# THE FABRICIAN TYPES OF THE AUSTRALIAN AND NEW ZEALAND COLEOPTERA IN THE BANKS COLLECTION AT THE BRITISH MUSEUM (NATURAL HISTORY)

## by WINIFRED P. K. RADFORD

1a Cheviot Avenue, Lower Mitcham, South Australia 5062

#### **ABSTRACT**

RADFORD, WINIFRED P. K. 1980. The Fabrician types of the Australian and New Zealand Coleoptera in the Banks Collection at the British Museum (Natural History). Rec. S. Aust. Mus. 18 (8): 155-197.

The Banks Collection is a collection of Fabrician types housed in the British Museum (Natural History). It was presented to the British Museum in 1863 by the Linnean Society. In this paper the Australian and New Zealand Coleoptera are classified as far as possible according to their present status. This classification includes nine new synonyms and eighteen species omitted from recent catalogues. In the discussion of the species they are recorded alphabetically. The original Fabrician reference and the 1801 reference are given, together with the Junk Coleopterorum Catalogus reference where applicable, and the Zimsen reference. As far as possible known synonyms of the species are listed. The labels and condition of the types are given and in some cases comments are made as to identification and locality. Sometimes it has been found that the Fabrician locality is incorrect. There is rarely a locality label on the specimen—but is only given in the original description. In the cramped conditions on the H.M.S. Endeavour there must have been some mixing of material.

## INTRODUCTION

In 1928 Dr. R. J. Tillyard, who was the chief of the Division of Entomology in the then recently created Australian Council of Science and Industrial Research, suggested that while I was studying in London I should examine the Australian and New Zealand species of Coleoptera in the Banks Collection located in the British Museum. This I did and received much help from G. J. Arrow, and K. G. Blair of the Museum and G. E. Bryant of the Entomological Bureau. On my return to Australia, late in 1929, I was fully occupied in establishing the Coleoptera Collection of the C.S.I.R. in Canberra. My manuscript on the Banks Collection was laid aside and only came to light again in 1976.

In the meantime specialists in various groups have studied some of the species, tracing out their present status and in some cases their synonymy. These are, as far as I have been able to ascertain, H. J. Carter (1926, 1929, 1930) on Australian Tenebrionidae, Buprestidae, and Alleculidae; P. Lepesme (1939) on Dermestidae; H. E. Hinton (1945) on Dermestidae; G. Ochs (1949) on Australian Gyrinidae; P. B. Carne (1957) on Australian Dynastinae; G. Kuschel (1969, 1970) on New Zealand Curculionoidea; E. G. Matthews (1972, 1974) on Australian Scarabaeinae; Y. Löbl (1976) on Australian species of Scaphidium.

The purpose of this paper is to present a list of the Fabrician Types of the Coleoptera in the Banks Collection in the British Museum (Natural Museum), for which Fabricius recorded the localities as "nova Hollandia", "nova Zelandia", and "terra Diemenii". A systematic list has been drawn up and the species classified, as far as possible, into families, sub-families, and their present generic status. It has been found that some species have been omitted from recent catalogues. This may be due to the very brief and inadequate original descriptions, which are often no more than two lines, together with the "habitat" for the locality giving only the name of the country, e.g., "nova Hollandia" and not mentioning any particular region. Sometimes the name of a collector or a collection is given, e.g., "Mus.Dom. Banks", or just "Dom.Banks". In some instances a comparison with a related species is given or, especially in his later publications, a fuller description is added.

Fabricius at first only separated the insects he studied into the large groups or orders as we now know them. Then, on the characters of the mouth parts, he classified them into genera only, not into families and sub-families although he did put them into groups according to the antennal structure. As he studied more and more specimens he realised his initial genera contained many species which could be better classified into smaller groups and so added more and more genera. Thus we find in his later publications the original generic name of the species was sometimes changed.

E. Zimsen (1964) published a book on "The Type Material of J. C. Fabricius". In this work she states where the specimens on which Fabricius based his descriptions are to be found. Fabricius did not label any particular specimen as a type and sometimes his descriptions were made from more than one specimen. S. L. Tuxén (1967: p. 8), who worked closely with Ella Zimsen, explains that from the references given by Fabricius in his original descriptions she "inferred, though it is nowhere stated explicitly in his books" that where the name of a collector or a collection is given that is where the "type specimen or specimens" are to be found, and where no such reference is given the type specimen is in his own collection, now housed in the Zoological Museum at Copenhagen. Tuxén adds, "Her work, based on this axiom, showed this to be the case . . . There may be reasons of labelling for this difficulty (choosing the type), but there is also

another reason which Fabricius himself mentions in 1803 (Tuxén 1967: pp. 9-10). In later years Fabricius himself got so confused in describing so many species (Zimsen lists 9 776), that he sometimes put one insect in two different genera or used the same name for different species. Tuxén quotes Fabricius:—"In my youth this did not easily happen, my memory was better and my eye sharper, now both are weaker . . ." It is understandable that in dealing with so many specimens mistakes occurred. Where there is only one known specimen then it can be taken as the holotype, but where there is more than one specimen later workers have sometimes selected a specimen as the lectotype and the others in the series are known as paralectotypes. Where no such study has been made the series are known as syntypes. In the late 19th century C. O. Waterhouse studied the Fabricius material in the Banks Collection and put type labels on those specimens which he was reasonably able to ascertain were the specimens to which Fabricius's description referred. Where the species is represented in the collection by only one specimen I have called it the holotype as Fabricius's reference states in "Mus. Dom. Banks". If there are two specimens I have called them syntypes according to the present day nomenclature. If one of these has a museum type-label on it, in the comments I have referred to that specimen as "type" as future workers may designate them as holo-, lecto- or syntypes. Where there was more than one specimen of a species the owner of the collection often gave Fabricius specimens for his own collection. Thus some "type material" occurs in more than one place. The references for the synonyms of each species are not given in the bibliography.

This paper brings to light 18 Fabricius species which have been overlooked or omitted from recent catalogues, records nine new synonyms, and gives a modern classification for the Australian and New Zealand species in the Banks Collection.

#### JOHANN CHRISTIAN FABRICIUS

Johann Christian Fabricius was born at Tønder in Denmark in 1745. He was fortunate that he was able to travel throughout Europe and England, where he had access to many museums and private collections. London became his second home. At the British Museum he met Dr. C. Solander who, like himself, had studied under Linnaeus at Uppsala. When Solander and Banks sailed on H.M.S. Endeavour, Fabricius returned to Copenhagen where he had been appointed a professor at the Charlottenberg Naturalickabenet. In 1771 H.M.S. Endeavour returned to England. From 1772-1775 Fabricius divided his time between Copenhagen and London, continuing his studies of the insects in the collections

of Hunter, Drury and Banks-the latter now included the insects brought back from the voyage the Endeavour. In 1775 his Systema Entomologiae was published, which consisted mainly of descriptions of insects he collected in England, or of insects he had studied in the English collections. He stated of this publication, "Entomology was at that time in its infancy". Up till then the only classification known was that of Linnaeus, who had based his classification on the wings of insects which was not satisfactory as Linnaeus himself realised. Also Linnaeus did not have sufficient specimens to make an entirely satisfactory classification. Fabricius used the mouth parts as a basis for classification. He was aware of its limitations but considered his classes were "more natural and my species were more numerous and more ably defined and the number of described genera considerably greater". Fabricius had now become the entomological authority of the day, and in his classifications introduced the concise language of the Linnaean "school" into this compartment of Natural History. He continued to travel in Europe and in England where he spent the summers of 1780-81 and again in 1787 (Tuxén 1967: p. 3). During these travels he had access to many museums and private collections. He published many systematic works on insects and in the later part of his life published monographs of the larger orders of insects. He died in 1808.

## SIR JOSEPH BANKS

Joseph Banks was born in 1743 into a wealthy family. He was educated at Harrow, Eton and Oxford where Botany was one of his chief studies. Although Botany was his life interest he had an extensive knowledge of all the Natural Sciences. His house at 32 Soho Square was open to all who wished to study his collections and work in his library. His wealth enabled him to undertake and finance three voyages. The first in 1766 to Newfoundland and Labrador, the second on the Endeavour from 1768-1771, and the third to Iceland and Staffa. It was due to the Royal Society that he obtained permission for himself and a staff of seven, including Dr. C. Solander of the British Museum, to accompany Lieutenant (later Captain) Cook on the Endeavour. He was fully aware of the task he was undertaking to make collections of Natural History specimens, which would be mostly new to Science, on the long voyage ahead of him. His preparations were thorough. John Ellis F.R.S. in a letter to Linnaeus gives us the only known account of these preparations:- "No people went to sea better fitted out for the purpose of Natural History. They had got a fine library of Natural History; they have all sorts of machines for catching and preserving insects, all kinds of nets, trawls, drags and hooks for coral fishing; they even have a curious contrivance of a

telescope, by which, put into water, you can see the bottom at a great depth where it is clear. They have many cases of bottles with ground glass stoppers, of several sizes to preserve animals in spirit. They have several sorts of salts to surround the seeds, and wax both beewax and that of Myrica. Besides there are many people whose sole business is to attend them for this very purpose". He was a true scientist in that he was a keen observer and a careful recorder. All specimens collected were recorded and preserved. He was also a keen student of the ethnic races that they encountered. Banks made friends easily and throughout the three years voyage there was no friction with Cook and the crew.

The voyage of the *Endeavour* enabled the scientists to collect at Madeira, Rio de Janeiro, in the region of Cape Horn, Tahiti, round the coast of New Zealand, where Cook discovered it to be two islands not one; along the east coast of Australia landing for short periods at Botany Bay, Bustard Bay, Thirsty Bay, then for two months at Cooktown while the ship had to be repaired after running on to a reef; then sailing round Cape York, proving New Guinea to be a separate island, stopping briefly on the west of New Guinea at Cook's Bay; then on to Suva and Batavia, and home round the Cape of Good Hope with a stop at St. Helena.

The voyage was primarily undertaken to observe the transit of Venus across the sun at Tahiti. This was not successful as the instruments of those days did not make it possible to take accurate observations. However, the work of Banks and his staff, the collections and observations of Natural History and of the ethnic races they encountered, were of inestimable value. After this, scientists were always part of the personnel of the British voyages of discovery. Banks himself did not publish any papers. He did keep and file all his correspondence which showed how wide his interests were. In 1779 he was asked to give evidence before a committee of the House of Commons concerning the suitability of Botany Bay as a convict settlement. Nothing was done till 1786 when the over-crowding of the prisons made the matter urgent, and on Banks' advice plans were made and the new colony was established shortly afterwards. For some time the governors of the colony wrote to Banks for help and advice and he acted as a go-between for the Government and the colony. Banks was by then scientific adviser to the Royal Gardens at Kew and his work there made the Gardens a centre for botanical research into plants of all the colonies of the Crown, which he foresaw would be necessary for their development. Today the Gardens are still a centre for botanical research.

Unfortunately Sir Joseph Banks ended his life as an invalid and a cripple, but to the end, his interest in all around him never flagged. His papers were left to his wife's nephew, and at his death were to go to the British Museum. Through misunderstanding as to the final destination and ownership, the papers were sold at auction, many were lost or destroyed and those remaining were distributed all over the world. Fortunately for Australia many of the papers relating to Australia, including the original copy of the Journal of the Voyage of the Endeavour, were procured and are now in the Mitchell Library. Apart from his papers, his library and collections were left to the botanist, Robert Brown. Later via the Linnaean Society they were removed to the British Museum which ensured their preservation.

## THE BANKS COLLECTION OF AUSTRALIA AND NEW ZEALAND COLEOPTERA

In a report by C. O. Waterhouse (1906: p. 580) he states that the Banks Collection "was received in the original Banksian cabinet . . . the specimens are, however, kept in the order of Fabricius' Systema Entomologiae." This is the 1775 publication. Many species in the collection were described after this date. Waterhouse adds, "Some of the species mentioned by Fabricius as being in this collection were not in it when it was received by the Museum." Recently (1979) some Banks material has been found in the Hunterian Collection in Glasgow. In correspondence with Dr. H. Brock of the University of Glasgow she writes; "There are in all over 100 specimens in the Hunterian Collection that must have come from the Cook voyages." I agree with her that Fabricius when working on both the Banks and Hunter Collections "enabled Hunter to acquire Banks duplicates." Banks was a generous man both with his money and possessions and shared them with others. Fabricius certainly added specimens from the collections he studied to his own collection. Now two of the six missing "types" from the Banks Collection, namely Dermestes navalis and Lampyris australis are found to be in the Hunterian Collection. As he worked with so many specimens it is very probable that some specimens were put back in the wrong collection. The Banks Collection contains over 3 000 insects in all. The Systema Eleutheratorum is Fabricius's record of the Coleoptera he described.

The Banks Collection of Coleoptera is now arranged in the order given by Fabricius in the Systema Eleutheratorum, 1801, except for one specimen which was omitted from the Eleutheratorum, and was found by E. Zimsen (1964) among the unnamed specimens. It was then added at the end of the named specimens in the collection.

Where they exist, the references given for each never mention of the genus". In the Banks species are:—

Collection, however, the genus is usually given, but

- 1. The original reference.
- 2. The Systema Eleutheratorum.
- 3. Junk's Coleopterorum Catalogus.
- 4. The reference in "The Type Material of J. C. Fabricius" by E. Zimsen.
- 5. The reference of a recent reviser of the group.

The species with the original reference in Systema Entomologiae, 1775, and four Curculionoidea from New Zealand with the original reference in the Species Insectorum, 1781, were collected during the voyage of the *Endeavour*. G. Kuschel (1920: p. 192) states that "the more spectacular weevils" were described first in 1775 and "the remainder" were described later. The species with the original reference in the Mantissa Insectorum, 1787, were collected by D. Nelson, who was sent by Banks on Captain Cook's third voyage on H.M.S. *Discovery*.

After the return of H.M.S. Endeavour many more voyages of discovery were made. Banks himself only made one more voyage after his return and that was to Iceland and the Shetland Islands. However, when opportunity offered, he sent out men at his own expense or from the Royal Gardens at Kew to collect for him and for the Gardens (Maiden 1909: p. 124). David Nelson was one of these collectors.

In this paper 131 Fabrician specific names are listed, ten of these are synonyms as Fabricius renamed those species in his later publications for one reason or another. Of the remaining 121:—

- i. Seventy-nine species are recorded by Fabricius from "nova Hollandia". The locality of seven of these were erroneously recorded, three are probably from the East Indies, and four from New Zealand. As G. Kuschel (1970: p. 191) points out, there must have been some mixing of material on H.M.S. Endeavour.
- ii. Thirty-two species are listed from "nova Zelandia". Of these, the locality of one is doubtful, and one erroneously recorded from "Brasilia" has been included (Kuschel 1970: p. 199).
- iii. Eight species are recorded from "terra Diemenii" one of which is labelled Kerguelen.
- iv. Two are recorded as being from both "nova Hollandia et Zelandia".

