 (1♂, dry). Paralectotype of *Grapsus (Pachysoma) haematocheir* De Haan. CW: 34.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) MNHN-B 12475 (1♂, dry). Paralectotype of *Grapsus (Pachysoma) haematocheir* De Haan. CW: 29.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**178. *Sesarma (Chiromantes) dehaani* (H. Milne Edwards, 1853)** (Japanese name: Kuro-benkei-gani) [クロベンケイガニ]

[*Grapsus (Pachysoma) quadratus* De Haan, 1833, 1835: Fauna Japonica, text p. 62; pl. 8, fig. 3 (♂)]

[*Sesarma dehaani* H. Milne Edwards, 1853: Ann. Sci. nat. Zool., (3) 30: 184]

9 lots; total of 14 specimens and displayed mouthparts.

- 1) RMNH D 156 (1♂ & 1♀ in alcohol). Paralectotypes of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 157 (1 specimen in alcohol). Lectotype of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 1693 (4 specimens in alcohol). Paralectotypes of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 2149 (Mouthparts of the paralectotype of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 5) RMNH D 2177 (1♂ & 1♀, dry). Paralectotypes of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. CW: 37.5 mm (♂), 34.9 mm (♀). Japan, 1823–1834, Ph. F. von Siebold.
- 6) BM(NH) 753-a (1♂, dry). Paralectotype of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. CW: 30.8 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 7) ZMC (2♂ in alcohol). Paralectotypes of *Sesarma dehaani* H. Milne Edwards, and

*Grapsus (Pachysoma) quadratus* De Haan. CW: 34.9–30.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 8) MNHN-B 3660 (1♂?, dry). Paralectotype of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. CW: 29.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 9) MNHN-B 3661 (1♂, dry). Paralectotype of *Sesarma dehaani* H. Milne Edwards, and *Grapsus (Pachysoma) quadratus* De Haan. CW: 32.1 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**179. *Sesarma (Parasesarma) plicatum* (Latreille, 1803)** (Japanese name: Kushitegani) [クシテガニ]

[*Grapsus (Pachysoma) affinis* De Haan, 1837: Fauna Japonica, text p. 66; pl. 18, fig. 5 (♂)]

[*Ocyrode plicata* Latreille, 1803: Hist. Nat. Crust., 6: 47]

2 lots; total of 3 specimens.

- 1) RMNH D 129 (1♂ in alcohol). Lectotype of *Grapsus (Pachysoma) affinis* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42313 (1♂ & 1♀, dry). Paralectotypes of *Grapsus (Pachysoma) affinis* De Haan. CW: 24.5 mm (♂), 24.0 mm (♀). Japan, 1825–1834, H. Bürger.

**180. *Sesarma (Parasesarma) pictum* (De Haan, 1835)** (Japanese name: Kaku-benkei-gani) [カクベンケイガニ]

[*Grapsus (Pachysoma) pictus* De Haan: Fauna Japonica, text pp. 61–62; pl. 16, fig. 6 (♂)]

[*Sesarma (Parasesarma) picta* (De Haan): De Man, 1895: Zool. Jahrb. Syst., 8: 183]

2 lot; total of 3 specimens.

- 1) RMNH D 42312 (1♂ & 1♀, dry). Paralectotypes of *Grapsus (Pachysoma) pictus* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 45168 (1♂, dry). Lectotype of *Grapsus (Pachysoma) pictus* De Haan. CW: 22.9 mm. Japan, 1825–1834, H. Bürger.

**181. *Sesarma (Perisesarma) bidens* (De Haan, 1835)** (Japanese name: Futaba-kakugani) [フタバカクガニ]

[*Grapsus (Pachysoma) bidens* De Haan: Fauna Japonica, text pp. 60–61; pl. 11, fig. 4 (♀); pl. 16, fig. 4 (♂)]

[*Grapsus (Chirromantes) bidens* (De Haan): Rathbun, 1910: Kgl. Danske Vid. Seisk. Skr., 7. Reakke, Naturvid.-Math. Afd. 4; 309]

5 lots; total of 9 specimens and displayed mouthparts.

- 1) RMNH D 144 (1♀ in alcohol). Paralectotype of *Grapsus (Pachysoma) bidens* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 145 (1♂ in alcohol). Lectotype of *Grapsus (Pachysoma) bidens* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42304 (4♂ & 1♀, dry). Paralectotypes of *Grapsus (Pachysoma) bidens* De Haan. CW: 30.1–12.4 mm (♂), 11.5 mm (♀). Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42305 (2♂, dry). CW: 27.2 mm and 22.7 mm. Japan.
- 5) RMNH D 42306 (Mouthparts of syntype of *Grapsus (Pachysoma) bidens* De Haan). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**182. *Sesarmops intermedius* (De Haan, 1835)** (Japanese name: Benkei-gani) [ベンケイガニ]

[*Grapsus (Pachysoma) intermedius* De Haan: Fauna Japonica, text p. 61; pl. 16, fig. 5 (♂)]

[*Sesarma intermedius* (De Haan): Serene and Soh, 1970, Treubia, 27: 401, 406]

2 lots; total of 2 specimens.

- 1) RMNH D 165 (1 specimen in alcohol). Lectotype of *Grapsus (Pachysoma) intermedius* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 1527 (1♂ in alcohol). Japan

**183. *Chasmagnathus convexus* (De Haan, 1833)** (Japanese name: Hama-gani) [ハマガニ]

[*Ocypode (Chasmagnathus) convexa* De Haan: Fauna Japonica, text pp. 56–57; pl. 7, fig. 5; pl. C (mouthparts)]

5 lots; total of 5 specimens and displayed mouthparts.

- 1) RMNH D 212 (1♀ in alcohol). Paralectotype of *Ocypode (Chasmagnathus) convexa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 213 (1♂ in alcohol). Lectotype of *Ocypode (Chasmagnathus) convexa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42156 (2♂, dry). Paralectotypes of *Ocypode (Chasmagnathus) convexa* De Haan. CW: 50.1 and 39.4 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42157 (Mouthparts of paralectotype of *Ocypode (Chasmagnathus) convexa* De Haan).
- 5) RMNH D 45128 (1♂, dry). CW: 34.6 mm. Japan.

**184. *Helice tridens* (De Haan, 1835)** (Japanese name: Ashi-hara-gani) [アシハラガニ]

[*Ocypode (Helice) tridens* De Haan: Fauna Japonica, text p. 57; pl. 11, fig. 2 (♀, young); pl. 15, fig. 6 (♂); pl. C (mouthparts)]

7 lots; total of 31 specimens and displayed mouthparts.

- 1) RMNH D 188 (1♂ in alcohol). Lectotype of *Ocypode (Helice) tridens* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 189 (1♀ in alcohol). Paralectotype of *Ocypode (Helice) tridens* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 190 (1♂ in alcohol). Paralectotype of *Ocypode (Helice) tridens* De Haan. Japan, 1825–1834, H. Bürger.
- 4) RMNH D 1680 (15♂ & 6♀ in alcohol). Japan.
- 5) RMNH D 42185 (3♂ & 3♀, dry). Paralectotypes of *Ocypode (Helice) tridens* De Haan. CW: 35.5–15.6 mm (♂), 29.2–20.3 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 42186 (Mouthparts of syntype of *Ocypode (Helice) tridens* De Haan).
- 7) MNHN-B 3476 (1♂, dry). Paralectotype of *Ocypode (Helice) tridens* De Haan. CW: 29.0 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**185. *Plagusia dentipes* (De Haan, 1833)** (Japanese name: Shôjin-gani) [シヨウジンガニ]

[*Grapsus (Plagusia) dentipes* De Haan: Fauna Japonica, text p. 58; pl. 8, fig. 1 (♂); pl. D (mouthparts)]

3 lots; total of 5 specimens and displayed mouthparts.

- 1) RMNH D 123 (2♂ in alcohol). Lectotype and paralectotype of *Grapsus (Plagusia) dentipes* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 42277 (2♂ & 1♀, dry). Paralectotypes of *Grapsus (Plagusia) dentipes* De Haan. CW: 62.7 mm (♂), 53.3 mm (♀). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 42278 (Mouthparts of paralectotype of *Grapsus (Plagusia) dentipes* De Haan).