In each case an exact copy of the Fabrician label, which is in his own handwriting, has been given. Sometimes the label is no more than a scrap of paper, but according to Zimsen (1964: p. 10) Fabricius in his own collection used "a small scrap of paper on which was written the name of the species,

Collection, however, the genus is usually given, but very rarely the locality or name of a collector. The Fabrician labels in this Collection are usually written in two lines, the upper one giving the name and the lower one the reference. In some cases the reference is the number only of the species in the genus being described, with no page reference. This would indicate that the label was attached when the species was described and before publication; where the page also is given would denote that the label was added after publication. In the introduction of both his publications, Species Insectorum, 1781, and Mantissa Insectorum, 1787, it is stated that these works contain descriptions of species studied in "Anglia" (England). These descriptions were not only of new species but also fuller descriptions of some species already described in the Systema Entomologiae, 1775. When compiling his Species Insectorum, 1781, he says "My system of Insects gained ground considerably, as well by the more exact definition of the species, as by the addition of a considerable number of genera." In doing so Fabricius must have changed the labels on some of the species he redescribed, so we find references to a later publication instead of the original one, and sometimes a change of the generic name. As more and more specimens were examined he realised his classification required further divisions. Therefore, sometimes the BMNH label has a different genus to the original one, in fact the genus for the species as given in Systema Eleutheratorum. It is probable that the BMNH label was written when the collection was arranged according to the order in that publication. A few specimens also have a BMNH register number 63-46 on a small blue disc. The Museum name-labels are not attached to the specimen but are pinned below it, except for C. O. Waterhouse's type-labels. Kuschel (1970) did not add any holotype or lectotype labels when he studied the New Zealand Curculionoidea in the collection. The specimens are usually pinned through the right elytron and in most cases the pin has been glued on the ventral surface, often obliterating the structures.

In the discussion of the species they are listed in alphabetical order according to the specific name. Known synonyms are listed. The numerous varieties of the chrysomelids are not listed as I believe that there is much work to be done on the separation of these varieties. The localities given are those published by Fabricius, but corrections to these localities have sometimes had to be made.

The following list of places visited by Cook around the coasts of New Zealand and Australia will give some indication where the type specimens were collected. A. Musgrave (1954: p. 232-7) points out that when the *Endeavour* was sailing up the coast of

Australia it was late in the season for collecting insects at Botany Bay, so probably most of the insects from Australia would have been collected at Endeavour River (Cooktown). However, Banks' journal does record that collecting was done at both Bustard and Thirsty Bays.

Round the coast of New Zealand:-

9-10 October at Poverty Bay 1769

20 October at Anaura Bay

23-29 October at Tolaga Bay

4-15 November at Mercury Bay

20 November at Waihou (Thames) River

29 November- 5 December at Bay of Islands

16 January- 6 February at Ship Cove, 1770 Queen Charlotte Sound

27-30 March at D'Urville Island

31 March left New Zealand waters and sailed to Australia

27 April- 6 May at Botany Bay

23-24 May at Bustard Bay

29-31 May at Thirsty Bay

16 July- 4 August at Endeavour River (Cooktown)

3 September at Cooks' Bay, New Guinea 18-21 September at Savu (Sawu) Indonesia 10-26 October at Batavia (Jakarta) Java

4-14 January at Princes Island 1771

1773 13 May- 7 June at Ship Cove, Queen Charlotte Sound, New Zealand

3-25 November at Ship Cove, Queen Charlotte Sound, New Zealand

23 March- 11 May at Dusky Sound, New Zealand

1776-77 24 December- 7 January at Kerguelen's

26-30 January at Adventure Bay, Tasmania

12-25 February at Ship Cove, Queen Charlotte Sound, New Zealand

The letters BMNH are used to denote the British Museum (Natural History)

## CLASSIFICATION OF THE AUSTRALIAN AND NEW ZEALAND COLEOPTERA IN THE BANKS COLLECTION

This classification follows that of E. Britton in "Insects of Australia" published by the C.S.I.R.O. (1970: pp. 517-8).

New synonyms, and those species Fabricius renamed in later publications, now regarded as synonyms, are given in this classification. A full list of synonyms is given under the heading of each species.

The original generic names are in parentheses.

\*Denotes that the species has been omitted from recent catalogues.

†Denotes a new synonym.

## FAMILY CARABIDAE

sub-family Scaritinae

Laccopterum cyaneum (F.) (Scarites)

sub-family Cicindelinae

Cicindela tuberculata F.

#### FAMILY DYTISCIDAE

Platynectes decempunctatus (F.) (Dytiscus)

## FAMILY GYRINIDAE

Dineutes australis (F.) (Gyrinus)

#### FAMILY HISTERIDAE

Saprinus cyaneus (F.) (Hister)

\* Saprinus detritus (F.) (Hister)

#### FAMILY **SCAPHIDIIDAE**

Scaphidium quadripustulatum (F.) (Sphaeridium)

#### **FAMILY STAPHYLINIDAE**

Creophilus oculatus (F.) (Staphylinus) Creophilus erythrocephalus (F.) (Staphylinus)

#### **LUCANIDAE FAMILY**

Lissotes cancroides (F.) (Lucanus)

## FAMILY SCARABAEIDAE

sub-family Scarabaeinae

Onthophagus quadripustulatus (F.) 3 (Scarabaeus)

= O. bipustulatus (F.) (Scarabaeus) ♀ Tesserodon novaehollandiae (F.)

(Scarabaeus)

= T. hollandiae (F.) (Scarabaeus)

#### sub-family Cetoniinae

Glycyphana stolata (F.) (Cetonia)

= G. fasciata (F.) (Cetonia)

## sub-family Dynastinae

Haploscapanes barbarossa (F.)

(Scarabaeus)

Pericoptus truncatus (F.) (Scarabaeus)

## sub-family Melolonthinae

Calonota festiva (F.) (Melolontha)

C. festiva var. laeta (F.) (Melolontha)

Chlorochiton suturalis (F.) (Melolontha)

Liparetrus sylvicolus (F.) (Melolontha)

Liparetus monticolus (F.) (Melolontha)

sub-family Rutelinae

Repsimus aeneus (F.) (Melolontha)

## FAMILY PSEPHENIDAE

\* Sclerocyphon collaris (F.) (Tritoma)

 $\dagger$  = S. bicolor Carter

## FAMILY BUPRESTIDAE

sub-family Buprestinae

Cisseis s.g. Neospades cruciata (F.) (Buprestis)

sub-family Chalcophorinae

Cyphogastra farinosa (F.) (Buprestis)

FAMILY RHIPICERIDAE Rhipicera mystacina (F.) (Hispa)

FAMILY LAMPYRIDAE

Luciola australis (F.) (Lampyris) in

Glasgow

FAMILY MELYRIDAE (DASYTIDAE)

Dasytes minutus (F.) (anobium)

† = D. subcyaneus Broun

FAMILY DERMESTIDAE

Dermestes carnivorus F. (carniforus F.)

Dermestes felinus F. is a synonym of D.

ater Degeer

FAMILY BOSTRYCHIDAE

Bostrychopsis jesuita (F.) (Apate)

Dinoderus minutus (F.) (Apate) Type
lost

FAMILY LYCIDAE

Trichalus serraticornis (F.) (Lycus)

FAMILY CLERIDAE

Eunstalis porcata (F.) (Notoxus)

Phymatophaea violacea (F.) (Notoxus)

† = Balcus niger Sharp

FAMILY NITIDULIDAE

Macroura abbreviata (F.) (Nitidula)

FAMILY PHYCOSECIDAE

\* Phycosecis limbatus (F.) (Dermestes)

FAMILY COCCINELLIDAE

Coccinella leonina F.

Coelophora inaequalis (F.) (Coccinella)

Coelophora novemmaculata (F.) (Coccinella)

= Coelophora novempunctata (F.) (Coccinella)

Epilachna guttato-pustulata (F.) (Coccinella)

Veranis striola (F.) (Coccinella)

= V. lineola (F.) (Coccinella)

FAMILY COLYDIIDAE

Ulonotus scaber (F.) (Dermestes)

† = U. integer Sharp

FAMILY TENEBRIONIDAE

sub-family Ulominae

Adelium porculatum (F.) (Calosoma) =A. porcatus (F.) (Carabus)

\* Alphitobius laevigatus (F.) (Opatrum)
Celibe laevicollis (F.) (Silpha)
Dermestes navalis (F.) is a synonym of
Triboloides (Blair 1913) ferrugineus (F.)
\* Uloma sanguinipes (F.) (Tenebrio)

sub-family Amarygminae

Amarygmus bicolor (F.) (Erotylus)

\* Amarygmus morio (F.) (Erotylus)
Chalcopterus amethystinus (F.)
(Erotylus)

Chalcopterus cupreus (F.) (Erotylus)

\* = Ch. setosus Blackburn Chalcopterus smaragdulus (F.) (Erotylus)

FAMILY LAGRIIDAE Lagria tomentosa F.

FAMILY ALLECULIDAE

\* Homotrysis rufipes (F.) (Helops)

FAMILY OEDEMERIDAE

\* Dohrnia tristis (F.) (Necydalis) Selenopalpus cyaneus (F.) (Lagria)

† = S. subviridus White Sessinia lineata (F.) (Lagria)

FAMILY CERAMBYCIDAE

sub-family Prioninae

Toxeutus arcuatus (F.) (Prionus)

sub-family Lamiinae

Depsages solandri (F.) (Lamia)

Hybolasius cristus (F.) (Lamia)

Xylotoles griseus (F.) (Saperda) Xylotoles lynceus (F.) (Saperda)

sub-family Cerambycinae

Coptomma variegata (F.) (Callidium) Hesthesis variegata (F.) (Leptura) Type lost

Navomorpha lineata (F.) (Callidium)
Navomorpha sulcata (F.) (Callidium)
Oemona hirta (F.) ♂ (Saperda)
= O. villosa (F.) ♀ (Saperda)

Pachydissus obscurus (F.) (Callidium) Phoracantha semipunctata (F.) (Stenocorus)

Zorion minuta (F.) (Callidium)

Lamia bidens F. Present status unknown as type missing

FAMILY CHRYSOMELIDAE

sub-family Cassidinae

Aspidomorpha deusta (F.) (Cassida) Aspidomorpha interrupta (F.) (Cassida)

sub-family Chrysomelinae

Calomela crassicornis (F.) (Chrysomela) Chalcolampra octodecimguttata (F.) (Chrysomela)

Paropsis s.g. Chrysophtharta detrita (F.) (Coccinella)

 $\dagger = P$ . laesa Germ.

Paropsisterna morio (F.) (Chrysomela) Phyllocharis cyanicornis (F.) (Chrysomela)

Phyllocharis cyanipes (F.) (Chrysomela) Phyllocharis nigricornis (F.) (Chrysomela)

sub-family Criocerinae

Crioceris nigripes F.

Lema bifasciata (F.) (Crioceris) Lema oculata (F.) (Crioceris) Lema unifasciata (F.) (Crioceris) sub-family Eumolpinae

Eucolaspsis brunnea (F.) (Chrysomela) Rhyparida didyma (F.) (Crypto-cephalus)

sub-family Galerucinae

\* Monolepta cyanocephala (F.) (Crioceris)

† = M. antennalis Lea

Synodita melanocephala (F.) (Crioceris)

sub-family Halticinae

Licyllus 4-punctata (F.) (Galleruca)

= Altica albicollis F.

## FAMILY ANTHRIBIDAE

Phloeobius griseus (F.) (Anthribus) Type missing

= Ptinus gigas F.

#### FAMILY BELIDAE

Agathinus tridens (F.) (Curculio) Belus semipunctatus (F.) (Curculio)

#### FAMILY BRENTHIDAE

Lasiorrhynchus barbicornis (F.) (Curculio)

= Curculio assimilis F.

#### FAMILY CURCULIONIDAE

sub-family Aterpinae

Aterpus cultratus (F.) (Curculio)

Chrysolopus spectabilis (F.) (Curculio)

sub-family Brachyderinae

Protomus scutellaris (F.) (Curculio)

sub-family Cossoninae

\* Cossonideus lineolus (F.) (Curculio)

sub-family Cryptorrhynchinae

Euthyrhinus meditabundus (F.) (Curculio)

Omydaus luridus (F.) (Curculio)

\* Tentegia stupida (F.) (Curculio)

= Rhynchaeus strepidus F.

† = T. ingrata Faust

Curculio cruciatus F. Present status unknown

† = Acalles doriae Pasc.

sub-family Curculioninae

Curculio amoenus F.

Orthorrhinus cylindrirostris (F.)

(Curculio)

sub-family Erirrhininae

Nyxtes bidens (F.) (Curculio)

Stephanorrhychus attelaboides (F.)

(Curculio)

Tysius bicornis (F.) (Curculio)

sub-family Haplonychinae

\* Haplonyx haemorrhoidalis (F.) (Curculio)

sub-family Leptopiinae

Catoptes interruptus (F.) (Curculio) Leptopius clavus (F.) (Curculio)

Leptopius quadridens (F.) (Curculio)

Leptopius tribulus (F.) (Curculio)

Stenocorynus crenulatus (F.) (Curculio)

sub-family Otiorrhynchinae

\* Oribius adspersus (F.) (Curculio)

sub-family Rhadinosominae

Rhadinomus acuminatus (F.) (Curculio)

sub-family Rhynchophorinae

Curculio bituberculatus F. is a synonym

of Sitophilus oryzae Linné

sub-family Rhyparosominae

\* Cecyropa modesta (F.) (Curculio)

The present status of the following species has not yet been determined:—

- \* Rhynchaenus curvirostris F. (Curculio)
- \* Rhynchaenus exclamationis F. (Curculio)

#### DISCUSSION OF SPECIES

## ABBREVIATA, Nitidula

Fabricius 1781, p. 91, n. 3 Junk's Catal. 1913, 15, 56, p. 155 (Aethina) Zimsen 1964, p. 81, n. 1138

Holotype labels:

- Fabricius "Nitidula abbreviata Fabr. Spec. Ins. n. 3"
- ii. BMNH "Nitidula abbreviata"

Locality: "nova Zelandia". It is doubtful that this locality is correct.

Current status: *Macroura abbreviata* (F.): Nitidulidae.

Comment: Except for the mesothoracic legs, most of which are missing, the specimen is in fairly good condition

This species belongs to the genus *Macroura* and not to the genus *Aethina* in which it has previously been placed. The genus *Macroura* is represented by species from India, East Indies, Australia and New Guinea. It is, therefore, possible that if the locality New Zealand is incorrect that it should be one of the above localities where Banks collected. The locality New Zealand has been queried by Broun (1880: p. 171) who stated "I have not seen any insect agreeing with Fabricius's description", also by Sharp (1891: p. 350) and by Grouvelle (1912: p. 398). In Grouvelle's table of the genus (1912: p. 574), it is very close to *M. javanica* Grouv. and *M. orientalis* Nictur.

## ACUMINATUS, Curculio

Fabricius 1775, p. 152, n. 132; 1801, 2, p. 535, n. 168 Junk's Catal. 1937, 28, 154 p. 1 (*Rhadinosomus*) Zimsen 1964, p. 219, n. 3781 Kuschel 1970, p. 203

Lectotype (Kuschel) labels:

i. Fabricius "Curc. Acuminatus Fab. Entom. p. 152 n. 132"

ii. BMNH "Curculio acuminatus", "Type"

Locality: "nova Zelandia"

Current status: Rhadinosomus acuminatus (F.): Curculionidae, Rhadinosominae.

Comment: Lectotype is a male. It is very dirty and in poor condition, pinned through left elytron part of which is missing, right elytron and left meta-thoracic leg are also missing. There is a second male specimen, a paralectotype, which is very badly damaged, head, prothorax and right metathoracic leg are missing.

Broun (1880: p. 430), following Lacordaire (1866: p. 63) attributed this species to Schönherr, since then the correction has been made. Kuschel designated the lectotype.

## ADSPERSUS, Curculio

Fabricius 1775, p. 149, n. 118; 1801, 2, p. 529, n. 131

Zimsen 1964, p. 217, n. 3752.

Holotype labels:

- i. Fabricius "Curc. Adspersus Fab. Sp. Ins. n. 165.
- ii. BMNH "Curculio adspersus".

Locality: "nova Hollandia". This species may possibly be from New Guinea or the East Indies.

Current status: Oribius adspersus (F.) Curculionidae, Otiorrhynchinae.

Comment: The holotype is in poor condition, head and prothorax have been broken off and glued on to the rest of body; left antenna, tarsi of prothoracic legs, both mesothoracic legs and right metathoracic leg are missing. C.O. Waterhouse did not identify this specimen as a "type". There has been a great deal of confusion in the literature about this species.

Zimsen records three specimens under the name *Curculio adspersus*, namely the numbers 3473, 3638, and 3752.

Number 3638:—The type is recorded as "in Cajenne Dom.V.Rohr" with the reference Mant. Ins. 1, p. 106. It is listed in Junk's catalogue as *Ileomus mucoreus* L. This species does not concern the Banks Collection.

Number 3473:—This was named by Fabricius as Rhychaenus pollux, which is now recorded by both Zimsen, and Csiki in Junk's catalogue 1934, 29, 137, 28 as a synonym of Hypera (Erirhinomorphus) adspersus (F.). This is not the species in the Banks Collection and should not be known by the specific name of adspersus as it is a junior homonym, but by the name given by Fabricius in 1801, 2, p. 457, n. 94, namely R. pollux.

Number 3752:—Curculio adspersus F. is recorded by Zimsen and as "in nova Hollandia in Dom.

Banks-London 1 specimen", and gives the original reference of 1775. This species is not listed by Csiki in Junk's catalogue, but he does give two references, namely Systema Eleutheratorum 2, 1801, p. 529, n. 131, and Herbst. Nat. Ins. Kaf. 6, 1795, p. 258 for the species H. (Erirhinomorphus) adspersus (F.) which is incorrect. These two references are for the Fabrician species Oribius adspersus (F.), number 3752 in Zimsen. It was classified into the genus Oribius by R. T. Thompson of the BMNH (pers. comm.). O. adspersus (F.) is the senior homonym. The other two species which Fabricius names Curculio adspersus were renamed by him in Syst. El. as Rhynchaenus pollux and Lixius roreus, and these specific names should now be used for them. L. roreus F. is a synonym of Ileomus mucoreus L.

#### AENEA, Melolontha

Fabricius 1775, p. 34, n. 11; 1801, 2, p. 166, n. 30 aeratus Linne 1790, p. 1570 (Scarabaeus) purpureipes Macl. 1871, p. 197 (Repsimus).

Junk's Catal. Suppl. 66 p. 285 (Repsimus).

Zimsen 1964, p. 144, n. 2360.

Carne 1958, p. 178-9.

Holotype labels:

- i. Fabricius "Melol. aenea Fabr. Sp. Ins. n. 14".
- ii. BMNH "Melolontha Aenea", "Type".

Locality: "nova Hollandia".

Current status: Repsimus aeneus (F.): Scarabaeidae, Ruterlinae.

Comment: The condition of the holotype is good, except that the mouth parts are covered with dried mycelial hyphae. This species is the type of the genus *Repsimus*. The reference on the label is not the original reference. This probably accounts for the fact that Fabricius would have re-examined this species before publishing Spec. Ins. 1781 and when compiling this list put this reference on the specimen before actual publication as there is no page reference given. Carne (idem) discusses the synonymy of this species in full.

## ALBICOLLIS F., Altica

See QUADRIPUNCTATA F., Galleruca

A. albicollis F. is the junior homonym.

#### AMETHYSTINUS, Erotylus

Fabricius 1775, p. 124, n. 7; 1801, 2, p. 13, n. 6 (Cnodulon)

Junk's Catal. 1911, 18, 28, p. 579 (Chalcopterus) Zimsen 1964, p. 116, n. 1806 Holotype labels:

- i. Fabricius "Erot. Amethystinus Fab. original genus Curculio. Entom. p. 124 n. 7"
- ii. BMNH "Cnodulon amethystinus", "Type"

Locality: "nova Hollandia"

Current status: Chalcopterus amethystinus (F.): Tenebrionidae, Amarygminae

Comment: The condition of the holotype is good, though the head is retracted somewhat into the prothorax, parts of both antennae are missing.

The spelling in the 1775 reference is *Erotylus* amethystines though on the label the specific name is spelt amethystinus. So the ending "es" is probably a misprint.

Blair (1914: p. 489) studied this species in relation to the specimens identified by Blackburn and Carter as *Ch. amethystinus* (F.). He points out the differences between these specimens and the Fabrician type.

- "1. In the type, the legs are entirely black, in the other specimens the femora is red and sometimes there are traces of red colouration on the tibiae.
- 2. In the type there is a small but distinct depression in the centre of each half of the prothorax, this is absent in the other specimens.
- 3. The anterior margin of the prothorax is slightly sinuate in the type but not so in the other specimens.
- 4. Punctures of the elytra are heavier in the type than in the other specimens."

Blair considered that the Fabrician species is nearest to *Ch. pulcher* Blkb. but is "not identical with it". In his opinion the specimens identified by Blackburn and Carter (1913: p. 10) as *Ch. amethystinus* F. are not the Fabrician species.

This is another species Fabricius reclassified in his later publications.

#### AMOENUS, Curculio

Fabricius 1775, p. 142, n. 81; 1801, 2, p. 489, n. 239 (Rhynchaenus)

Junk's Catal. 1923, 29, 123, p. 23 Zimsen 1964, p. 208, n. 3582

Holotype labels:

- i. Fabricius "Curc. Amoenus Fabr. S. Ent. p. 142, n. 81"
- ii. BMNH "Rhynchaenus amoenus", "Type"

Locality: "nova Hollandia"

Current status: *Curculio amoenus* F.: Curculionidae, Curculioninae.

Comment: Holotype is in good condition, all structures are complete. At one time this species was

placed in the genus *Balaninus* but is now back in its original genus *Curculio*.

## ARCUATUS, Prionus

Fabricius 1787, 1, p. 129, n. 9; 1801, 2, p. 259, n. 10 curvus Gmel. 1789, p. 1817. After McKeown 1947

Junk's Catal. 1913, 22, 52, p. 38 Zimsen 1964, p. 163, n. 2717

Holotype labels:

- i. Fabricius "Prionus Arcuatus v. Diem. land Nelson Fabr. Mss".
- ii. Fabricius "Prionus arcuatus Fabr. Mant. Ins. n. 9"
- iii. BMNH "Prionus arcuatus", "Type"

Locality: "Terra Diemenii"

Current status: *Toxeutes arcuatus* (F.): Cerambycidae, Prioninae.

Comment: Holotype has been pinned twice, now through the right elytron, previously through the prothorax; terminal joints of left antenna and some tarsi of mesothoracic legs are missing.

Lameere (1904 p. 24) studied the holotype and gives a detailed description of it.

The name Nelson on the label, is that of the collector who sailed with Cook on his third voyage, and collected at Adventure Bay, Tasmania.

## ASSIMILIS, Curculio

Fabricius 1775, p. 134, n. 42; 1801, 2 p. 546, n. 3 (Brentus)

Junk's Catal. 1927, 26, 89, p. 58 (Lasiorhynchus) Zimsen 1964, p. 221, n. 3833 Kuschel 1970, p. 194

Lectotype (Kuschel) label:

- i. Fabricius "Brent. Assimilis Fabr. M. Ins. n. 9"
- ii. BMNH "Brentus assimilis", "Type"

Locality: "nova Zelandia"

Current status: synonym of Lasiorrhynchus barbaricornis (F.)

Comments: "Type" is a female, pinned through left elytron which has been glued on to specimen. Otherwise specimen is in good condition, except for terminal joints of both antennae which are missing. The reference number 9 on the label is incorrect, it should be number 2. Kuschel (idem.) designates this specimen as the lectotype and the specimen in Fabricius's own collection as a paralectotype.

#### ATTELABOIDES, Curculio

Fabricius 1775, p. 156, n. 162; 1801, 2, p. 545, n. 227 osculator Broun 1909, p. 134

Junk's Catal. 1934, 28, 140, p. 81 (Stephanorrhynchus)

Zimsen 1964, p. 221, n. 3832 Kuschel 1970, p. 199

Holotype labels:

- i. Fabricius "Curc. attelaboides Fab. Entom. 156 n. 152
- ii. BMNH "Curculio attelaboides"

Locality: "Brasilia". This locality is incorrect. It is a New Zealand species.

Current status: Stephanorhynchus attelaboides (F.) Curculionidae, Erirrhininae

Comment: Holotype is a female. This species is endemic to New Zealand and was identified in the Collection by Kuschel (1970; p. 191) as being erroneously recorded from Brazil. Kuschel (1970: p. 199) gives a key to the indentification of this species and its closely related species.

#### AUSTRALIS, Gyrinus

Fabricius 1775, p. 235, n. 2; 1801, 1, p. 275, n. 3 rufipes F. 1801, 1, p. 276, n. 13 dentipennis Macl. 1825, p. 30 limbatus Macl. 1825, p. 30 iridus Hope 1842, p. 428 leucopoda Montr. 1860, p. 245 (Dineutus) janthinus Reg., 1882, p. 421 (Dineutes) dentatus Suffr. 1842, p. 256 (Dineutes) Leucopus Montr. 1860, p. 245 (Dineutes)

Junk's Catal. 1910, 4, 21, p. 4 (Dineutes) Zimsen 1964, p. 70, n. 927 Ochs 1949, p. 192

Holotype labels:

- i. Fabricius "australis"
- ii. BMNH "Gyrinus australis" museum register number 63-46.

Locality: "in novae Hollandiae aquis"

Current status: Dineutus australis (F.); Gyrinidae.

Comment: The holotype has been broken between the meso and metathorax and then glued together. The full list of synonyms and literature concerning this species is given by Ochs (idem.). Fabricius described the female of this species at a later date under the name of *G. rufipes* F. which is now a synonym, the type of which is in "Dom Billardiae". *D. dentatus* Suffr and *D. leucopus* Montr. are not listed by Ochs as synonyms as they are not Australian species.

## AUSTRALIS, Lampyris

Fabricius 1775, p. 201, n. 11; 1801, 2, p. 104, n. 23 Junk's Catal. Suppl. 1966, 9, p. 99 (Luciola) Zimsen 1964, p. 133, n. 2141 Holotype is missing from the Collection. "Type" has recently been found in the Hunterian Collection in Glasgow.

Locality: "nova Hollandia"

Current status: Luciola australis (F.) Lampyridae.

Comment: In Gemminger et Harold Catalogue this species is recorded under the name Luciola australis (F.) and the locality is erroneously given as "Nov. Island" (New Ireland). Boisduval (1835; p. 125) gives the same locality. However, Masters (p. 312) and McDermot in Junk's Suppl (idem.) records the Fabrician locality, "Australia". Masters records two synonyms L. guerini Laporte and L. nigripennis Latr. McDermot states that L. guerini Laporte is from New Guinea and is not a synonym of L. australis (F.). L. nigripennis Latr is not listed by McDermot and Lea (1909: p.108) regards L. nigripennis Latr as merely a "catalogue name". Therefore there is no recognised synonym of L. australis (F.).

#### BARBAROSSA, Scarabaeus

Fabricius 1775, p. 12, n. 35; 1801, 1, p. 47 (Geotrupes)

var similis Prell 1934, p. 57.

Junk's Catal. 1937, 21, 156, p. 93 (Haploscapanes) Zimsen 1964, p. 22, n. 28 (Geotrupes)

Carne 1957, p. 190

Syntypes labels:

- i. Fabricius "Scarab. Barbarossa" Fabr. Sp Ins. No. 41.
- ii. BMNH "Geotrupes barbarossa"

Locality: "Nova Hollandia"

Current status: Haploscapanes barbarossa (F.).: Scarabaeidae, Dynastinae.

Comment: There are two specimens, a male and female. The condition of the male is fair; only two basal joints of the antennae are present and the terminal joints of the left labial palp and most of the tarsi are missing. The female is an exceptionally large specimen and is in good condition. The reference on the label is the 1781 reference so Fabricius must have re-examined this specimen in 1780-1.

## BARBICORNIS, Curculio

Fabricius 1775, p. 134, n. 41; 1801, 2, p. 545, n. 1 (Brentus)

assimilis F. 1775, p. 134

Junk's Catal. 1927, 26, 89, p. 58 (Lasiorrhynchus) Zimsen 1964, p. 221, n. 3833 Kuschel 1970, p. 193-5

Lectotype (Kuschel) labels:

i. Fabricius "Brentus Barbicornis Fabr.

Mant. Ins. n. 1"

ii. BMNH "Brentus barbicornis", "Type"

Locality: "nova Zelandia"

Current status: Lasiorrhynchus barbicornis (F.): Brenthidae

Comments: There are two specimens both males. The "type" specimen designated by Kuschel as the lectotype is very dirty and terminal joints of left antenna are missing. In the 2nd specimen, a male, a paralectotype (Kuschel) head is missing. Broun (1880: p. 543) notes that there is great variation in length of this species. The reference on the label indicates that Fabricius must have re-examined this species after the original 1775 publication and before the Mantissa Insectorum was published as there is no page number given; the page number is 95.

#### BICOLOR, Erotylus

Fabricius 1775, p. 124, n. 8; 1801, 2, p. 14, n. 7 (Cebrio)

tardus Blk. 1889 p. 1271 (Amarygmus) var torridus Pasc. 1869 p. 351

Junk's Catal. 1911, 18, 28, p. 578 (Amarygmus) Zimsen 1964, p. 116, n. 1807

Carter 1926, p. 158

Holotype labels:

- i. Fabricius "Erotylus Bicolor Fab. Entom.p. 124 n. 8"
- ii. BMNH "Cnodulon bicolor", "Type"

Locality: "nova Hollandia"

Current status: Amarygmus bicolor (F.): Tenebrionidae, Amarygminae

Comment: The holotype is in a poor state of preservation. The ventral surface is covered with dirt and mycelium, except for the terminal joints of the right antenna all structures appear to be present but are difficult to discern. Carter (1915: p. 33) discusses the synonym of this species fully. This reference includes a copy of the correspondence between Carter and Blair of the BMNH who compared the Fabrician type with the type of *A. tardus* Blkb. which is in the BMNH. Fabricius changed the genus of this species in his later publication. This species is recorded in Junk's Catalogue (idem.) as a queried synonym of *Chalcopterus affinis* Bless. This is not accepted by Carter (idem.).