**186. *Pinnotheres pholadis* De Haan, 1835** (Japanese name: Kagitsume-pin-no) [カ]

ギツメピンノ]

[*Pinnotheres pholadis* De Haan: Fauna Japonica, text p. 63; pl. 16, fig. 7 (♂)]

1 lot; displayed mouthparts only.

RMNH D 42276 (Mouthparts of syntype of *Pinnotheres pholadis* De Haan). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**187. *Geothelphusa dehaani* (White, 1847)** (Japanese name: Sawa-gani) [サワガニ]  
[*Cancer (Thelphusa) berardii* Audouin: De Haan: 1833, 1835, Fauna Japonica, text pp. 52-53; pl. 6, figs. 2 (♂ & ♀)]

[*Thelphusa Dehaani* White, 1847: List Crust. British Mus.: 30]

[*Thelphusa japonica* Herklots, 1861: Tijdschrift Entomologie, 4: 126]

12 lots; total of 48 specimens and displayed mouthparts.

- 1) RMNH D 331 (2♂ in alcohol). Lectotype and paralectotype of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 333 (4♂ & 4♀ in alcohol). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 334 (1♂ in alcohol). Paralectotype of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 4) RMNH D 1609 (11 specimens in alcohol). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. Japan.
- 5) RMNH D 42294 (5♂ & 1♀, dry). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. CW: 30.3–21.2 mm (♂), 24.8 mm (♀). Japan, 1825–1834, H. Bürger.
- 6) RMNH D 42295 (4♂ & 6♀, dry). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. CW: 28.5–25.0 mm (♂), 32.2–24.4 mm (♀). Japan.
- 7) RMNH D 44304 (2 specimens, dry). ?Japan, 1823-1834, Ph. F. von Siebold & H. Bürger.
- 8) RMNH D 44502 (Mouthparts of paralectotype of *Thelphusa dehaani* White). Japan, 1824-1834, Ph. F. von Siebold & H. Bürger.
- 9) SMF (1♂ & 1♀ in alcohol). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 10) BM(NH) 910 (a & b) (1♂ & 1♀, dry). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. CW: 30.4 mm (♂). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 11) MNHN-B 3803 (1♂ & 1♀, dry). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. CW: 25.2 mm (♂). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 12) MNHN-B 4375 (2♂, dry). Paralectotypes of *Thelphusa dehaani* White, and *Thelphusa japonica* Herklots. CW: 26.1 mm (shown under in the present figure). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**188. *Ocypode ceratophthalmus* (Pallas, 1772)** (Japanese name: Tsunome-gani) [ツノメガニ]

1 lot; 4 specimens.

RMNH D 225 (4 specimens in alcohol). Japan.

**189. *Ocypode stimpsoni* Ortmann, 1897** (Japanese name: Suna-gani) [スナガニ]

[*Ocypode (Ocypode) cordimana* Desmarest, 1823: Fauna Japonica, text pp. 57-58; pl. 15, fig. 4 (♂)]

[*Ocypode stimpsoni*, Ortmann, 1897: Zool. Jahrb. Syst., 10: 367]

Although De Haan wrote "*Ocypode (Ocypode) cordimana*, n. p." on p. 57 of Fauna

Japonica, the fact that he referred to "*Ocypode cordimana* Latr." (Desmarest, 1. 1. 121) shows that he meant not to describe a new species but to identify his material with *Ocypode cordimana* Latreille, 1818.

2 lot; 2 specimens and displayed mouthparts.

- 1) RMNH D 227 (1♂ & 1♀ in alcohol). Japan, 1825–1834, H. Bürger.
- 2) RMNH D 45355 (Mouthparts of *Ocypode* (*Ocypode*) *cordimana* De Haan). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**190. *Uca arcuata* (De Haan, 1833)** (Japanese name: Shio-maneki) [シオマネキ]  
[*Ocypode* (*Gelasimus*) *arcuata* De Haan: Fauna Japonica, text pp. 53-54; pl. 7, fig. 2 (♂); pl. B (mouthparts)]

[*Uca arcuata* (De Haan): Parisi, 1918: Atti della Societa Italiana di Scienze Naturali, 57: 93]  
8 lots; total of 35 specimens and displayed mouthparts.

- 1) RMNH D 243 (1♂ in alcohol). Lectotype of *Ocypode* (*Gelasimus*) *arcuata* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 244 (20♂ & 1♀ in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan. CW (max.): 36.7 mm (♂). Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 309 (3♂ & 1♀ in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42326 (3♂ & 1♀, dry). Paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan. CW: 34.4–31.9 mm (♂), 28.9 mm (♀). Japan, 1829–1829, Ph. F. von Siebold.
- 5) RMNH D 42327 (Mouthparts of paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan) Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 6) BM(NH)745-a (1♂, dry). Paralectotype of *Ocypode* (*Gelasimus*) *arcuata* De Haan. CW: 26.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.  
This specimen was believed to be *Uca lactea* by White and he listed it in his catalogue (White, 1847: 36) as *Gelasimus lacteus*.
- 7) ZMC (2♂ in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan. CW: 35.7 mm and 31.9 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) MNHN-B 3121 (2♂, dry). Paralectotypes of *Ocypode* (*Gelasimus*) *arcuata* De Haan. CW: 28.9–27.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**191. *Uca lactea* (De Haan, 1835)** (Japanese name: Hakusen-shio-maneki) [ハクセンシオマネキ]

[*Ocypode* (*Gelasimus*) *lactea* De Haan: Fauna Japonica, text p. 54; pl. 15, fig. 5 (♂)]

[*Uca lactea* (De Haan): Ortmann, 1897: Zool. Jahrb. Syst., 10: 355]

9 lots; total of 63 specimens.

- 1) RMNH D 253 (9 specimens in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *lactea* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 254 (1♂ in alcohol). Lectotype of *Ocypode* (*Gelasimus*) *lactea* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 1575 (17♂ & 2♀ in alcohol). Japan.
- 4) RMNH D 42328 (13♂, dry). Paralectotypes of *Ocypode* (*Gelasimus*) *lactea* De Haan. CW: 19.5–12.0 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 42329 (3♂, dry). Paralectotypes of *Ocypode* (*Gelasimus*) *lactea* De Haan. CW: 19.1–16.8 mm. Japan, 1825–1834, H. Bürger.
- 6) RMNH D 45388 (8♂ & 1♀, dry). CW: 17.5–14.7 mm (♂), 17.9 mm (♀). Japan.
- 7) SMF-106 (3♂ & 1♀ in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *lactea* De Haan. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 8) ZMC (3♂ in alcohol). Paralectotypes of *Ocypode* (*Gelasimus*) *lactea* De Haan. CW:

17.5–15.5 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

- 9) MNHN-B 3149 (1♂ & 1♀, dry). Paralectotypes of *Ocypode (Gelasimus) lactea* De Haan. CW: 17.4 mm (♂), 16.3 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

**192. *Scopimera globosa* (De Haan, 1835)** (Japanese name: Kometsuki-gani) [コメツキガニ]

[*Ocypode (Scopimera) globosa* De Haan: Fauna Japonica, text p. 53; pl. 11, figs. 3; pl. C (mouthparts)]

5 lots; total of 10 specimens and displayed mouthparts.

- 1) RMNH D 281 (1♂ in alcohol). Paralectotype of *Ocypode (Scopimera) globosa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 2) RMNH D 282 (2♂ in alcohol). Lectotype and paralectotype of *Ocypode (Scopimera) globosa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 1590 (5 specimens in alcohol). Paralectotypes of *Ocypode (Scopimera) globosa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 42307 (2♂, dry). Paralectotypes of *Ocypode (Scopimera) globosa* De Haan. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 42308 (Mouthparts of paralectotype of *Ocypode (Scopimera) globosa* De Haan).

**193. *Ilyoplax pusilla* (De Haan, 1835)** (Japanese name: Chigo-gani) [チゴガニ]

[*Ocypode (Cleistostoma) pusilla* De Haan: Fauna Japonica, text p. 56; pl. 16, fig. 1 (♂)]

[*Ilyoplax pusilla* (De Haan): Tweedie, 1937: Bull. Raffles Mus., 13: 149]

3 lots; total of 9 specimens and displayed mouthparts.