## BICORNIS, Curculio

Fabricius 1781, 1, p. 180, n. 111; 1801, 2, p. 489, n. 241 (Rhynchaenus)
amplipennis Pasc. 1875, p. 218
purus Broun 1893, p. 1224 (Tysius)
Zimsen 1964, p. 208, 108, n. 3584
Kuschel 1970, p. 202

Lectotype (Kuschel 1970) labels:

- i. Fabricius "Curc. Bicornis Fabr. Sp. Ins. n. 111"
- ii. BMNH "Rhynchaenus bicornis", "Type"

Locality: "nova Zelandia"

Current status: Tysius bicornis (F.): Curculionidae, Erirrhininae

Comment: The lectotype is badly damaged; head, tarsi of right prothoracic leg, left prothoracic leg except for coxa and trochanter, and right metathoracic leg are missing. This species was for sometime omitted from the catalogues. G. Kuschel places this species in the genus *Tysius*. He regards this "type", a male, as the lectotype although the Fabrician reference says "Mus. Dom. Banks" and there is only one specimen in the collection. There is a female in Fabricius's own collection which he names as a paralectotype.

## BIDENS, Lamia

Fabricius 1775, p. 177, n. 30; 1801, 2, p. 304, n. 124. Junk's Catal. 1923, 23, 74, p. 604. Zimsen 1964, p. 172, n. 2890.

Labels of specimen in collection:

- i. Fabricius "Lamia Bidens Fab. Entom. p. 177 n. 30".
- ii. BMNH "Lamia bidens". This label and the "Type label" have been crossed out and the word "Bidens" queried.
- iii. A mutilated label—"an bidens fabricii?"

Locality: "nova Hollandia".

Comment: This specimen cannot be the "Fabrician type of *L. bidens*. It is in good condition but has been badly pinned. I have been unable to identify it. Aurivillus (Junk's Catal. idem.) and McKeown (1947: p. 174) both list this species among those "doubtful or unknown" genera. Oliver (1789: p. 67 Fab. 17 fig. 125) figures *L. bidens* F. as a small narrow insect with the apices of the reddish-brown elytra distinctly bidentate.

## BIDENS, Curculio

Fabricius 1775, p. 136, n. 51; 1801, 2, p. 457, n. 96 (Rhynchaenus)
rufipes Broun 1881, p. 718 (Nyxetes)

Junk's Catal. 1934, 28, 140, p. 84 (Nyxetes).

Zimsen 1964, p. 203, n. 3474.

Kuschel 1970, p. 201.

Lectotype labels:

- i. Fabricius "Curc. Bidens Fab. Entom. p. 136 n. 51".
- ii. BMNH "Rhynchaenus", "Type".

Locality: "nova Zelandia".

Current status: Nyxetes bidens (F.): Curculionidae, Erirrhininae.

Comment: Glue is present on both dorsal and ventral surfaces; spine-like clusters of hairs on right elytron are broken, abdomen twisted and lying at right angles to the rest of body; antennae, most tarsi and right metathoracic leg are missing. The colour of this species varies from reddish brown to black, "type" is black. Fabricius changed the genus in his later publications. Kuschel designated this specimen as a lectotype.

## BIFASCIATA, Crioceris (Lema)

Fabricius 1775, p. 120, n. 12; 1801, 1, p. 476, n. 29 (Lema).

Junk's Catal. 1924, 24, 51, p. 55 (Lema). Zimsen 1964, p. 107, n. 1645.

Syntype labels:

- i. Fabricius "Crioc. bifasciata Fab. Entom. p. 120, n. 12".
- ii. BMNH "Lema bifasciata", "Type".

Locality: "nova Hollandia".

Current status: Lema bifasciata F.: Chrysomelidae, Criocerinae.

Comment: The condition of the "type" is fair, parts of the antennae and tarsi of right metathoracic legs are missing. The second specimen is not in as good a condition as the "type", and it is pinned through the left elytron. Fabricius re-classified this species in 1801 into the genus *Lema*.

#### BIPUSTULATUS, Scarabaeus

Fabricius 1775, p. 30, n. 121; 1801, 1, p. 62, n. 37 (Ateuchus)

Junk's catal. 1927, 19, 90, p. 209 (Onthophagus) Zimsen 1964, p. 31, n. 188 Matthews 1972, p. 220 (Onthophagus)

Holotype labels:

- i. Fabricius "Scarab. 2-pustulatus" Fab. Sp. Ins. No. 152
- ii. BMNH "Ateuchus bipustulatus"

Locality: "nova Hollandia"

Current status: synonym of Onthophagus quadripustulatus (F.).

Comment: Holotype is badly pinned through the left elytron. Several legs are without tarsi and the club of the left antenna is missing. O. bipustulatus (F.) is a female and the synonym has been established by Matthews (idem).

## BITUBERCULATUS, Curculio

Fabricius 1781, 1 p. 171, n. 58; 1801, 2, p. 438, n. 42 Junk's Catal. 1936, 30, 149, p. 111

Zimsen 1964, p. 199, n. 301 Kuschel 1970, p. 197

Holotype labels:

- i. Fabricius "Curc. 2-tuberculatus Fabr. Sp. Ins. n. 58"
- ii. BMNH "Calandra 2-tuberculata", "type"

Locality: "nova Zelandia"

Current status: *C. bituberculatus* F. is a synonym of *Sitophilus oryzae* Linné: Curculionidae, Rhynchophorinae.

Comment: The holotype is badly pinned, head and most tarsi are missing. Oliver (1807: p. 95 f. 167) describes this species, stating that the body is a ferrugineus uniform colour and without marks, and that the specimen in the Bank's Collection is without any raised tubercles on the prothorax as described by Fabricius. Herbst (1795: p. 29) and Broun (1880: p. 504) both note the same absence of tubercles. Kuschel (1970: p. 197) makes no reference to this. Kuschel determined the synonymy. He also explains the confusion caused in identifying this species as it had been erroneously associated with the weevils Dryophthorus crenatus Boisd. and Mitrastethus baridioides Redtenbacher.

## BRUNNEA, Chrysomela

Fabricius 1781, 1 p. 123, n. 44; 1801, 1, p. 439, n. 104 Junk's Catal. 1914, 24, 59, p. 22 Zimsen 1964, p. 100, n. 1504

Holotype labels:

- i. Fabricius "Chr. Brunnea Fabr. Sp. Ins. n. 44"
- ii. BMNH "Chrysomela brunnea", "Type"

Locality: "nova Zelandia"—Zimsen (1964) and Musgrave (1952) record the locality as "nova Hollandia" as given by Fabricius in his 1781 publication. In his later publications of 1792 & 1801 Fabricius corrects this and gives the correct locality as "nova Zelandia".

Current status: Eucolapsis brunnea (F.): Chrysomelidae, Eumolpinae.

Comment: The condition of the holotype is poor, and the structures on the ventral surface are covered with glue and dirt. Parts of both antennae and parts of all legs are missing. There are several colour varieties of this species. The holotype is reddish and there is no trace of any green colour, as on some specimens, this may be due to fading. This species is described by Broun (1880: p. 622) and his account corresponds very closely to it, and the three specimens in his own collection are identical with the "type". Broun records the habitat as "New Zealand on the flowers of Leptospermum". Musgrave (1932: p. 87) incorrectly records the Fabrician genus as being *Coccinella*.

## CANCROIDES, Lucanus

Fabricius 1787, 1, p. 2, n. 9; 1801, 2, p. 252, n. 18 Junk's Catal. 1960, 8, p. 39 Zimsen 1964, p. 162, n. 2071

Holotype labels:

- Fabricius "Lucan. Crancroides Fabr. Mant. Ins. n. 9"
- ii. BMNH "Lucanus Crancroides", "Type"

Locality: "Terra Diemenii"

Current status: Lissotes crancroides (F.): Lucanidae.

Comment: Holotype has been pinned twice, now through the right elytron but previously through the prothorax; mouth parts and tarsi covered in dirt; tarsi of right prothoracic and left metathoracic leg, and right mesothoracic leg are missing.

Westwood (1871: p. 371) gives a full description of this species, and compares it with closely allied species.

## CARNIVORUS, Dermestes

Fabricius 1775, p. 55, n. 2, (*D. carniforus*); 1801, 1, p. 31, 2 n. 2

Junk's Catal. 1911, 14, 33, p. 42

Zimsen 1964, p. 64, n. 1048

Hinton 1945, p. 287

Locality: "in nova Hollandia et Zelandia" in 1775.
"in nova Hollandia et in Germania" in
1801.

Current status: Dermestes carnivorus F.: Dermestidae

Comment: Fabricius changed the "habitat" in 1801 and added that the "type" was in "Dom Smidt", having previously in 1775 stated it was in "Mus. Dom. Banks". The spelling in 1775 of the species as "carniforus" is possibly a misprint as in all later publications it is spelt carnivorus. Hinton records the distribution of this species as "N. & S. America, Europe and India". According to Fauvel (1889) it is indigenous to America. It seems probable that this insect may have been found on the Endeavour, having been brought aboard with stores, thus giving rise to the confusion of its place of origin. This then is not an Australian or New Zealand species.

#### CLAVUS, Curculio

Fabricius 1775, p. 154, n. 140; 1801, 2, p. 536, n. 177 elegans Lea 1916 p. 332

Junk's Catal. 1931, 28, 114, p. 18 (Leptops)

Zimsen 1964, p. 219, n. 3789

Holotype labels:

i. Fabricius "Curcul. Clavus Fab. Entom. p. 154 n. 140' ii. BMNH "Curculio clavus", "Type".

Locality: "nova Hollandia"

Current status: Leptopius (Oke 1951) clavus (F.): Curculionidae, Leptopiinae.

Comment: Holotype is pinned through the left elytron, tarsi of left prothoracic leg and right mesothoracic leg are missing. This species varies in colour and intensity of red markings and in the number of scales present.

#### COLLARIS, Tritoma

Fabricius 1775, p. 69, n. 2 bicolor Carter (Sclerocyphon) new synonym. Zimsen 1964, p. 237, n. 4109

Holotype labels: Fabricius "Tritoma Collaris Fab Entom. 69 n. 2"

Locality: "nova Hollandia"

Current status: Sclerocyphon collaris (F.): Psephenidae.

Comments: There is no BMNH label. This speciment was added at the end of the named specimens in the collection after it was found in 1964 by E. Zinsen "in the last box" of the collection, which consists of unnamed specimens.

The condition of the type is very poor. The antennae and the abdomen are missing. The right side of the prothorax is broken, but the broken piece is lying on top of the prothorax. It is badly pinned and the right elytron is cracked. There is a large lump of glue on the ventral surface and the insect is covered with dried mycelial hyphae and debris.

This species has not only been omitted from the catalogues but Fabricius omitted it from his 1801 publication, the Systema Eleutheratorum. It is listed in his Species Insectorum and in Mantissa Insectorum. However, the omission from the Eleutheratorum may account for the fact that it was not found in the arrangement of the Banks Collection which was based on the order given in that publication. While I was studying the collection R. D. Pope of the BMNH classified this specimen as a member of the family Psephenidae and as belonging to the genus Sclerocyphon. (pers. com.) While at the BMNH I compared it with H. J. Carter's (1935: p. 191) description of S. bicolor. This described the Fabrician species, T. collaris F. There was no speciment of S. bicolor Carter in the BMNH, so no comparison could be made. On returning to Australia, I was eventually able to track down a paratype of S. bicolor Carter at the Zoology Department at the University of Tasmania, where Mrs. J. Smith is making a study of the genus Sclerocyphon. The specimen was sent to R. D. Pope at the BMNH and he made a comparison of the two

species, and agrees that *S. bicolor* Carter is a synonym *T. collaris* F. In a letter received from Mr. Pope he states: "I have compared the Carter paratype with the specimen in the Banks Collection and am quite satisfied that they are the same species. The overall size, pronotal colour pattern and shape, elytra punctation and colour all agree well. The teeth on the hind margin of the pronotum from margin of the scutellum and basal borders of the elytra all correspond in size and distribution. The colour pattern and general morphology of the head also agree".

#### CRASSICORNIS, Chrysomela

Fabricius 1775, p. 99, n. 27; 1801, 1, p. 437, n. 94. Junk's Catal. 1916, 24, 68, p. 193 (Calomela). Zimsen 1964, p. 99, n. 1496.

Holotype labels:

- i. Fabricius "Chrys. crassicornis Fab. Entom. p. 99, 27.
- ii. BMNH "Chrysomela crassicornis" "Type".

Locality: "nova Hollandia".

Current status: Calomela crassicornis (F.): Chrysomelidae, Chrysomelinae.

Comment: The holotype is not in good condition. Glue on the ventral surface has covered the metathorax and abdomen; left mesothoracic and right metathoracic legs are missing. Baly (1855: p. 249) gives a detailed description of this species. However, the black markings on the "type" differ somewhat from what Baly describes as typical of the species. The general colour is fulvous, the "type" being paler than most specimens in the BMNH, but this may be due to fading. The "type" differs from Baly's description in the following respects:—

- 1. no dark frontal patch on head
- 2. no black marking on prothorax
- 3. markings on each elytron are a single rounded black basal spot, and an elongated black streak posterior to it. Baly describes the elytral markings as a "subtriangular spot near the scutellum and a sinous vitta . . . extends nearly to the apex of the elytron".

#### CRENULATUS, Curculio

Fabricius 1775, p. 147, n. 105; 1801, 2, p. 518, n. 64, australis Boisd. (Gastrodus).

Junk's Catal. 1913, 28, 114, p. 16. Zimsen 1964, p. 214, n. 3696.

Holotype labels:

- i. Fabricius "Curc. Crenulatus Fab. Entom. p. 147, n. 105".
- ii. BMNH "Curculio crenulatus", "Type".

Locality: "nova Hollandia".

Current status: Stenocorynus crenulatus (F.): Curculionidae, Leptopiinae.

Comment: Holotype is pinned through left elytron; terminal joints of both antennae and tarsi of left metathoracic leg are missing, it is also very abraded only a few scales are present.

#### CRISTA, Lamia

Fabricius 1775, p. 170, n. 3; 1801, 2, p. 282, n. 6. Junk's Catal. 1922-23, 23, 74, p. 323. Zimsen 1964, p. 167, n. 2787.

Holotype labels:

- i. Fabricius "Lamia Crista Fab. Entom. p. 170 n. 3".
- ii. BMNH "Lamia crista", "Type".

Locality: "nova Zelandia".

Current status: Hybolastus cristus (F.): Ceramycidae, Lamiinae.