- 1) RMNH D 42224 (3♂, dry). Lectotype and paralectotypes of *Ocypode (Cleistostoma) pusilla* De Haan. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 45429 (6 specimens, dry). Paralectotypes of *Ocypode (Cleistostoma) pusilla* De Haan, 1835. Originally determined as *Tympanotus pusillus*. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 3) RMNH D 42325 (Mouthparts of paralectotype).

**194. *Macrophthalmus (Macrophthalmus) abbreviatus* Manning & Holthuis, 1981** (Japanese name: Osa-gani) [オサガニ]

[*Ocypode (Macrophthalmus) abbreviata* De Haan, 1835: Fauna Japonica, text p. 26 (nomen nudum)]

[*Ocypode (Macrophthalmus) dilatata* De Haan, 1835: Fauna Japonica, text p. 55; pl. 15, fig. (♂)]

[*Macrophthalmus (Macrophthalmus) abbreviatus* Manning & Holthuis, 1981: Smiths. Contr. Zool., 306: 201]

Manning & Holthuis (1981) proposed the name *abbreviatus* for this species, because *Ocypode (M.) dilatata* De Haan, 1835, is a junior homonym of *Ocypode (Cleistostoma) dilatata* De Haan, 1833. The name *abbreviata* was used by De Haan (1835: 26) for this species but it is an invalid *nomen nudum*.

6 lots; total of 9 specimens and displayed mouthparts.

- 1) RMNH D 299 (1♂ in alcohol). Lectotype of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 300 (2♂ in alcohol). Paralectotypes of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981. Japan, 1825–1834, H.

Bürger.

- 3) RMNH D 1541 (1♀ in alcohol). Paralectotype of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981. Japan, 1825–1834, H. Bürger.
- 4) RMNH D 42228 (4♂, dry). Paralectotypes of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981. CW (max.): 14.6 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 45412 (Mouthparts of paralectotypes of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981, taken from D 42228).
- 6) MNHN-B 3244 (1♂, dry). Paralectotype of *Ocypode (Macrophthalmus) dilatata* De Haan and of *M. (M.) abbreviatus* Manning and Holthuis 1981. CW: 28.8 mm. Japan.

On the label only the locality, Japan, is written; however, the age and appearance of the specimen suggest that it originated from the collection in the Leiden Museum. The exchange list in the archives of the Leiden Museum shows that one specimen of the present species was sent to Paris in 1837.

**195. *Macrophthalmus (Mareotis) japonicus* (De Haan, 1835)** (Japanese name: Yamato-osa-gani) [ヤマトオサガニ]

[*Ocypode (Macrophthalmus) japonica* De Haan: Fauna Japonica, text pp. 54–55; pl. 7, fig. 1 (♀); pl. 15, fig. 2 (♂)]

[*Macrophthalmus (Mareotis) japonicus* (De Haan): Barnes, 1967: Trans. zool. Soc. Lond., 31: 224–226]

[*Macrophthalmus (Mareotis) japonicus* (De Haan): Wada & Sakai, 1989: Senckenbergiana marit., 20: 131–146]

K. Wada found that the crab which had currently believed to be *Macrophthalmus japonicus* consisted of two sibling species. One of these is the true *M. (M.) japonicus* but the other is an undescribed species. K. Sakai examined the material in the Leiden Museum in 1988 and found that it is a mixture of two different species. One of these should be *M. (M.) japonicus*, and the other is a distinct species new to science. Wada and Sakai published a paper in 1989 describing a new species, *M. (M.) banzai*; however, it is hard to be sure that all of the present unidentified specimens belong to *M. (M.) banzai*. The morphological features described for *M. banzai* do not seem to agree completely with those of the unidentified specimens in Leiden. Detailed studies are needed. There might be another new sibling species of *M. (M.) japonicus* in Japan.

12 lots; total of 23 specimens and displayed mouthparts.

- 1) RMNH D 296 (1♀ in alcohol). CW: 23.2 mm. Japan, 1825–1834, H. Bürger.
- 2) RMNH D 297 (1♂ in alcohol). Lectotype of *Ocypode (Macrophthalmus) japonica* De Haan. CW: 32.1 mm. Japan, 1823–1829, Ph. F. von Siebold.
- 3) RMNH D 37362 (1♂ dry). Redet. K. Sakai 1 ix, 1988. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835. Japan, 1823–1829, Ph. F. von Siebold.
- 4) RMNH D 37363 (1♂ dry). Redet. K. Sakai 1 ix, 1988. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835. Japan, 1823–1829, Ph. F. von Siebold.
- 5) RMNH D 37364 (1♀ dry). Redet. K. Sakai 1 ix, 1988. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835. Japan, 1823–1829, Ph. F. von Siebold.
- 6) RMNH D 37365 (1♂ dry). Redet. K. Sakai 1 ix, 1988. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835. Japan, 1823–1829, Ph. F. von Siebold.
- 7) RMNH D 37366 (1♂ dry). Redet. K. Sakai 1 ix, 1988. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835. Japan, 1823–1829, Ph. F. von Siebold.
- 8) RMNH D 42229 (Mouthparts of paralectotype of *Ocypode (Macrophthalmus) japonica* De



Haan, 1835).

The mouthparts are labelled as *Macrophthalmus depressus* Rüppell. *Macrophthalmus depressus*, a species from the the Red Sea, is very similar to *M. japonicus*. De Haan at first identified *M. japonicus* as *M. depressus* before the establishment of the new species, *Ocypode (Macrophthalmus) japonica*. The figure of a female of this species in Plate 7 of Fauna Japonica, which was published in 1833, is shown as *Macrophthalmus depressus*. However, the figure in Plate 15, published in 1835, was shown as *Ocypode (Macrophthalmus) japonica*.

- 9) RMNH D 42230 (12 specimens, dry). Japan, 1823–1829, Ph. F. von Siebold. Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan, 1835.
- 10) BM(NH) 749-a (1♂, dry). Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan?\* CW: 30.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 11) MNHN-B 3249 (1♂, dry). Paralectotype of *Ocypode (Macrophthalmus) japonica* De Haan?\* CW: 31.7 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 12) MNHN-B 10920 (1♂ & 1♀, dry). Paralectotypes of *Ocypode (Macrophthalmus) japonica* De Haan?\* CW: 27.4 mm (♂), 23.6 mm (♀). Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.

\*The problem still remains unresolved about the identity of the specimens now preserved in the museums in London and Paris

**196. *Macrophthalmus (Mareotis) banzai* Wada & K. Sakai, 1989** (Japanese name: Hime-yamato-osa-gani) [ヒメヤマトオサガニ]

[*Macrophthalmus (Mareotis) banzai* Wada & Sakai, 1989: Senckenbergiana marit., 20: 131–146]

3 lots; total of 30 specimens.

- 1) RMNH D 577 (8♂ & 7♀ in alcohol). Japan. Paratypes of *Macrophthalmus (Mareotis) banzai* Wada & K. Sakai, 1989.
- 2) RMNH D 45413 (6 specimens, dry). Paratypes of *Macrophthalmus (Mareotis) banzai* Wada & K. Sakai, 1989. Japan, 1823–1829, Ph. F. von Siebold. Paratypes seen by K. Sakai, 21 ix 1988. See also Yamaguchi, 1993, P. F. von Siebold and Nat. Hist. Japan Crust. p. 512–518.
- 3) RMNH D 45414 (9 specimens, dry). Paratypes of *Macrophthalmus (Mareotis) banzai* Wada & Sakai, 1989. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger. Removed from cat. b lot of *Macrophthalmus japonicus* (De Haan), D 42230. Paratypes seen by K. Sakai, 21 ix 1988. See also Yamaguchi, 1993, P. F. von Siebold and Nat. Hist. Japan Crust. p. 512–518.

**197. *Cleistostoma dilatatum* (De Haan, 1833)** (Japanese name: Ariake-gani) [アリアケガニ]

[*Ocypode (Cleistostoma) dilatata* De Haan: Fauna Japonica, text pp. 55–56; pl. 7 fig. 3 (♀); pl. B (mouthparts)]

2 lots; 1 specimen and displayed mouthparts.

- 1) RMNH D 4215 (1♀, dry). Holotype of *Ocypode (Cleistostoma) dilatata* De Haan. CW: 24.2 mm. Japan, 1823–1834, Ph. F. von Siebold & H. Bürger.
- 2) RMNH D 42160 (Mouthparts of holotype of *Ocypode (Cleistostoma) dilatata* De Haan).