Comment: The holotype is in fairly good condition; pinned through the left elytron which is cracked; terminal joints of both antennae and tarsi of right metathoracic leg are missing. Broun (1880: p. 609-10) states that he examined the Fabrician type and noted that Fabricius made an error when he described the basal tubercles of the elytra as tridentate. The mistake is due to the fact that the tubercle is surmounted by "a compressed pencil of hairs".

## CRUCIATA, Buprestis

Fabricius 1775, p. 222, n. 36; 1801, 2, p. 210, n. 134. Junk's Catal. 1935, 12, 143, p. 844. Zimsen 1964, p. 155, n. 2568. Carter 1923, p. 172 and 1929 p. 277.

Holotype labels:

- i. Fabricius "Buprestis cruciata Fab. Entom.p. 222 n. 36".
- ii. BMNH "Buprestis cruciata", "Type".

Locality: "nova Hollandia".

Current status: Cisseis s.g. Neospades cruciata (F.): Buprestidae, Buprestinae.

Comment: The holotype is in good condition except for a large amount of glue on the ventral surface. Carter (1929: p. 277) classified this species in the genus *Neospades* which is now a sub-genus of *Cisseis*.

#### CRUCIATUS, Curculio

Fabricius 1775, p. 129, n. 8; 1801, 2, p. 434, n. 23 (Calandra)

doriae Pasc. 1885 p. 257, new synonym Junk's Catal. 1936, 29, 151, p. 151 Zimsen 1964, p. 198, n. 3386 Holotype labels:

- i. Fabricius "Curc. cruciatus Fabr. Entom. p. 129 n. 8"
- ii. BMNH "Calandra cruciatus"
- iii. "Crypto-rhynchus"

Locality: "nova Hollandia"

Current status: unknown: Curculionidae, Cryptorrhynchinae.

Comment: All structures appear to be complete though the legs are all tightly contracted and folded inwards, there is a great deal of glue on the ventral surface. There is no museum "type" label on this speciment although the label has the original reference on it. In correspondence with R. J. Thompson of the BMNH he sent the following communication to me "I have compared the types of cruciatus and Acalles doriae Pasc. and confirm that they belong to the same species. Although doriae stands in Ophrythyreoces in Junk's Catalogue (Hustache 1936), it certainly does not belong there. In his description of Ophrythyreocis, Lea draws special attention to the "conspicuously elevated scutellum" (1913: p. 245) but in doriae the scutellum is absent. Lea (idem, p. 247 note) placed doriae in Pseudoporopterus, along with P. irrasus (idem, p. 246). Although doriae and irrasus are probably congeneric, I doubt if they really belong in Pseudoporopterus".

## CULTRATUS, Curculio

Fabricius 1775, p. 153, n. 136; 1801, 2, p. 536, n. 173 bicristatus F. 1801, 2 p. 517 Junk's Catal. 1936, 28, 150, p. 3 (Aterpus)

Zimsen 1964, p. 219, n. 3785

Holotype labels:

- i. Fabricius "Curc. cultratus Fab. Entom. p. 153 n. 136"
- ii. BMNH "Curculio cultratus", "Type"

Locality: "nova Hollandia"

Current status: Aterpus cultratus (F.): Curculionidae, Aterpinae.

Comment: All structures are complete, but the ventral surface is covered with dirt. This is a well known species. Fabricius (1775: p. 153) describes the elytra with "tuberculis sex v. septem elevatis" (six to seven elevated tubercles). The holotype has only five distinct tubercles.

#### CUPREUS, Erotylus

Fabricius 1775, p. 123, n. 5; 1801, 2 p. 12, n. 1 (Cnodalon)

venereus Gmel p. 1728 (Chalcopterus) rusticus Blkb. Mon. p. 63, 76 (Chalcopterus) setosus Blkb. by Blair (1914: p. 489) (Chalcopterus) var cupriventris Carter (Chalcopterus) Junk's Catal. 1911, 18, 28, p. 580 (Chalcopterus) Zimsen 1964, p. 115, n. 1801 Carter 1926, p. 160

Holotype labels:

i. Fabricius "Cnodalon cupreum Fab. Ent. p. 123 n. 5"

The original name of Erotylus cupreus on the label has been changed to Cnodalon cupreum in the same handwriting. After re-examination of more species Fabricius must have done this himself. As his work progressed he often re-classified species in new genera.

ii. BMNH "Cnodalon cupreus", "type"

Locality: "nova Hollandia"

Current status: Chalcopterus cupreus (F.): Tenebrionidae, Amarygminae.

Comment: The condition of the holotype is good except for the head which is retracted within the prothorax. Only the terminal joints of the left antenna and terminal tarsi of left metathoracic leg are missing.

The synonyms of this species are given by Carter (idem.) as *Ch. venereus* Gmel and *Ch. rusticus* Blk. H. J. Carter (1913: p. 14) had some correspondence with K. G. Blair of the BMNH about this Fabrician species. In this reference Blair's description of the Fabrician type is given. Blackburn's type of *Ch. rusticus* and *Ch. setosus* are both in the BMNH. Blair (1914: p. 489) published that *Ch. setosus* Blk. is also a synonym. Carter (1926: p. 160), who had not seen the types still published them as separate species, omitting Blair's work on this species. The full synonymy should be as above.

This species shows great variation in colour from deep purple, almost black with a metallic tinge through various shades of purple with a green metallic tinge, to reddish copper, to an emerald green. The holotype is black with thorax and elytra coppery.

## CURVIROSTRIS, Curculio

Fabricius 1781, 1, p. 166, n. 29; 1801, 2, p. 446, n. 40 (Rhynchaenus).

Zimsen 1964, p. 201, n. 3436.

Holotype labels:

- i. Fabricius: "Curc. Curvirostris F. Sp. Ins. N. 23". This number 23 is incorrect; it should be 29.
- ii. BMNH "Rhynchaenus curvirostris", "Type".

Locality: "nova Hollandia".

Current status: unknown. Family Curculionidae.

Comment: The holotype is in poor condition; head twisted through an angle of 90° to the left. Both antennae and some of the legs are missing, and the rest twisted and covered with dirt.

R. curvirostris F. does not appear in any recent catalogue. Olivier (1807: p. 152) described and figures this species. As Fabricius studied more and more species he realised that the large genus of Curculio had to be divided up into separate genera. This species was put in the genus Rhynchaenus in his later publications.

#### CYANEUS, Hister

Fabricius 1775, p. 52, n. 3; 1801, 1, p. 86, n. 13 speciosus Boisd. 1835, p. 148 laetus Er. 1834, p. 179.

Junk's Catal. 1910, 8, 24, p. 93 (Saprinus). Zimsen 1964, p. 35, n. 253.

Labels: There are 3 specimens over the BMNH label "Hister cyaneus".

- i. Fabricius "Hister cyaneus Nova Hollandia".
  - ii. BMNH "Type".
- 2. No labels.
- 3. Fabricius "Hister cyaneus C.B.S. Fab. Ent. p. 52 n. 3".

Locality of "Type": "nova Hollandia".

Locality of 3rd specimen: "C.B.S." (Cape of Good Hope).

Current status: Saprinus cyaneus (F.): Histeridae.

Comment: Both labelled specimens are pinned through the left elytron with a large amount of glue on the ventral surface. The "type" is complete except for the tarsi of the right meta-thoracic leg. The specimen labelled as from "C.B.S." is in poor condition with right antenna and most legs missing. The unnamed specimen is the same species as the "type", so both specimens may be taken as syntypes. The second specimen is in much the same condition as the "type". These specimens were compared with the large series in the BMNH collection of S. cyaneus (F.). It is a species that varies a good deal in size and colour from green to blue, also in degree and form of striation on the elytra. In none of the species examined was the sutural and second striae united anteriorly, as they are in the specimen with the "habitat" given as "C.B.S." (Cape of Good Hope). This specimen was compared with the specimens of S. bicolor (F.), the type of which is in the BMNH collection and the "C.B.S." specimen proved to be that species. The type of S. bicolor (F.) of South Africa is given in Syst. El. 1801, 1 p. 86, n. 14 as being in Mus. D. de Schestedt, and the locality is given as "C.B.S." It appears then that this specimen has been erroneously labelled Hister cyaneus with the reference "Fab. Ent. p. 52 n. 3"

which is for *H. cyaneus*. The locality C.B.S. on the label is correct for *H. bicolor*. There has obviously been some mixing of material here. This specimen of *H. bicolor* may be a syntype as the label is in Fabricius's handwriting.

## CYANEUS, Lagria

Fabricius 1775, p. 125, n. 4; 1801, 2 p. 68, n. 5 (Dryops)

chalybeus White ♂ (Selenopalpus)

subviridus White ♀ (Selenopalpus) new synonym Junk's Catal. 1915, 17, 65, p. 24 (Selenopalpus) Zimsen 1964, p. 127, n. 2026

Holotype labels:

- i. Fabricius "Lagria Cyanea Fab. Entom. p. 125 n. 4"
- ii. BMNH "Dryops cyanea", "Type"

Locality: "nova Hollandia" is the locality given by Fabricius and recorded as such by Zimsen. It is, however, a New Zealand species (Broun 1880: p. 420).

Current status: Selenopalpus cyaneus (F.): Oedemeridae

Comment: Pin has forced the elytra apart; glue on the ventral surface has entangled meso and metathoracic legs; abdomen has been broken off and glued on at a slight angle; joints of both antennae and left maxillary palp are missing.

White's types of S. chalybeus and S. subviridus are in the BMNH collection. S. chalybeus is a male and this synonymy was published by Broun (1880: p. 420). On examination S. subviridus white is found to be the female of S. chalybeus White and is, therefore, another synonym of S. cyaneus (F.) Schenkling in Junk's Catalogue published all three as separate species, ignoring Broun's publication. Sclenopselophus is another generic synonym.

## CYANEUS, Scarites

Fabricius 1775, p. 249, n. 2; 1801, 1, p. 125, n. 13. fabricii Westw 1842, 1, p. 85

var aenescens Sloane 1923, p. 19.

Junk's Catal. 1927, 1, 91, p. 451 (Laccopterum) Zimsen 1964, p. 41, n. 376

Holotype labels:

- i. Fabricius "cyaneus"
- ii. BMNH Scarites cyaneus

Locality: "nova Hollandia"

Current status: Laccopterum cyaneum (F.): Carabidae, Scaritinae

Comments: The specimen is badly pinned through the mid-dorsal line forcing the elytra apart. The ventral surface is covered with glue. The left mesothoracic leg is missing, the metathoracic leg is detached and lying in the glue.

## CYANICORNIS, Chrysomela

Fabricius 1775, p. 99, n. 24; 1801, 1 p. 436, n. 85. Junk's Catal. 1916, 24, 68, p. 200 (*Phyllocharis*) Zimsen 1964, p. 99, n. 1489

Holotype labels:

- i. Fabricius "Chrys. Cyanicornis Fab. Entom. p. 99".
- ii. "Chrysomela cyanicornis", "Type"

Locality: "nova Hollandia"

Current status: *Phyllocharis cyanicornis* (F.) Chrysomelidae, Chrysomelinae

Comment: The holotype is pinned through the left elytron, the posterior half of which is missing, only the coxa and trochanter of left mesothorac leg is present. There are several varieties of this species. As in the other species of this genus there is tremendous variation in colour patterns. This holotype has a single central prothoracic spot and eight spots distributed over the elytra, one basal spot and two marginal ones on each elytron, and one central and one triangular apical spot each with half on each elytron. Lea (1902 p. 402) suggests that this species is a variety of *P. cyanipes* (F.). It needs a specialist in this group to decide which are valid species and which are varieties.

#### CYANIPES, Chrysomela

Fabricius 1775, p. 98, n. 23; 1801, 1 p. 436 n. 84. Junk's Catal. 1916, 24, 68, p. 201 (*Phyllocharis*) Zimsen 1964, p. 99 n. 1488

Holotype label:

- i. Fabricius "Chrys. Cyanipes Fab. Entom. p. 98 n. 23".
- ii. BMNH "Chrysomela cyanipes" "Type"

Locality: "nova Hollandia"

Current status: *Phyllocharis cyanipes:* Chrysomelidae, Chrysomelinae

Comment: The condition of the holotype is fair. Left antenna and some tarsi are missing, and there is a large crack between the metathorax and abdomen, also there is a great deal of glue on the ventral surface

There are a number of colour pattern varieties of this species listed in Junk's Catal (idem). Also Baly (1855: p. 172) describes and discusses these varieties fully. He states that the Fabrician type was founded on a single specimen which he, Baly, regards as an extreme variety. There are two blue spots on each elytron in the holotype specimen, one basal spot near the sutural angle and one slightly

posterior to it nearer the external margin. The posterior half of the elytra is dark blue with a ramus running up each side of the suture. There is a small ferrugineous apical spot. This species is recorded from New Guinea and Northern Australia.

## CYANOCEPHALA, Crioceris

Fabricius 1775, p. 121, n. 18; 1801, 1, p. 461, n. 58 antennalis Lea 1923: p. 521 and p. 543, new synonym.

Zimsen 1964, p. 104, n. 1591.

Syntype label:

- i. Fabricius "Cr. Cyanocephala Fab. Entom. p. 121 p. 18".
- ii. BMNH "Crioceris cyanocephala"

Locality: "nova Hollandia"

Current status: Monolepta cyanocephala (F.) Chrysomelidae, Galerucinae.

Comment: There are two specimens on the Fabrician label, neither of which has been identified by Waterhouse as the type, therefore both must be regarded as syntypes. Zimsen records only one. Both are in a very bad state of preservation. One specimen, being badly pinned is very distorted and the structures so twisted and superimposed on one another, it is difficult to distinguish the characters; both antennae are damaged. In the other specimen the membraneous wings are unfolded and protrude beyond the elytra, the antennae are damaged and parts of the right one are carded. The ventral surface is in a better condition than the previous specimen and only the tarsi of the metathoracic legs are missing. This is a male; the sex of the other specimen is indiscernable.

This species has been omitted from recent catalogues. Hope (1840: p. 145) mentions it in his list of Fabrician species under the original genus of Crioceris. J. W. Wilcox does not mention it in Junk's Supplement 1971-74. In 1929, G. E. Bryant of the Entomological Bureau, London, identified this species as belongong to the genus Monolepta. T. Blackburn (1896: p. 99) states "I have not seen any Galerucid agreeing with the description of this species, but it does not seem at all likely to be a true Monolepta as its author states that the third joint of its antenna is as long as the fourth". On examination of this specimens this is not the case. The second and third joints are very small, the fourth and fifth joints are longer and equal in size, and joints six to eleven are longer than the second and third joints, but shorter than four and five.

In the BMNH there are four cotypes, two males and two females, of *M. antennalis* Lea. On comparing these with *M. cyanocephala* (F.) they are found to be identical. *M. antennalis* Lea then

becomes a synonym of *M. cyanocephala* (F.). Mrs. S. L. Shute of the BMNH verified this synonymy.