## Acknowledgement

We thank Dr. C. H. J. M. Fransen and Prof. L. B. Holthuis, the present and the former curators of the crustacean division of the Nationaal Natuurhistorisch Museum. T. Y. thanks Dr. Fransen and Prof. Holthuis for their help and support rendered during his visit to the museum in 2002. We also thank Colin L. McLay of the University of Canterbury, Christchurch, for reading the introductory note in English.

## References

- Alcock, A., 1895. Materials for a Carcinological Fauna of India. No. 1. The Brachyura Oxyrhyncha. Journal of Asiatic Society of Bengal, Calcutta, 64, (II-2): 157-291, plates 3-5.
- Baba, K., K. Hayashi and M. Toriyama, 1986. Decapod crustaceans from continental shelf and slope around Japan. Japan Fisheries Resource Conservation Association, 336 pages. Tokyo.
- Barnes, R. S. K., 1967. The *Macrophthalmus* of Australia: with a review of the evolution and morphological diversity of the type genus *Macrophthalmus* (Crustacea: Brachyura). The Transactions of the Zoological Society of London, 31: 195-262.
- Bate, C. S., 1868. On a new genus, with four new species, of freshwater prawns. Proceedings of the Zoological Society of London, 1868: 363-368, plates 30, 31.
- Bate, C. S., 1888. Report on the Crustacea Macrura collected by H. M. S. Challenger during the Years 1873-76. Report on the Scientific Results of the Voyage of H. M. S. Challenger During the Years 1873-76, Zoology, 24: xc + 942 pages, plates 1-150.
- Berthold, A. A., 1846. Über verschiedene neue oder seltene Reptilien aus Neu-Granada und Crustaceen aus China. Abhandlungen der königlichen Gesellschaft der Wissenschaften zu Göttingen, 3: 3-32, plates 1-3.
- Chace, F. A. Jr., 1988. The caridean shrimps (Crustacea: Decapoda) of the Albatross Philippine Expedition, 1907-1910. Part. 5: family Alpheidae. Smithsonian Contributions to Zoology, 466: vi + 99 pages.
- Chan, T. Y. and K. H. Chu, 1996. On the different forms of *Panulirus longipes femoristriga* (von Martens, 1872) (Crustacea: Decapoda: Palinuridae), with description of a new species. Journal of Natural History, 30: 367-387.
- Chan, T. Y. and P. K. L. Ng, 2001. On the nomenclature of the commercially important spiny lobsters *Panulirus longipes femoristriga* (von Martens, 1872), *P. bispinosus* Borradaile, 1899, and *P. albiflagellum* Chan & Chu, 1998 (Decapoda, Panlinuridae). Crustaceana, 74: 123-127.
- Chen, H., 1980. Two new species of crabs from South China Sea. Oceanologica et Limnologica Sinica, 11 (2): 154-160, plates 1-2. [In Chinese]
- Coutière, H., 1897. Note sur quelques espèces du genre *Alpheus* du Musée de Leyde. Notes from the Leyden Museum, 19: 195-207.
- Dana, J. D., 1851. Crustacea Grapsoidea, (Cyclometopa, Edwardsii): Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione, Carolo Wilkes e Classe Reipublicae Foederatae Duce, 8. Proceedings of the Academy of Natural Sciences of Philadelphia, 5: 247-254.
- Darwin, C., 1851. The Lepadidae; or, pedunculated Cirripedes. A monograph on the subclass Cirripedia, with figures of all the species, Volume 1, xii + 400 pages, plates 1-10.
- Darwin, C., 1854. The Balanidae, (or sessile cirripedes); the Verrucidae, etc. etc., etc. A

30 plates.

- Dollfus, A., 1889. Sur quelques Isopodes du Musée de Leyde. Notes of the Leyden Museum, 11: 91-96, plate 5.
- Dotsu, Y., K. Seno and S. Inoue 1966. Rearing experiments on early Phyllosoma of *Ibacus ciliatus* (Von Siebold) and *I. novemdentatus* Gibbes (Crustacea: Reptantia). Bulletin of the Faculty of Fisheries, Nagasaki University, 21:181-194, figures 1-10. [In Japanese with English summary]
- Dotsu, Y., O. Tanaka, Y. Shojima and K. Seno, 1966. Metamorphosis of Phyllosoma of *Ibacus ciliatus* (von Siebold) and *I. novemdentatus* Gibbes (Crustacea: Reptantia) to the reptant larvae. Bulletin of the Faculty of Fisheries, Nagasaki University, 21:195-221, plates 1-3. [In Japanese with English summary]
- Estampador, E. P., 1949. Studies on *Scylla* (Crustacea: Portunidae), I. Revision of the genus. The Philippine Journal of Science, 78(1): 95-109, plates 1-2.
- Fabricius, J. C., 1798. Supplementum entomologiae systematicae. 572 pages. Copenhagen.
- Forest, J., 1984. Révision du genre *Aniculus* (Decapoda Diogenidae). Crustaceana, (suppl.) 8: 1-91, frontispiece.
- Forskål, P., 1775. Descriptiones animalium, avium, amphibiorum, piscium, insectorum, vermium, 19, xxxii + 164 pages. Hafniae.
- Fransen, C. H. J. M., Holthuis, L. B. and J. P. H. M. Adema, 1997. The type-catalogue of the decapod crustacea in the collections of the Nationaal Natuurhistorisch Museum, with appendices of pre-1900 collectors and material. Zoologische Verhandelingen, 311: 1-344.
- Galil, B. S., 2001. A revision of the genus *Arcania* Leach, 1817 (Crustacea: Decapoda: Leucosioidea). Zoolische Mededelingen Leiden, 75 (11): 169-206.
- Galil, B. S., 2001. A revision of *Myra* Leach, 1817 (Crustacea: Decapoda: Leucosioidea). Zoolische Mededelingen Leiden, 75 (24): 409-446.
- Galil, B. S., and P. F., 1994. Clark: A revision of the genus *Matuta* Weber, 1795 (Crustacea: Brachyura: Calappidae). Zoologische Verhandelingen, 294: 1-55.
- George, R. W. and L. B. Holthuis, 1965. A revision of the Indo-West Pacific spiny lobsters of the *Panulirus japonicus* group. Zoologische Verhandelingen, uitgegeven door het Rijksmuseum van Natuurlijke Historie te Leiden, 72: 1-36.
- Gordon, I., 1954. On a rare xanthid crab from Western Australia. Western Australian Naturalist, 4: 97-104.
- Gray, J. E., 1831. Description of a new genus and some undescribed species of Crustacea. The Zoological Miscellany, London, 39-41.
- Guinot, D., 1968. Recherches préliminaires sur les groupements naturels chez les Crustacés, Décapodes, Brachyours. IV. Observations sur quelques genres de Xanthidae. Bulletin du Muséum national d'Histoire naturelle (Paris), Série 2, 39(4) [1967]: 695-727.
- Guinot, D., 1976. Constitution de quelques groupes naturels chez les Crustacés Décapodes Brachyours. I. La superfamille des Belloidea et trois sous-familles de Xanthidae (Polydectinae Dana, Trichiinae de Haan, Actaeinae Alcock). Mémoires du Muséum national d'Histoire naturelle, Série A, Zoologie, 97: 1-308, plates 1-19.
- Guinot, D., 1989. Le genre *Carcinoplax* H. Milne Edwards, 1852 (Crustacea, Brachyura: Goneplacidae). In: J. Forest (ed.), Résultats des Campagnes MUSORSTOM, Volume 5. Mémoires du Muséum national d'Histoire naturelle, Série A, Zoologie, 144: 265-345.
- Haan, W. de, 1833-1849. Crustacea. In: Ph. F. von Siebold, Fauna Japonica sive Descriptio Animalium, quae in Itinere per Japoniam, Jussu et Auspiciis Superiorum, Qui Summum in India Batavia Imperium Tenent, Suscepto Annis 1823-1830 Collegit, Notis,