#### CYLINDRIROSTRIS, Curculio

Fabricius 1775, p. 137, n. 55; 1801, 2, p. 463, n. 125 (Rhynchaenus)

innubus Herbst 1792-5, p. 172.

longimanus Boisd. 1835, p. 408 (Orthorrhinus)

var. simulans Boh. 1836, p. 245

var. laetus Saund. and Jekel 1855, p. 297

var. aspreda Pasc. 1882, p. 380

var. carbonarius Pasc. 1882, p. 381

var. lateralis Pasc. 1882, p. 381

var. euchromus Fairm. 1883, p. 36

var. patreulis Pasc. 1885, p. 225

var. vagus Olliff. 1889, p. 89

var. pomicola Lea 1897, p. 624

var. albiceps Lea 1897, p. 624

var. howensis Lea unpublished.

Junk's Catalogue 1932, 28, 122, p. 46 (Orthorrhinus) Zimsen 1964, p. 204, n. 3491

## Holotype labels:

- i. Fabricius "Curc. cylindrirostris Fabr. Entom. p. 137 n. 55".
- ii. BMNH "Rhynchaenus cylindriostris", "Type".

Locality: "nova Hollandia"

Current status: Orthorrhinus cylindrirostris (F.): Curculionidae, Hylobiinae.

Comment: Holotype is black with scattered greyish and brownish scales. This is a common species which varies considerably in size and number of scales present. In Junk's Catalogue O. laetus Saund. and Jekel and O. lateralis Pasc. are listed as separate species. Before A.M. Lea died in 1932 he sent me a copy of his MS notes on Lord Howe Island Coleoptera. These have not been published. In these notes he states that both O. lateralis Pasc and O. laetus Saund. are varieties of O. cylindrirostris (F.). I quote from Lea's MS:—

"O. cylindrirostris Fab. var. lateralis Pasc.

Six specimens were obtained; four with white markings conspicuous, two with them rather vaguely indicated.

O. cylindrirostris, var. vagus Oll. This var. was very abundant on freshly felled trees at night time, and was a common victim of Cormodes darwini.

O. cylindrirostris, var howensis Lea. a new variety.

A large var. 14-18 mm. Scales nearly all of a creamy whiteness except in the vicinity of the fascicles; elytral fascicles more or less ochreous, only the median pair very conspicuous, apical fascicles of prothorax feeble or absent. Rostrum long and thin; front legs long in both sexes, but in male considerably longer than in female and the front tarsi wide, flat, and with conspicuous fringes.

Specimens of this var. in good condition have a curious speckled appearance owing to the abundant granules showing through the scales; but greasy or dirty specimens look very different. Twelve males and seven females were obtained in company with specimens of the preceding var. i.e. var. vagus Oll."

These MS notes were sent to me in December 1931. In a covering letter to me A.M. Lea stated that var. howensis Lea was close to var. laetus Saund and Jekel from the New Hebrides.

In the BMNH Collection under the label O. laetus Saund and Jekel which is in Jekel's handwriting is a specimen with the label O. cylindrirostris (F.) identified by A.M. Lea as var. howensis Lea. There are 2 locality labels on this specimen, (1) Lord Howe Is. A.M. Lea and a BMNH label, Australia. Variety howensis Lea is therefore a variety of O. cylindrirostris and according to Lea O. laetus Saund and Jekel and O. lateralis Pasc. should be regarded as varieties also.

#### DECEMPUNCTATUS, Dytiscus

Fabricius 1775, p. 232, n. 11; 1801, 1, p. 263, n. 26 ab. flavoscriptus Zimmerm. 1917, p. 213 (Platynectes)

ab. lugubris Blanch. 1853, p. 49 (Platynectes)

var. masteri Macl. 1871, p. 126 (Platynectes)

var. octodecimmaculatus Macl. 1825, p. 31 (Platynectes)

var. semperi Reg. 1899, p. 285 (Platynectes)

var. spilopterus Germ. 1848, p. 172 (Platynectes)

var. variegatus Reg. 1899, p. 286 (Platynectes) Junk's Catal. 1920, 4, 71, p. 149 (Platynectes) Zimsen 1964, p. 68, n. 879

Zimmermann 1917-19, p. 213

Syntype labels:

- i. Fabricius "Dytisc. 10—punctatus Fab. Entom. p. 232 n. 11"
- ii. BMNH "Dytiscus 10—punctatus", "Type"

Locality: "nova Hollandia". This species is very widespread and has also been recorded from the islands of Indonesia, Philippines and New Guinea.

Current status: *Platynectes decempunctatus* (F.): Dytiscidae

Comment: The condition of the "type" is good, only the left mesothoracic leg and tarsal joints of the right and left metathoracic legs are missing. This species has a great many varieties which are recorded by Zimmermann in Junk's Catalogue (1920). Both Sharp (1882: p. 540) and Zimmermann (1917, 1919: p. 213) give full accounts of this species. The varieties differ mainly in the markings of the yellow spots. The "type" has a large distinct anterior spot on the head, one spot on each anterior angle of the prothorax, five yellow spots on each elytron

arranged in two longitudinal rows—three in the inner row near the suture, and two outer lateral spots situated slightly posterior to the inner anterior and medial spot. The dorsal surface of the type is dull, this may be due to dirt and age. All the specimens in the BMNH collection are shiny.

## DETRITA, Coccinella

Fabricius 1775, p. 85, n. 36; 1801, 1, p. 373, n. 98

?amica Newman 1842, p. 415 (Paropsis)

laesa Germ. 1848, p. 235 (Paropsis), new synonym.

conferta Chap. 1877, p. 81 (Paropsis) Zimsen 1964, p. 76, n. 1237

## Holotype labels:

- i. Fabricius "Coccin. Detrita Fab. Entom. p. 85 n. 36"
- ii. BMNH "Coccinella detrita"

Locality: "nova Hollandia"

Current status: Paropsis detrita (F.): Chrysomelidae, Chrysomelinae

Comment: Condition of holotype is poor. The insect has been broken and roughly glued together. Parts of the antennae, the labial palps and parts of all legs except for those of the right meso and metathoracic legs are missing.

This species was classified as a coccinellid by Fabricius. Hope (1840: p. 87) refers it to the genus *Paropsis* but makes no further comment on it. It does not appear in either Gemminger et Harold's catalogue nor in Junk's catalogue. In 1929 G. E. Byrant of the Entomological Bureau of London checked this synonymy and agreed that it was the same as the species *P. (Chrysophtharta) laesa* Germ. (1948: p. 235). *P. detrita* (F.) is therefore the valid name and *P. laesa* Germ is a new synonym. Blackburn's (1899: p. 493) description of *P. laesa* Germ. describes the "type" specimen of *P. detrita* (F.). The above synonyms are given in Junk's Catalogue 1916, 24, 68, p. 164 for *P. laesa* Germ.

#### **DETRITUS**, Hister

Fabricius 1775, p. 53, n. 10; 1801, 1, p. 89, n. 28 Junk's Catal. 1910, 8, 24, p. 93 (Saprinus) Zimsen 1964, p. 35, n. 262

Holotype labels:

- i. Fabricius "Hister detritus Fab. Entom. p. 53 n. 10"
- ii. BMNH "Hister detritus", "TYPE"

Locality: "nova Hollandia". This is probably a New Zealand species.

Current status: Saprinus detritus (F.): Histeridae.

Comment: The condition of the type is fair except for the legs, one of which is entirely missing and the others are in a bad state of preservation. There is also a good deal of dried fungal hyphae present.

H. Bickhardt in Junk's Catalogue (idem.) lists S. detersus Illiger, (1807: p. 365) and queries S. detritus Rossi (1790: p. 29) as a synonym. Fabricius (1927: p. 76) refers to Rossi's and Olivier's descriptions. Rossi was not the author of the species. Both Fabricius and Olivier (1789: p. 12) give "nova Hollandia" as the locality. The locality of S. detersus Ill. is a Mediterranean and Western European species. R. Staig (1931: p. 102) lists S. detritus (F.) as the species and S. detersus Ill. as a synonym. He notes that in the Fabrician reference 1787 p. 33 the specific name is spelt as detricus, which is probably a misprint. S. detritus (F.) has been omitted from recent catalogues. On comparison of the type of S. detritus (F.) with specimens of S. detersus Ill. in the BMNH collection, it is evident that these two species are not identical and should be regarded as two distinct species.

Characters of S. detritus (F.):—Head and thorax black, elytra deep red. Head:—punctation slight and scattered. Prothorax:—anterior margin fringed with hairs, transverse, slightly bisinuate at base, anterior angles rounded but projecting, lateral and posterior margins punctate with punctures fading out towards centre on posterior margin, disc smooth and shiny and under magnification very fine punctures are visible. Elytra:—oblong, almost rectangular, slighty swollen at humeral angle, lateral edges bent sharply at right angles, posterior half of elytra coarsely and densely punctate, on lateral margins punctures extend up to two-thirds of length of elytra and reach anterior margin between third and fourth striae. Five striae are distinguishable in anterior half, and first and second striae are united anteriorly. No striae are distinguishable in posterior half.

Legs:—External margin of tibiae of pro- and mesothoracic legs have four strong denticles and two small ones at apex. The metatibiae have spines on external margin.

Abdomen:—Ventral surface punctated, propygidium and pygidium also punctated.

In the BMNH there are several unidentified specimens from New Zealand. On comparing them with the type of *S. detritus* (F.) they appear to be the same species. It is probable therefore that the Fabrician locality "nova Hollandia" is incorrect and should be "nova Zelandia".

## DEUSTA, Cassida

Fabricius 1775, p. 89, n. 8; 1801, 1, p. 396, n. 44 corallina Boisd 1835, p. 541 angulifera Blanch. 1853, p. 324 Junk's Catal. 1914, 25, 62, p. 70 (Aspidomorpha) Zimsen 1964, p. 90, n. 1313 Syntype labels:

- i. Fabricius "Cassida deusta Fab. Entom. p. 89 n. 8"
- ii. BMNH "Cassida deusta" "Type"

Locality: "nova Hollandia"

Current status: Aspidomorpha deusta (F.): Chrysomelidae, Cassidinae.

Comment: The "type" is in fair condition. The terminal joints of the left antenna, the terminal tarsi of the mesothoracic legs and the left metathoracic leg are all missing. There is a second specimen which is cleaner than the "type" but both right meso- and metathoracic legs and the tarsi of the left metathoracic leg are missing.

The number of spots arranged in three longitudinal rows on the elytra varies considerably in this species. They may be absent or two or three may unite. If present, the position of the spots remain constant. The holotype has five spots in the sutural and median lines and four in the marginal line with three of them fusing.

A. nigrodorsata Boh., given in Junk's Catal. (idem.) as a subspecies, has two black median spots missing on the elytra but otherwise is in close agreement with A. deusta (F.).

#### **DIDYMUS** Cryptocephalus

Fabricius 1775, p. 107, n. 9; 1801, 2, p. 43, n. 11. ab. fulvoplagiata Jac. 1884, p. 210 Junk's Catal. 1914, 24, 59, p. 92 (*Rhyparida*) Zimsen 1964, p. 122, n. 1923

Syntype labels:

- i. Fabricius "Crypt. didymus Fab. Entom. p. 107 n. 9"
- ii. BMNH "Cryptocephalus didymus", "Type"

Locality: "nova Hollandia"

Current status: Rhyparida didyma (F.) Chrysomelidae, Eumolpinae.

Comment: The "type" is badly damaged. Both antennae and all legs are incomplete, posterior half of right elytron is missing. There is a second specimen but it also is in a poor condition with the glue on the ventral surface obscuring most of the structures, both elytra are complete.

The three spots on the eltyra may vary in size and shape in this species, may also be united or obsolete. In the "type" they are distinct, the basal spot which Fabricius describes as "postice didyma" (posteriorly divided into two) is semicircular in shape with one branch extended towards the sutural margin and a slight indication of a branch given off medianly towards the outer margin, the central spot is roughly triangular and the apical one is elongate.

## ERYTHROCEPHALUS, Staphylinus

Fabricius 1775, p. 265, n. 6; 1801, 2, p. 593, n. 19. punctatus Hope

Junk's Catal. 1914, 5, 57, p. 398

Steel 1949, p. 57-61

Zimsen 1964, p. 231, n. 3986

Holotype labels:

- i. Fabricius "Staph. erythroceph. Fab. Entom. p. 265 n. 6"
- ii. BMNH "Staphylinus erythrocephalus", "Type"

Locality: "nova Hollandia"

Current status: Creophilus erythrocephalus (F.) Staphylinidae, Staphyliniae

Comments: Holotype, a female, head is very much deflexed, membraneous wings are unfolded, terminal joints of left antenna missing and left prothoracic leg is broken at base of tibia. The second specimen, a female, had been identified by W. O. Steel (idem.) as *C. lania* Er. It is in fair condition, only right metathoracic leg is missing and membranous wings are unfolded.

C. erythrocephalus (F.) is widely distributed throughout Australia and is recorded from Tonga, Tahiti and Chile. In the BMNH there is the type of C. punctatus Hope which is marked as a synonym. W. O. Steel (idem.) records this and points out the differences between C. erythrocephalus (F.) and C. lania Er.

## EXCLAMATIONIS, Curculio

Fabricius 1775, p. 133, n. 37; 1801, 2, p. 456, n. 89 (Rhynchaenus)

Zimsen 1964, p. 203, n. 3471

Holotype labels:

- i. Fabricius "Curc. Exclamationis Fab. Entom. p. 133 n. 37"
- ii. BMNH "Rhynchaenus exclamationis", "Type"

Locality: "nova Hollandia"

Current status: unkown. Fam. Curculionidae

Comment: The holotype is badly pinned through position of left elytron which is missing, pin emerges on ventral surface between metathorax and abdomen so that abdomen is nearly detached from the thorax, antennae hidden beneath rostrum; left prothoracic leg is missing.

There is no record of this species in recent catalogues. Olivier (1801 p. 155, f165) describes this species but the figure is poor and does not show any detailed structure. Fabricius changed the genus in his later publications to *Rhynchaenus*.

#### FARINOSA, Buprestis

Fabricius 1775, p. 219, n. 16; 1801, 2, p. 195, n. 50 var. auroimpressa Cast. and Gory. 1835, p. 20 (Chrysodema)

var. impressa Kerr. 1898, p. 118 (Cyphogastra) var. borneensis kerr. idem, p. 251 (Cyphogastra) Junk's Catal. 1926, 12, 84, p. 117 (Cyphogastra) Zimsen 1964, p. 152, n. 2509

Holotype labels:

- i. Fabricus "Buprestis farinosa Fab. Entom.p. 219 n. 16"
- ii. BMNH "Buprestis farinosa", "Type"

Locality: "nova Hollandia". This Fabrician locality is probably incorrect. This species has only been recorded in the East Indies.

Current status: Cyphogastra farinosa (F.): Buprestidae, Chalcophorinae.

Comments: Holotype is pinned through the left elytron; terminal joints of both antennae and tarsi of left mesothoracic and both metathoracic legs are missing; ventral surface is covered with a fine golden powder adhering to the pubescence. There are several specimens of this species in BMNH collection and they are all from Java and Borneo. Banks may have collected this specimen when the *Endeavour* stopped at Batavia for repairs.