- Observationibus et Adumbrationibus Illustravit, (Crustacea) xvii + xxxi + ix-xvi + 243 pages, plates A-J, L-Q, 1-55, circ. tab. 2. Lugduni-Batavorum (Leiden).
- Hayashi, K., 1975. The Indo-West Pacific Processidae (Crustacea, Decapoda, Caridea). *Journal of Shimonoseki University of Fisheries*, 24 (1): 47-145.
- Hayashi, K., 1992. Dendrobranchiata crustaceans from Japanese waters. ix + 300 pages. Seibutsu Kenkyusha, Tokyo. [In Japanese]
- Herbst, J. F. W., 1782-1804. Versuch einer Naturgeschichte der Krabben und Krebse, nebst einer systematischen Beschreibung ihrer verschiedenen Arten. Volume 1 (1782-1790): 274 pages, plates 1-21; Volume 2 (1791-1796): 226 pages, plates 22-46; Volume 3 (1799-1804): 66 + 46 + 54 + 49 pages, plates 47-62.
- Herklots, J. A., 1861. Symbolae carcinologicae. I. Catalogue des Crustacés qui ont servi de base au système carcinologique de M. W. de Haan, rédigé d'après la collection du Musée des Pays-Bas et les Crustacés de la faune du Japon. *Tijdschrift voor Entomologie*, 4: 116-156.
- Hoestlandt, H., 1948. Recherches sur la biologie de l'*Eriocheir sinensis* H. Milne Edwards (Crustacé Brachyoure). *Annales de l'Institut océanographique, Monaco*, 24: 1-116.
- Hoek, P. P. C., 1883. Report on the Cirripedia collected by H. M. S. Challenger during the Years 1873-76. Report on the Scientific Results of the Voyage of H. M. S. Challenger During the Years 1873-76, *Zoology*, 8 (25): 169 pages, plates 1-13.
- Holthuis, L. B., 1946. The Decapoda Macrura of the Snellius Expedition. 1. The Stenopodidae, Nephropsidae, Scyllaridae and Palinuridae. Biological results of the Snellius Expedition XIV. *Temminckia*, 7: 1-178, plates 1-11.
- Holthuis, L. B., 1959. Stomatopod Crustacea of Suriname. *Studies Fauna Suriname and other Guyanas*, 3: 173-191, plates 8, 9.
- Holthuis, L. B., 1960. Preliminary descriptions of one new genus, twelve new species and three new subspecies of scyllarid lobsters (Crustacea Decapoda Macrura). *Proceedings of the Biological Society of Washington*, 73: 147-154.
- Holthuis, L. B., 1985. A revision of the family Scyllaridae (Crustacea: Decapoda: Macrura). I. Subfamily Ibacinae. *Zoologische Verhandelingen, uitgegeven door het Rijksmuseum van Natuurlijke Historie te Leiden*, 218: 1-130.
- Holthuis, L. B., 1987. *Huenia heraldica*, the correct name for *Huenia proteus*, and the name of the type species of the genus *Huenia*. *Researches on Crustacea*, 16: 15-18.
- Holthuis, L. B., 1996. The nomenclatural status of the generic names *Trichia* De Haan, 1839, and *Zalasia* Rathbun, 1897 (Decapoda, Brachyura). *Crustaceana*, 69 (1): 122-124.
- Holthuis, L. B. and R. B. Manning, 1990. Crabs of the subfamily Dorippinae MacLeay, 1838, from the Indo-West Pacific region (Crustacea: Decapoda: Dorippidae). *Researches on Crustacea, Special Number 3*: i-iii, 1-151, frontispiece.
- Holthuis, L. B. and T. Sakai, 1970. Ph. F. Von Siebold and Fauna Japonica. –A History of early Japanese Zoology, 323 pages, 1+5+32 plates, 1 map. Academic Press of Japan, Tokyo.
- Kawai, T., 2000. On the likely locality of the specimens of Japanese crayfish, obtained by von Siebold. *Cancer*, 9: 23-27. [In Japanese]
- Kawai, T., S. Miyake and T. Hamano, 1990. Individual density and reproduction of *Cambaroides japonicus* (De Haan) in the southernmost habitat. *Researches on Crustacea*, 19: 55-61. [In Japanese with English abstract]
- Kämpfer, E., 1727. The history of Japan, giving an account of the ancient and present state and government of that empire; its temples, palaces, castles and other buildings; its metals, minerals, trees, plants, animals, birds and fishes; of the chronology and succession of the Emperors, ecclesiastical and secular; of the original descent, religions, customs, and manufactures of the natives, and of their trade and commerce

- with the Dutch and the Chinese. Together with a description of the Kingdom of Siam. Volume 1, iii + 391 + 4 pages, plates 1-20. Volume 2, 393-612 pages, 75 + 11 + 10 pages, plates 21-45.
- Kemp, S., 1913. An account of the Crustacea Stomatopoda of the Indo-Pacific region based on the collection in the Indian Museum. *Memoirs of the Indian Museum*, 4: 1-217, plates 1-10.
- Kishinouye, K., 1896. Notes on Japanese *Penaeus* and its classification. *Dobutsugaku Zasshi (Zoological Magazine)*, 8: 372-374. [In Japanese]
- Koelbel, C., 1878. Über einige neue Cymothoiden. *Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften (Wien)*, 78(1): 1-16, plates 1, 2.
- Krusenstern, A. J. von, 1810-1814. Reise um die Welt in den Jahren 1803, 1804, 1805 und 1806 auf Befehl seiner Kaiserlichen Majestät Alexander des Ersten auf den Schiffen *Nadeshda* und *Newa*, Volume 1 (1810), i-xx + 354 pages; Volume 2 (1811), 436 pages; Volume 3 (1812), iv + 378 pages; atlas (1814), plates 1-106.
- Lamarck, J. B. P. A., 1801. *Système des animaux sans vertèbres, ou tableau général des classes, des ordres et des genres de ces animaux; présentant leurs caractères essentiels et leur distribution, d'après la considération de leurs rapports naturels et de leur organisation, et suivant l'arrangement établi dans les galeries du Muséum d'Histoire Naturelle, parmi leurs dépouilles conservées; précédé du discours d'ouverture du cours de zoologie, donné dans le Muséum national d'Histoire naturelle l'an 8 de la République*, viii + 432 pages. Paris.
- Latreille, P. A., 1803. *Histoire naturelle, générale et particulière, des crustacés et des insectes*, Volume 6, 391 pages, plates 44-57. Paris.
- Leach, W. E., 1818. *Dictionnaire des Sciences Naturelles*, 12: 353.
- Linnaeus, C., 1758. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis*, Edition 10, Volume 1, iii + 824 pages. Stockholm.
- Linnaeus, C., 1767. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis*, Edition 12, Volume 1, part 2, 533-1327. Stockholm.
- Mac Lean, J. 1975. The enrichment of the Royal Cabinet of Rarities at 's-Gravenhage with Japanese ethnographical specimens from 1815 to 1848. *Japanese studies in the history of science*, No. 14: 120-125, 127-137.
- Man, J. G. de, 1895. Berichte über die von Herrn Schiffscaptän Strom zu Atjeh, an den westlichen Küsten von Malakka, Borneo und Celebes sowie in der Java-See gesammelten Decapoden und Stomatopoden (Part. 1). *Zoologische Jahrbücher, Abteilung für Systematik, Geographie und Biologie der Thiere*, 8: 485-609.
- Man, J. G. de, 1905. Diagnoses of new species of macrurous decapod Crustacea from the "Siboga-Expedition." *Tijdschrift Nederlandsche Dierkundige Vereeniging*, (2) 9: 587-614.
- Man, J. G. de, 1909. Note sur quelques espèces du genre *Alpheus* Fabr. appartenant au Groupe *Brevirostris* de M. *Mémoires de la Société Zoologique de France*, 22 (1, 2): 146-164, plates 7, 8.
- Manning, R. B., 1991. Stomatopod Crustacea collected by the Galathea Expedition, 1950-1952, with a list of Stomatopoda known from depths below 400 meters. *Smithsonian Contributions to Zoology*, 521: 1-18 (*Acaenosquilla*)
- Manning, R. B., 1995. Stomatopod Crustacea of Vietnam: The legacy of Raoul Serène. *Crustacean Research, Special Number 4*: i-viii, 1-262, coloured plates 1-38, frontispiece.
- Manning, R. B. and L. B. Holthuis, 1981. West African brachyuran crabs (Crustacea:

- Decapoda). Smithsonian Contributions to Zoology, 306: xii + 379 pages.
- Martens, E. von, 1872. Über Cubanische Crustaceen nach den Sammlungen Dr. J. Gundlach's. Archiv für Naturgeschichte, 38(1): 77-147, plates 4, 5.
- Miers, E. J., 1876. Description of some new species of Crustacea, chiefly from New Zealand. Annals and Magazine of Natural History, (4) 17: 218-229.
- Miers, E. J., 1886. Report on the Brachyura collected by H. M. S. Challenger during the Years 1873-76. Report on the Scientific Results of the Voyage of H. M. S. Challenger during the Years 1873-76, Zoology, 17: xii + 362 pages, plates 1-29.
- Milne Edwards, A., 1861. Études zoologiques sur les Crustacés récents de la famille des Portuniens. Archives Muséum d'Histoire naturelle (Paris), 10: 309-428, 2 unnumbered pages, plates 28-38.
- Milne Edwards, A., 1865. Cancérides, Pirimélides, Carpilides, Première Partie: Études zoologiques sur les Crustacés récents de la famille des Cancériens. Nouvelles Archives du Muséum d'Histoire naturelle (Paris), 1: 177-308, plates 11-19.
- Milne Edwards, H., 1834. Histoire naturelle des Crustacés, comprenant l'anatomie, la physiologie et la classification de ces animaux, Volume 1, xxxv + 468 pages. Paris.
- Milne Edwards, H., 1836. Observations zoologiques sur les Pagures et description d'un nouveau genre de la tribu des Paguriens. Annales des Sciences Naturelles, Paris, Series 2, 6: 257-288, plates 13, 14.
- Milne Edwards, H., 1837. Histoire naturelle des Crustacés, comprenant l'anatomie, la physiologie et la classification de ces animaux. Volume 2: 532 pages. Atlas [1834, 1837, 1840]: 32 pages, plates 1-14, 14bis, 15-25, 25bis, 26-42. Paris.
- Milne Edwards, H., 1852. De la famille des ocypodides (Ocypodidae). Deuxieme Mémoire. In: Observations sur les affinités zoologiques et la classification naturelle des Crustacés. Annales des Sciences Naturelles, Series 3, Zoologie, 18: 128-166, plates 3, 4.
- Milne Edwards, H., 1853. Mémoires sur la famille des Ocypodiens, suite. Annales des Sciences Naturelles, Series 3, Zoologie, 20: 163-228, plates 6-11.
- Miyake, S., 1982. Japanese crustacean decapods and stomatopods in color, Volume I. Macrura, Anomura and Stomatopoda, ii + 261 pages, plates 1-56. Hoikusha, Osaka. [In Japanese]
- Miyake, S., 1983. Japanese crustacean decapods and stomatopods in color, Volume II. Brachyura, viii + 277 pages, plates 1-64. Hoikusha, Osaka. [In Japanese]
- Ortmann, A., 1890. Die Decapoden-Krebse des Strassburger Museums, mit besonderer Berücksichtigung der von Herrn Dr. Döderlein bei Japan und bei den Liu-Kiu-Inseln gesammelten und zur Zeit im Strassburger Museums aufbewahrten Formen. I. Theil. Die Unterordnung Natantia Boas. Zoologische Jahrbücher, Abtheilung für Systematik, Geographie und Biologie der Thiere, 5: 437-542, plates 36, 37.
- Ortmann, A., 1892. Die Decapoden-Krebse des Strassburger Museums, mit besonderer Berücksichtigung der von Herrn Dr. Döderlein bei Japan und bei den Liu-Kiu-Inseln gesammelten und zur Zeit im Strassburger Museums aufbewahrten Formen. IV. Theil. Die Abteilungen Galatheidea und Pagrudidea. Zoologische Jahrbücher, Abtheilung für Systematik, Geographie und Biologie der Thiere, 6: 241-326, plates 11-12.
- Ortmann, A., 1893. Die Decapoden-Krebse des Strassburger Museums, mit besonderer Berücksichtigung der von Herrn Dr. Döderlein bei Japan und bei den Liu-Kiu-Inseln gesammelten und zur Zeit im Strassburger Museum aufbewahrten Formen, VII. Theil. Abtheilung: Brachyura (Brachyura genuina Boas), II. Unterabtheilung: Cancroidea, 2. Section: Cancrinea, 1 Gruppe: Cyclometopa. Zoologische Jahrbücher, Abtheilung für Systematik, Geographie und Biologie der Thiere, 7: 411-495, plate 17.
- Ortmann, A., 1894. Die Decapoden-krebse des Strassburger Museums, mit besonderer Berücksichtigung der von Herrn Dr. Döderlein bei Japan und bei den Liu-Kiu-Inseln

- gesammelten und zur Zeit im Strassburger Museum aufbewahrten Formen, VIII. Theil. Abtheilung: Brachyura (*Brachyura genuina* Boas), III. Unterabtheilung: Cancroidea, 2. Section: Cancrinea, 2 Gruppe: Catametopa. Zoologische Jahrbücher, Abtheilung für Systematik, Geographie und Biologie der Thiere, 7: 683-772, plate 23.
- Ortmann, A., 1897. Carcinologische Studien. Zoologische Jahrbücher, Abtheilung für Systematik, Geographie und Biologie der Thiere, 10: 258-372, plate 17.
- Owen, R., 1839. Crustacea. The zoology of Captain Beechey's voyage: compiled from the collections and notes made by Captain Beechey, the officers and naturalist of the expedition, during a voyage to the Pacific and Bering Strait performed in His Majesty's ship Blossom, under the command of Captain F. W. Beechey, R. N. F. R. S., &c., &c., in the years 1825, 26, 27 and 28: 77-92, plates 24-28.
- Parisi, B., 1918. I Decapodi Giapponesi del Museo di Milano. VI. Catometopa e Paguridea, Atti della Società Italiana di Scienze Naturali, 57: 90-115, plate 8.
- Paul'son, O., 1875. Podophthalmata and Edriophthalmata (Cumacea). Studies on Crustacea of the Red Sea with notes regarding other seas, Part I, xiv + 144 pages, plates 1-21. Kiev. [In Russian; an English translation was published in 1961, with different pagination by the Israel Program for Scientific Translations, Jerusalem]
- Pennant, T., 1777. Crustacea. Mollusca. Testacea. British Zoology, (edition 4) Volume 4, viii + 136 pages, plates 1-93.
- Pfeffer, G., 1881. Die Panzerkrebse des Hamburger Museums. Verhandlungen des naturwissenschaftlichen Vereins in Hamburg, 5: 22-55.
- Pilsbry, H. A., 1916. The sessile barnacles (Cirripedia) contained in the collections of the U. S. National Museum; including a monograph of the American species. United States National Museum, Bulletin 93: i-xi, 1-366, plates 1-76.
- Racek, A. A. and W. Dall, 1965. Littoral Penaeinae (Crustacea Decapoda) from northern Australia, New Guinea, and adjacent waters. Verhandelingen der Koninklijke Nederlandse Akademie van Wetenschappen, (Natuurkunde), (2) 56(3): 1-119, plates 1-13.
- Randall, J. W., 1840. Catalogue of the Crustacea brought by Thomas Nuttall and J. K. Townsend, from the West Coast of North America and the Sandwich Islands, with descriptions of such species as are apparently new, among which are included several species of different localities, previously existing in the collection of the academy. Journal of the Natural Science of Philadelphia, 8: 106-147, pls. 3-7.
- Ranzani, C., 1818. Osservazioni su i Balanidi. Opuscoli Scientifici, 2(2): 63-93
- Rathbun, M. J., 1897. A revision of the nomenclature of the Brachyura. Proceedings of the Biological Society of Washington, 11: 153-167.
- Rathbun, M. J., 1902. Crabs from the Maldive Islands. Bulletin of the Museum of Comparative Zoology at Harvard College, in Cambridge, 39(5): 123-238.
- Rathbun, M. J., 1909. New crabs from the Gulf of Siam. Proceedings of the Biological Society of Washington, 22: 107-114.
- Rathbun, M. J., 1910. Brachyura: The Danish Expedition to Siam 1899-1900, V. In: Det Kongelige Danske Videnskabernes Selskabs Skrifter, 7. Raekke, Naturvidenskabelig og Mathematisk Afdeling, 4: 301-367, plates 1 and 2, 1 map.
- Rathbun, M. J., 1911. Marine Brachyura, Number 11. The Percy Sladen Trust Expedition to the Indian Ocean in 1905, under the leadership of J. Stanley Gardiner, Volume 3, Transactions of the Linnean Society of London, series 2 (Zoology), 14(2): 191-261, plates 15-20.
- Rathbun, M. J., 1923a. An analysis of "*Dromia dormia* (Linnaeus)." Proceedings of the Biological Society of Washington, 36: 65-70.
- Rathbun, M. J., 1930. The Cancroid Crabs of America of the Families Euryalidae,