## FASCIATA F., Cetonia

see STOLATA F. Cetonia

C. fasciata F. is a synonym of C. stolata F.

## FELINUS Dermestes

Fabricius 1781, 1, p. 34, n. 11; 1801, 1, p. 314, n. 13 Junk's Catal. 1911, 14, 33, p. 43 Zimsen 1964, p. 77, n. 1057 Hinton 1945, p. 296

Syntype labels:

- Fabricius "Felinus Fabr. Mant. Ins. n. 11" Kergulandel"
- ii. BMNH "Dermestes felinus" Register number "63-46"

Locality: "Terra Diemenii" in 1781 reference. "Kergulandel" on the label. Kergulen Island or Land is an island in the South Indian Ocean. Cook charted its coast on his Third voyage before calling in at Adventure Bay, Tasmania. Nelson, the collector, was on board. It appears that Fabricius must have thought this island was off the coast of Tasmania.

Current status: *D. felinus* F. is a synonym of *D. ater* Degeer (1774: p. 223): Dermestidae. Lepesme (1939: p. 192) and Hinton (idem.) discuss this synonymy.

Comment: There are two specimens in the Banks Collection, one of which has the BMNH type label. This is in the better condition. Head is sharply deflexed and some of the tarsi are missing. Zimsen only records one specimen in the Banks Collection.

#### FESTIVA, Melolontha

Fabricius 1775, p. 36, n. 23; 1801, 2, p. 171, n. 63 festa Gmelin 1788, p. 1561 (Calonota) munda Sharp 1876, p. 73 (Pyronota) var laeta F. 1775, p. 36, n. 24
Junk's Catal. 1912, 20, 47, p. 90 (Calonota) Zimsen 1964, p. 146, n. 2390

Syntype label:

- i. Fabricius "Melo. Festiva Fabr. Sp. Ins. No. 31"
- ii. BMNH "Melolontha festiva", "Type"

Locality: "nova Zelandia"

Current status: Calonota festiva (F.): Scarabaeidae, Melolonthinae

Comment: The "type" is in good condition. It is pinned through the left elytron; right prothoracic leg except for coxa, and tarsi of left metathoracic leg are missing. There is a second specimen which is not recorded by Zimsen, the condition of which is only fair, it has been broken at the base of the prothorax and then glued together. This species must have been re-examined by Fabricius who put the later reference 1781 on the label when compiling the list for this publication.

There are a number of colour varieties of this species of which Melolontha laeta F. is one.

## GIGAS, Ptinus

See GRISEUS F. Anthribus

P. gigas F. is the junior homonym.

## GRISEA, Saperda

Fabricius 1775, p. 186, n. 9; 1801, 2, p. 324, n. 37

heteromorpha Boisd. 1835 (Lamia)

lentus Newm. 1840, p. 12 (Xylotoles)

westwoodi Guer. 1847, p. 27 (Xylotoles)

Junk's Catal. 1922, 23, 73, p. 3 (Xylotoles)

Zimsen 1964, p. 175, n. 2966

Syntype labels:

- i. Fabricius "Saperda Grisea Fab. Entom. p. 186 n. 9"
- ii. BMNH "Saperda grisea", "Type"

Locality: "nova Zelandia"

Current status: Xylotoles griseus (F.): Cerambycidae, Lamiinae

Comment: This is a small insect. The "type" specimen is pinned through the right elytron which it has displaced. There is a great deal of glue present on both dorsal and ventral surfaces and entangling the legs; both antennae, except for the basal joint of the left one, and the left elytron are missing.

There is a second specimen which, is cleaner than the "type" and left antenna and left elytron are complete, but right elytron is broken and abdomen is displaced.

Broun (1880: p. 593) attributes this species erroneously to Westwood (1843: p. 27) and gives *S. grisea* F. as a synonym. Westwood's description has a much later date, i.e., 1843.

#### GRISEUS, Anthribus

Fabricius 1775, p. 63, n. 1 (Ptinus gigas); 1801, 2, p. 410, n. 22 gigas F. 1775 p. 63 (Ptinus) longicornis F. 1798 Suppl., p. 160 subsp. cervinus Klug. 1833, p. 188 nigroungulatus Fahrs. 1839, p. 241 Junk's Catal. 1929, 26, 102, p. 86 (Phloeobius) Zimsen 1964, p. 193, n. 3297

Locality: "nova Hollandia". Its known distribution is now from New Guinea to Australia.

Current status: Phloeobius griseus (F.) Anthribidae.

Comment: The holotype is missing from the collection. In the original description (1775) Fabricius adds "an proprii genesis", a genus of its own. In the 1792 and 1801 publications, Fabricius changed not only the generic but also the specific name to Anthribus griseus. This species is now in the genus Phloeobius (Schk. 1826: p. 36) and the valid specific name is griseus according to the International Code.

## GUTTATOPUSTULATA, Coccinella

Fabricius 1775, p. 87, n. 51; 1801, 1, p. 385, n. 153 Junk's Catal. 1931-32, 16, 118, p. 32 (*Epilachna*) Zimsen 1964, p. 88, n. 1273

Holotype labels:

- i. Fabricius "Cocc. guttato-pustulata Fab. Entom. p. 87 n. 51"
- ii. BMNH "Coccinella guttato-pustulata"

Locality: "nova Hollandia"

Current status: Epilachna guttatopustulata (F.): Coccinellidae

Comment: The holotype is very dirty and there is a great deal of glue on the ventral surface.

The species is a well known leaf-eater.

#### HAEMORRHOIDALIS, Curculio

Fabricius 1775, p. 140, n. 71; 1801, 2, p. 484, n. 215 (Rhynchaenus)

Zimsen 1964, p. 208, n. 3567

Syntype labels:

- i. Fabricius "Curc. haemorrhoidalis Fab. Entom. p. 140 n. 71"
- ii. BMNH "Rhynchaenus haemorrohoidalis", "Type"

Locality: "nova Hollandia"

Current status: *Haplonyx haemorrhoidalis* (F.) Curculionidae, Haplonychinae.

Comment: They are two specimens, male and female. The male has the "type" label, it is badly pinned through left elytron, the abdomen has been pushed out of place and lies at right angles to the body plane; the specimen is badly abraded.

Female specimen is in good condition but is also badly abraded.

This species has been omitted from recent catalogues. In the BMNH there are specimens of this species labelled *Melanterius haemorrhoidalis* (F.).

Both E. C. Zimmermann of C.S.I.R.O. Canberra and R. T. Thompson of BMNH (pers. comm.) place this species in the genus *Haplonyx*.

## HIRTA, Saperda

Fabricius, 1775, p. 184, n. 4; 1801, 2, p. 320, n, 13 (S. villosa)

villosa F. 1801

Junk's Catal. 1912, 22, 39, p. 115 (Oemona) Zimsen 1964, p. 174, n. 2945

Syntype labels:

- i. Fabricius "Saperda hirta Fab. Entom p. 184 n. 4"
- ii. BMNH "Saperda hirta", "type"

Label of 2nd specimen: BMNH "Saperda villosa F. Syst. El."

Locality: "nova Zelandia"

Current status: *Oemona hirta* (F.): Cerambycidae, Cerambycinae.

Comment: The "type" is a male, its condition is fair, terminal joints of both antennae, right prothoracic leg except for coxa, tarsi of left prothoracic leg and both metathoracic legs are missing. The second specimen is a female, its condition is poor and it is badly rubbed. It has the BMNH label "Saperda villosa F. Syst. El." This labelling indicates that this was labelled when the collection was arranged in the order given in the Systema Eleutheratorum, as in that reference Fabricius gives the specific name as villosa and hirta

as the synonym as nov. nom., as he considered the name was preoccupied. He had used the specific name of hirta for a second species of Saperda, described first in 1792, p. 317, the locality of which is given as Italy. The New Zealand species however, is the senior homonym and therefore is the valid name for this specimen and villosa is the synonym. There is a large series in the BMNH of this species, and it shows great variation in size. Broun (1880: p. 570 and p. 1275) gives a detailed description of it. However, the type differs from this description as it has a smooth vertex, a dense patch of bright yellow hairs in the emarginate portion of the eye and another posterior to the eye. There is no indication of a smooth dorsal line on the prothorax. Also there is no pubescence along the dorsal line, but this may be due to rubbing. The elytra are also devoid of hairs.

## HOLLANDIAE F., Scarabaeus

See NOVAEHOLLANDIAE, F., Scarabaeus

## INAEQUALIS, Coccinella

Fabricius 1775, p. 80, n. 8; 1801, 1, p. 362, n. 40 Junk's Catal. 1931-32, 16, 120, p. 292 (Coelophora) Zimsen 1964, p. 84, n. 1197

Holotype labels:

- i. Fabricius "Cocc. inaequalis Fab. Entom. p. 80 n. 8"
- ii. BMNH "Coccinella inaequalis", "Type"

Locality: "nova Hollandia"

Current status: Coelophora inaequalis (F.): Coccinellidae

Comment: Condition of "type" is fair. It has been pinned twice through the right elytron. The ventral surface is covered with dirt and dried hyphae, the antennae are missing. There are a number of varieties recorded for this species in Junk's Catalogue (idem.). The Fabrician type is taken as the typical structure and is described fully by Mulsant (1850: p.404). The large series in the BMNH collection show considerable variation of markings on thorax and elytra. This species has a wide distribution from Japan and China, through the Malay Archipelago to Tasmania.

## INTERRUPTA, Cassida

Fabricius 1775, p. 89, n. 7; 1801, 1, p. 395, n. 40 plasoni Spaeth. 1898, p. 539 (Aspidomorpha) var badeni Wgenr. (Aspidomorpha) var planipennis Blkb. (Aspidomorpha)

Junk's Catal. 1914, 25, 62, p. 71 (Aspidomorpha)

Zimsen 1964, p. 90, n. 1309

Holotype labels:

- i. Fabricius "Cassida interrupta Fab. Entom.p. 89 n. 7"
- ii. BMNH "Cassida interrupta"

Locality: "nova Hollandia"

Current status: Aspidomorpha interrupta (F.) Chrysomelidae, Cassidinae

Comment: The holotype is complete except for the terminal joints of the right antenna. The legs are covered in dried mycelial hyphae.

The black markings on the elytra of this species varies as to degree and arrangement.

#### INTERRUPTUS, Curculio

Fabricius 1781, p. 188, n. 148; 1801, 2, p. 519, n. 70 obliquesignatus Boh. 1842, p. 244 griseus White 1846, p. 14 (Otiorhynchus) apicalis Broun 1881, p. 701 (Empaeotes); loc. cit. 1893, p. 118 (Platyomida)

Zimsen 1964, p. 214, n. 3701 Kuschel 1969, p. 789 and pp. 792-5 (Catoptes)

Lectotype (Kuschel) labels:

- i. Fabricius "Curcul. Interruptus Fabr. Sp. Ins. n. 148
- ii. BMNH "Curculio Interruptus", "type"

Locality: Fabricius recorded this specimen from "nova Hollandia". This has proved incorrect as it is from New Zealand (Kuschel idem.).

Current status: Catoptes interruptus (F.): Curculionidae, Leptopiinae

Comment: There are two specimens in the Collection. The one that originally had Waterhouse's "type" label is in very poor condition having metathoracic legs and abdomen missing. The "second specimen" is in better condition and has only right metathoracic leg missing. Glue obscures the ventral surface. This specimen is a male and has been designated by Kuschel (idem.) as the lectotype and a label as such has been added to the specimen by R. T. Thompson of the BMNH. The former "type" specimen Kuschel now designates as a paralectotype (1970: p. 204).

There is a female specimen in Fabricius's own collection which Kuschel designates as a paralectotype (Kuschel 1970: p. 204).

G. A. K. Marshall (1944: p. 73) transferred all New Zealand *Catoptes* species from the sub-family Eremninae to the sub-family Leptopiinae.

#### JESUITA, Apate

Fabricius 1775, p. 54, n. 3; 1801, 2, p. 380, n. 5 canarii Nördl. 1880 App., p. 66 Junk's Catal. 1938, 10, 161, p. 39 (Bostrychopsis) Zimsen 1964, p. 186, n. 3175 Holotype labels:

178

- i. Fabricius "Apate Jesuita Fab. Entom. p. 54 n. 3"
- ii. BMNH "Apate jesuita"

Locality: "nova Hollandia"

Current status: Bostrychopsis jesuita (F.): Bostrychidae

Comment: Only the metathorax and abdomen of the holotype is left and neither metathoracic leg is complete.

There is another specimen in Fabricius's own collection, now at the Zoological Museum in Copenhagen. This is a well known species and is widely distributed throughout North and South Australia, New South Wales and Victoria. The colour is usually uniformly black, but some specimens may be reddish.

#### LAETA. Melolontha

Fabricius 1775, p. 36, n. 24; 1801, 2, p. 171, n. 64 Junk's Catal. 1912, 20, 47, p. 90 (Calonota) Zimsen 1964, p. 146, n. 2391

Holotype labels:

- Fabricius "Melol. laeta Fabr. Sp. Ins. n. 32"
- ii. BMNH "melolontha laeta", "type"

Locality: "nova Zelandia"

Current status: Calonota laeta (F.) is a variety of C. festiva (F.): Scarabaeidae, Melolonthinae.

Comment: The condition of the holotype is fair; both antennae except for two basal joints, tarsi of left prothoracic and right metathoracic legs are missing.

This is a colour variety of *C. festiva* F. It is a pink opalescent colour with red thoracic stripe and red scutellum. Fabricius must have re-examined this species before publishing in 1781 and put this later reference on the label.

## LAEVICOLLIS, Silpha

Fabricius 1775, p. 73, n. 7; 1801, 1, p. 338, n. 8

reticulatus Haag 1878, p. 659 (Saragus)

Junk's Catal. 1910-11, 18, 28, p. 424 (Saragus)

Zimsen 1964, p. 80, n. 1117

Carter 1926, p. 142

Holotype labels:

- i. Fabricius "Silpha laevicollis Fab. Entom. p. 73 n. 7"
- ii. BMNH "Silpha laevicollis"

Locality: "nova Hollandia"

Current status: Celibe laevicollis (F.): Tenebrionidae, Ulominae

Comment: The holotype is in good condition, only a few tarsi and the right metathoracic leg are missing.

Schenkling in Junk's Catalogue (idem.) incorrectly attributes this species to Olliff, but Carter (idem.) corrects this. This species was formally classified in the genus *Saragus*; Watt (1968: p. 36) made *Saragus* a synonym of the genus *Celibe*.

# LAEVIGATUM, Opatrum Fabricius 1781, 1, p. 90, n. 4; 1801, 1, p. 117, n. 8.

?mauritanicus F. 1792, p. 113 (Tenebrio)

piceus Ol. 1792, p. 50
?oryzae Herbst 1799, p. 18
picipes Steph. 1832, p. 11 (Alphitobius)
granivorus Muls. et God. 1868, p. 288
(Alphitobius)
striatulus Fairm. 1869, p. 231 (Cataphronetis)
rufipes Mad. 1872, p. 286 (Microphyes)
Zimsen 1964, p. 39, n. 334
Carter 1926, p. 137

Syntype label:

- i. Fabricius "Opatrum laevigatum Fab. Sp. Ins. n. 4 Hab. in Nova Zel"
- ii. BMNH "Opatrum laevigatum"

There are two specimens under this label, the "type" specimen has the Fabrician label.