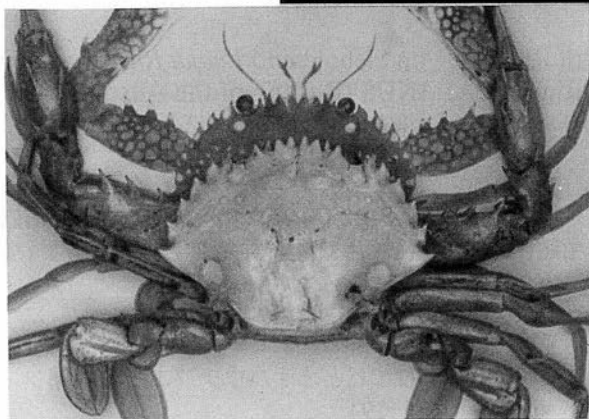
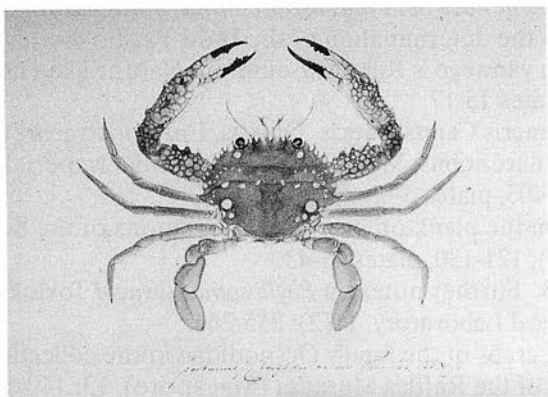
- Portunidae, Atelecyclidae, Cancridae and Xanthidae. United States National Museum Bulletin, 152: xvi + 609 pages, plates 1-230.
- Rumphius, G. E., 1705. D'Amboinische rariteitkamer, behelzende eene beschryvinge van allerhande zoo weeke als harde schaalvisschen, te weeten raare krabben, kreeften en diergelyke zeedieren, als mede allerhande hoorntjes en schulpen, die men in d'Amboinsche Zee vindt: daar beneven zommige mineraalen, gesteenten, en soorten van aarde, die in d'Amboinsche, en zommige omleggende eilanden gevonden worden. 28 + 340 + 43 pages, plates 1-60, with frontispiece. Amsterdam.
- Schiödte, J. C. and Fr. Meinert, 1883. Symbolae ad Monographiam Cymothoarum, Crustaceorum Isopodum Familiae. II Anilocridae, III Saophridae, IV Cymothoidae, Trib. I Cymothoinae. Naturhistorisk Tidsskrift, Copenhagen, (3) 13: 291, plate 11.
- Schiödte, J. C. and Fr. Meinert, 1884. Symbolae ad Monographiam Cymothoarum, Crustaceorum Isopodum Familiae. II Anilocridae, III Saophridae, IV Cymothoidae, Trib. II Cymothoinae, Trib. III Livonecinae. Naturhistorisk Tidsskrift, Copenhagen, (3) 14: 362.
- Serène, R., 1952. Les espèces du genre *Scylla* à Nhatrang (Vietnam). Proceedings of the Indo-Pacific Fisheries Council 3(2): 133-137, plates 1-2.
- Serène, R. and K. Romimohtarto, 1969. Observations on the species of *Dorippe* from the Indo-Malayan Region. Marine Research in Indonesia (Penelitian laut di Indonesia), 9: 1-35, plates 1-6.
- Serène, R. and C. L. Soh, 1970. New Indo-Pacific genera allied to *Sesarma* Say 1817 (Brachyura, Decapoda, Crustacea). Treubia, 27(4): 387-416, plates 1-8.
- Siebold, G. T. de [Ph. F. von], 1824. De historiae naturalis in Japonia statu, nec non de augmento emolumentisque in decursu perscrutationum exspectandis Dissertatio, cui accedunt Spicilegia Faunae Japonicae. 16 pages. Batavia.
- Stephenson, We. and B. Campbell, 1960. Remaining Genera. The Australian Portunids (Crustacea: Portunidae), IV. Australian Journal of Marine and Freshwater Research, 11(1): 73-122, plate 1-6.
- Stephenson, W. and S. Cook, 1973. Studies of "*Portunus gladiator* complex" and related species of *Portunus* (Crustacea: Decapoda). Memoirs of the Queensland Museum, 16 (3): 415-424.
- Stimpson, W., 1857. Prodromus descriptionis animalium evertibratorum, quae in expeditione ad Oceanum Pacificum Septentrionalem, a Republica Federata missa, Cadwaladaro Ringgold et Johanne Rodgers ducibus, observavit et descripsit. Pars III. Crustacea Maiioidea. Proceedings of the Academy of Natural Sciences of Philadelphia, 1857: 216-221.
- Stimpson, W., 1858a. Prodromus descriptionis animalium evertibratorum, quae in expeditione ad Oceanum Pacificum Septentrionalem, a Republica Federata missa, Cadwaladaro Ringgold et Johanne Rodgers ducibus, observavit et descripsit. Pars IV. Crustacea Cancroidea et Corystoidea. Proceedings of the Academy of Natural Sciences of Philadelphia, 1858: 31-40.
- Stimpson, W., 1858b. Prodromus descriptionis animalium evertibratorum, quae in expeditione ad Oceanum Pacificum Septentrionalem, a Republica Federata missa, Cadwaladaro Ringgold et Johanne Rodgers ducibus, observavit et descripsit. Pars VII. Crustacea Anomoura. Proceedings of the Academy of Natural Sciences of Philadelphia, 1858: 225-252.
- Takahashi, M. and T. Saisho, 1978. The complete larval development of the scyllarid lobster, *Ibacus ciliatus* (Von Siebold) and *Ibacus novemdentatus* Gibbes in the laboratory. Memoirs of the Faculty of Fisheries, Kagoshima University, 27(1): 305-353, plates 1-6. [In Japanese with English summary]



- Temminck, C. J., 1836. Coup-d'oeil sur la faune des Iles de la Sonde et de l'Empire du Japon. Discours préliminaire destiné à servir d'introduction à la Faune du Japon. i-xxx pages.
- Tesch, J. J., 1917. Synopsis of the genera *Sesarma*, *Metasesarma*, *Sarmatium* and *Clistocoeloma*, with a key to the determination of the Indo-Pacific species. Zoologische Mededeelingen uitgegeven vanwege 's Rijks Museum van Natuurlijke Historie te Leiden, 3(2-3): 127-260, plates 15-17.
- Tilesius, G. C. von, 1815. De Cancris Camtschaticis, Oniscis, Entomostracis et Cancellis marinis microscopicis noctilucentibus. Mémoires de l'Académie Impériale des Sciences de St. Petersbourg, 5: 331-405, plates 5-8.
- Tokioka, T., 1954. Droplets from the plankton net XIV. Publications of the Seto Marine Biological Laboratory, 3(3); 121-130, plates 41-43.
- Tokioka, T. and E. Harada, 1963. Further notes on *Phyllosoma utivaebi* Tokioka. Publications of the Seto Marine Biological Laboratory, 11(2): 255-264.
- Tweedie, M. W. F., 1937. On the crabs of the family Ocypodidae in the collection of the Raffles Museum. Bulletin of the Raffles Museum (Singapore), 13: 140-170, figures 1-9.
- Wada, K. and K. Sakai, 1989. A new species of *Macrophthalmus* closely related to *M. japonicus* (De Haan). Senckenbergiana maritima, 20: 131-146.
- Ward, M., 1936. Crustacea, Brachyura from the coasts of Queensland. Memoirs of the Queensland Museum, 11: 1-13, plates 1-3.
- White, A., 1847a. List of the specimens of Crustacea in the collection of the British Museum. viii + 143 pages. London.
- Yamaguchi, T. and K. Baba, 1993. Crustacean specimens collected in Japan by Ph. F. von Siebold and H. Bürger and held by the Nationaal Natuurhistorisch Museum in Leiden and other museums. In T. Yamaguchi (ed.): Ph. F. von Siebold and Natural History of Japan, Crustacea. viii + 731 pages. Plates 1-24. The Carnicological Society of Japan, Tokyo.
- Yamaguchi, T. and L. B. Holthuis, 2001. Von Siebold and *Kai-ka Rui Siya-sin*, a collection of pictures of crabs and shrimps. CALANUS (Bulletin of the Aitsu Marine Biological Station, Kumamoto University, Japan), Special Number III: 1-156.
- 川井唯史, 2000. シーボルトは青森県中西部のニホンザリガニを見た? *Cancer*, 9: 23-27.
- 川井唯史・三宅貞祥・浜野龍夫, 1990. 分布南限のザリガニ *Cambaroides japonicus* (De Haan, 1841) の個体群密度と再生産に関する研究. 甲殻類の研究 (日本甲殻類学会誌), No. 19: 55-61.
- 高橋実・税所俊郎, 1978. ウチワエビ幼生とオオバウチワエビ幼生の完全飼育について. 鹿児島大学水産学部紀要, 27 (1): 305-353.
- 道津喜衛・妹尾邦義・井上俊二, 1966. ウチワエビとオオバウチワエビの初期フィロゾーマの飼育. 長崎大学水産学部研究報告, 21: 181-194.
- 道津喜衛・田中於菟彦・庄島洋一・妹尾邦義, 1966. ウチワエビとオオバウチワエビの最終期フィロゾーマからほふく幼生への変態. 長崎大学水産学部研究報告, 21: 195-205.
- 林健一, 1992. 日本産エビ類の分類と生態 I. 根鰓亜目(クルマエビ上科・サクラエビ上科). ix + 300 pages, 生物研究社, 東京.
- Holthuis, L. B. and T. Sakai (ホルサイス・酒井恒), 1970. シーボルトと日本動物誌—日本動物史の黎明. 3 + 4 + 323 pages, plates 1 + 5 + 32, 1 map. 学術書出版会, 東京.
- 三宅貞祥, 1982. 原色大形甲殻類図鑑 I. 261 pages, plates 1-56. 保育社, 大阪.
- 三宅貞祥, 1983. 原色大形甲殻類図鑑 II. 277 pages, plates 1-64. 保育社, 大阪.
- 山口隆男・馬場敬次, 1993. シーボルト及びビュルゲル収集の甲殻類標本. 山口隆男(編)「シーボルトと日本の博物学」. pp. 145-570. 日本甲殻類学会, 東京.
- 山口隆男, 2001. 「ファウナ・ヤポニカ」甲殻類編で参照された図譜「蟹蝦類写真」について.

CALANUS (合津臨海実験所報), 特別号 III: 157-181.

Plate 1

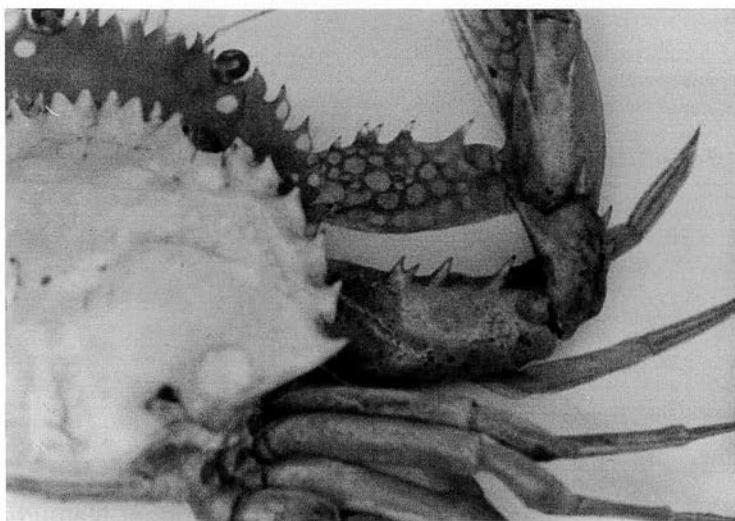
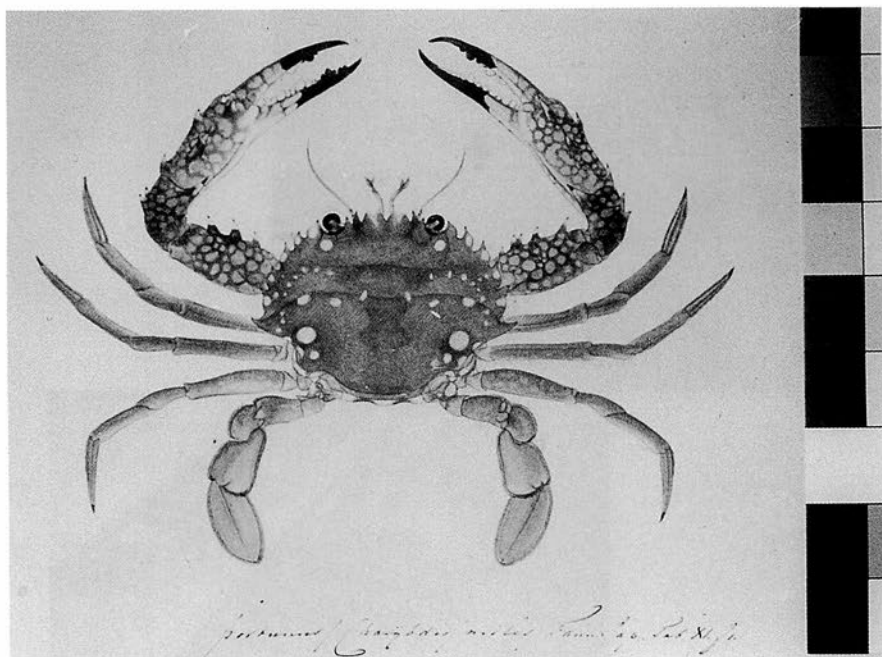


Above: The picture of *Charybdis (Charybdis) riversandersoni* Alcock, 1899 executed by Kawahara Keiga. Bürger requested him to draw various kinds of crustaceans. Kawahara Keiga was the only painter allowed to come to Deshima (Holthuis & Sakai, 1970).

Middle: The sole specimen of *Charybdis (Charybdis) riversandersoni* Alcock, male, CW 28.2 mm, RMNH D 45440)

Below: The specimen placed on the picture.

川原慶賀筆のアカイシモドキの写生図と標本。一番上に慶賀の写生画，中段に標本を示している。同一倍率で示しているが，写生画は標本と同じ大きさに描かれている。下のは写生図の上に標本をのせた状態。



Above: The picture of *Charybdis (Charybdis) riversandersoni* Alcock drawn by Kawahara Keiga. The same picture as presented on the preceding page. This picture was given the scientific name of *Portunus Charybdis miles* by De Haan.

Below: The specimen bears an abnormal (bifurcate) spine on the merus of the right cheliped, which was correctly depicted in the picture. From this picture, it is confirmed that Kawahara Keiga illustrated his zoological subjects exactly in the same shape and same size.

アカイシモドキの写生図の拡大。写生図と標本の全く同じ位置に2又した棘の異常が描かれている。このことから、慶賀は標本そのままに実物大に写生をしていたことが判る。

Plate 3



The inside of the rooms for crustacean collections. In the Nationaal Natuurhistorisch Museum in Leiden, the crustacean division is given one room for the alcoholic collection. The half of the space of another room is given for the dry collections, and the other half used by the division of molluscs.

Above: Row of shelves in the alcoholic collection room.

Middle: One of the trays is pulled out. The size of tray inside is 87.3 cm wide and 75.6 cm long.

Bottom: A view of the room for dry collections. The specimens shown left are the types of *Macrocheira kaempferi* (Temminck, 1836).

現在の甲殻類標本室・液浸標本には 200 平方メートルの部屋が 1 室。乾燥標本室は軟体動物部門と共用で、その半分のスペース。常時 19 度に保たれている。液浸の棚は立派で棚板は手前に引き出すことができる。