Locality: "nova Zelandia"

Current status: Alphitobius laevigatus (F.): Tenebrionidae, Ulominae.

Comment: The condition of the "type" is fair, the legs are bunched together and tarsi are missing. This species is not listed by H. Gebien in Junk's Catalogue (1910, 18, 15, p. 458) but the synonym Microphyes rufipes Macl. is. This synonymy was identified by Blair (1914: p. 486). The synonyms of this species are listed in Junk's Catalogue as synonyms of A. piceus Ol. The distribution of this species is now known to be cosmopolitan.

## LEONINA, Coccinella

Fabricius 1775, p. 87, n. 54; 1801, 1, p. 386, n. 160. tasmanii White 1846, 11, p. 23 (tasmaniae) Junk's Catal. 1931-32, 16, 120, p. 508. Zimsen 1964, p. 88, n. 1279

Syntype labels:

- (i) Fabricius "Cocc. leonina Fab. Entom. p. 87 n. 54"
- (ii) BMNH "Coccinella leonina", "Type"

Locality: "nova Hollandia". It is doubtful if this Fabrician locality is correct. Both Mulsant (1850: p. 128) and Schenkling in Junk's Catalogue (idem.) give the locality as New Zealand. Out of twenty specimens in the BMNH collection seventeen have

locality labels as New Zealand. Gemminger et Harold and Masters Catalogues both give the Fabrician locality.

Current status: Coccinella leonina F.: Coccinellidae.

Comment: The "type" is in a very poor condition. It has been badly pinned and the specimen is covered with dried fungal hyphae. There is a second specimen which is in much the same condition.

The specimen in the BMNH Collection of the synonym *C. tasmanii* White is labelled "Coccinella Tasmanii White, Zool. Ereb. and Terror" (1846: p. 23). The habitat of this specimen is labelled New Zealand. This is probably White's type specimen although it is not labelled as such. In Junk's Catalogue this synonym is incorrectly spelt as "Tasmaniae".

## LIMBATUS Dermestes

Fabricius 1781, 1, p. 66, n. 23; 1801, 1, p. 318, n. 36 atomaria Pasc. 1875, p. 210-223 discoidea Pasc. 1875, p. 210-223.

Zimsen 1969, p. 78, n. 1076 Crowson 1964, p. 313 (*Phycosecis*)

Syntype labels:

- (i) Fabricius "Dermestes limbatus Fabr. Sp. Ins. n. 23"
- (ii) BMNH "Phycosecis limbatus" "Type"

Locality: "nova Zelandia"

Current status: Phycosecis limbata (F.): Phycosecidae.

Comment: The "type" is in a very dirty condition, so that it is difficult to determine its structures, especially those of the legs. It is a very small insect and has been pinned through the suture. The head is deflexed sharply. Head is black, main body dark brown and lateral margins of elytra pale testaceous. Prothorax as broad as long, rounded, posterior angles obsolete and anterior angles very acute. Elytra twice length of prothorax, pubescence scanty, punctate and striate. This species is not recorded in Junk's Catalogue, in Broun's manual of New Zealand Coleoptera, nor in Huttons Index Faunae Novae Zealandiae. There is a second specimen. It is in a worse state of preservation than the "type".

#### LINEATUM, Callidium

Fabricius 1775, p. 189, n. 10; 1801, 2, p. 340, n. 40 australis Gmel. 1790, p. 1849 Junk's Catal. 1912, 22, 39, p. 488 (Navomorpha) Zimsen 1964, p. 179, n. 3036

Holotype labels:

- i. "Callid. lineatum Fab. Entom. p. 189 n. 10"
- ii. "Callidiam lineatum", "Type"

Locality: "nova Zelandia". Fabricius in 1801 erroneously published the locality as "nova Hollandia". In 1775 the locality is correctly given as "nova Zelandia".

Current status: *Navomorpha lineata* (F.): Cerambycidae, Cerambycinae.

Comment: The holotype is in good condition, only most of the right antenna, and left metathoracic leg are missing. See Broun (1880: p. 590) for detailed description of the species. In Gemminger et Harold Catalogue (1873: p. 2984) the genus is spelt *Naomorpha*.

## LINEATA, Lagria

Fabricius 1775, p. 124, n. 3; 1801, 2, p. 68, n. 4 (*Dryops*)

Junk's Catal. 1915, 17, 65, p. 33 (Sessinia) Zimsen 1964, p. 127, n. 2025

Syntype labels:

- i. Fabricius "Lagria lineata Fab. Entom. p. 124 n. 3".
- ii. BMNH "Dryops lineata", "Type"

Locality: "nova Zelandia"

Current status: Sessinia lineata (F.): Oedemeridae.

Comment: The "type" is a female and is in a good state of preservation, the antennae except for basal joint of left antenna and right methatoracic leg are missing. There is a second specimen, it is not in a good condition; it is pinned through the left elytron <sup>2</sup>/<sub>3</sub> of which is missing, together with both prothoracic legs; not one leg is complete. This species has been recorded under a number of different genera. Fabricius put it in the genus *Dryops* in his later publications. It has also been recorded in the following genera *Oedemera* (Ol. 1794: p. 6), *Sclenopselaphus* (Gemm. et Har. Cat. 1870: p. 2168) and *Thelyphassa* (Blair 1920: p. 153)

## LINEOLA F., Coccinella

See STRIOLA F., Coccinella C. lineola F. is a junior homonym

#### LINEOLA, Curculio

Fabricius 1775, p. 136, n. 48; 1801, p. 503, n. 28 (*Lixus*)
Zimsen 1964, p. 211, n. 3631

Syntype labels:

- i. Fabricius "Curc. lineola Fab. Entom. p. 136 n. 48"
- ii. BMNH "Lixus lineola", "Type"

Locality: "nova Hollandia"

Current status: Cossonideus lineolus (F.): Curculionidae, Cossoninae.

Comment: There are two specimens in the Collection, Zimsen records only one. The specimen with the "type" label is in very poor condition; head and prothorax are intact, but posteriorly it is very badly damaged, only a few remnants of abdomen and elytra remain. The second specimen is in a better condition, only elytra are missing. This species is not listed in Junk's Catalogue. In discussion with E. C. Zimmermann of C.S.I.R.O., Canberra, he placed this species in the genus Cossonideus.

## LURIDUS, Curculio

Fabricius 1775, p. 138, n. 63; 1801, p. 470, n. 155 (Rhynchaenus)

fulginosus Boh. 1835, p. 431 (Cryptorrhynchus) immansuetus Boh. 1837, p. 328 (Acalles) plinthoides Pasc. 1871. p. 199 (Omydaus)

Junk's Catalogue 1936, 29, 151, p. 163 (Omydaus) Zimsen 1964, p. 205, n. 3514

Lea 1918, p. 272

Holotype labels:

- i. Fabricius "Curc. luridus Fab. Entom. p. 138 n. 63".
- ii. BMNH "Rhynchaenus luridus", "type".

Locality: "nova "Hollandia"

Current status: Omydaus luridus (F.): Curculionidae, Cryptorrhynchinae

Comment: The holotype is badly abraded, there being no scales present; tarsi of right prothoracic leg and left mesothoracic leg, and the right metathoracic leg are missing.

This species has at times been placed in various genera (Lea idem.). It is now listed in the genus *Omydaus*.

## LYNCEA, Saperda

Fabricius 1775, p. 185, n. 8; 1801, 2, p. 323, n. 35 Junk's Catal. 1922, 23, 73, n. 3 (*Xyotoles*) Zimsen 1964, p. 175, n. 2964

Holotype labels:

- i. Fabricius "Saperda lyncea Fab. Entom. p. 185 n. 8"
- ii. BMNH "Saperda lyncea", "Type"

Locality: "nova Zelandia"

Current status: *Xyotoles lynceus* (F.): Cerambycidae, Lamiinae.

Comment: The condition of the holotype is poor; head is covered in dirt; neither antennae is complete, and every leg has parts missing; ventral surface is covered in glue. In the copy of Broun's Manual in the BMNH on p. 593 Dr. Gahan has

made a note that White's description (1846: p. 22) which Broun followed "refers to X. humeratus Bates, the Fabrician species being wrongly identified by him". Broun does quote a description given by Bates after he, Bates, had examined the Fabrician type, and this is the correct description of X. lynceus (F.). X. lynceus (F.) is larger than either X. griseus (F.) or X. humeratus Bates. It is elongate, narrow, sides are nearly parallel along most of entire length of insect, tapering at the apices of elytra; ferruginous, head and prothorax are slightly darker than the rest; prothorax is longer than wide, margined anteriorly, and posteriorly reticulose with an indication of an horizontal anterior and posterior depression; base of elytra is not wider than the prothorax, elytra striate with large scattered punctures on the anterior half, more concentrated towards the base, apices produced and divaricate.

#### MEDITABUNDUS, Curculio

Fabricius 1775, p. 139, n. 64; 1801, 2, p. 473, n. 169 (Rhynchaenus)

monachus Boisd. 1835, p. 430 (Cryptorrhynchus)

Junk's Catalogue 1936, 29, 151, p. 241 (Euthyrhinus) Zimsen 1964, p. 206, n. 3526

Holotype labels:

- i. Fabricius "Curc. meditabundus Fab. Entom. p. 139 n. 64"
- ii. BMNH "Rhynchaenus meditabundus", "Type"

Locality: "nova Hollandia"

Current status: Euthyrhinus meditabundus (F.): Curculionidae, Cryptorrhynchinae

Comment: Holotype is in good condition; it has been pinned twice, now through the right elytron but previously through mid-basal line of prothorax. Some authors have spelt the genus *Euthyrrhinus*. Schönherr who named and described the genus (1837: p. 371) spelt it with only one "r". This species is widely distributed throughout the Pacific Islands.

## MELANOCEPHALA, Crioceris

Fabricius 1775, p. 119, n. 8; 1801, 1, p. 450, n. 7 Junk's Catal. Suppl. 1973 78, 3, p. 445 (Synodita) Zimsen 1964, p. 102, n. 1544

Holotype labels:

- i. Fabricius "Crioc. melanocephala Fab. Entom. p. 119 n. 8"
- ii. "Crioceris melanocephala", "Type"

Locality: "nova Hollandia"

Current status: Synodita melanocephala (F.): Chrysomelidae, Galerucinae.

Comment: The condition of the holotype is poor; glue obscures much of the ventral surface. The right

antenna, parts of the left antenna and metathoracic legs, half of the elytron and the abdomen are missing. J. A. Wilcox gives a full list of references in Junk's Catal. Suppl. (idem.). The colour of the elytra of this species varies from metallic green-blue to violet-blue. The elytra of the holotype is violet-blue, but rather faded with age.

#### MINUTA, Apate

Fabricius 1775, p. 54, n. 4; 1801, 2, p. 383, n. 25

substriatus Staph 1839, p. 352

vertens Walk. 1859, p. 260

siculus Baudi 1873, p. 336

bifoveolatus Zoufal 1894, p. 42

'japonicus Matsum. 1915, p. 184

Junk's Catal. 1938, 10, 161, p. 24

Zimsen 1964, p. 187, n. 3192

Locality: "nova Zealand"

Current status: Dinoderus minutus (F.): Bostrychidae

Comment: Specimen under this label in the Bank's Collection is not Apate minuta F. but is a species of Sinoxylon. C. Waterhouse recognised this was not the type of A. minutus F. and has added a label "This cannot be the type." There is no specimen of this species in Broun's collection but there is a space left for it. P. Lesne (1897: p. 329) in his revision of this group records this species as being cosmopolitan but does not record New Zealand as one of the countries where it has been found. There is a large series in the BMNH showing its wide distribution.

## MINUTUM, Anobium

Fabricius 1781, 1, p. 72, n. 8; 1781 Spec. Ins. App., p. 499, n. 13-14 (*Lagria*); 1792, 2, p. 81, n. 17 (*Lagria*); 1801, 2, p. 74, n. 12 (*Dasytes*) subcyaneus Broun 1880, p. 328 (*Dasytes*) new synonym.

Junk's Catal. 1937, 10, 155, p. 75 (Dasytes) Zimsen 1964, p. 129, n. 2051

Syntype labels:

- i. Fabricuis "Lagria Minuta Fabr. Sp. Ins. App. p. 499 n. 13-14"
- ii. BMNH "Dasytes minuta", "Type"

Locality: "nova Zelandia"

Current status: Dasytes minutus F. Melyridae (Dasytidae)

Comment: The "type" is in very poor condition, pinned through the left elytron, structures appear to be complete but the specimen is very dirty and covered with mycelium. The second specimen is also pinned through the left elytron and is badly damaged with head and prothorax missing. The Fabricius reference on the label is not recorded by Pic in

Junk's Catalogue nor by Zimsen. It appears that when compiling the Species Insectorum Fabricius put this species into the genus Anobium, then, presumably after re-examination changed the genus to Lagria and published this in the Appendix. In 1792 he still published it under the genus Lagria but in 1801 put it in the genus Dasytes, the genus in which it is now stands. Pic (idem.) records D. minuta F. with the earliest reference but gives the incorrect page number of 79 which should be 72. Page 79 is the reference for the species Sphaeridium minuta F. D. minuta F. does not appear in Broun's manual (1880), nor in Hutton's Index Fauna Novae Zelandia (1904). Broun (1880 p. 328) describes D. subcyaneus as a new species. This account decribes the Fabrician type of D. minuta F, and on comparison D. subcyaneus Broun proves to be a synonym of D. minuta F. Pic. (idem.) lists them as separate species.

#### MINUTUM, Callidium

Fabricius 1775 p. 192 n. 23; 1801, 2 p. 346, n. 2 (Clytus)
exiguum Gmel. 1788 p. 1852, (Zorion)
fabricianum Westw. (Obrium) 1845, p. 28.
Junk's Catal. 1912, 22, 39, p. 156 (Zorion)
Zimsen 1964, p. 180, n. 3061.

Holotype labels:

- i. Fabricius "Callid Minutum Fab. Entom. p. 192, n. 23"
- ii. BMNH "Clytus minutus", "Type"

Locality: "nova Zelandia"

Current status: Zorion minutum (F.): Cerambycidae, Cerambycinae

Comment: The holotype is badly damaged, right elytron is almost detached, except for 3 basal joints of left antenna and abdomen are missing, and right metathoracic leg is detached. See Broun (1880: p. 584) for detailed description. Fabricius himself reclassified this specimen in 1801 into the genus *Clytus*.

#### MODESTA, Curculio

Fabricius 1781, p. 186, n. 138; 1801, 2, p. 512, n. 30 brevipennis Broun 1880, 1, p. 438 (Cecyropa) maritima Broun 1880, 1, p. 438 (Cecyropa) alba Broun 1881, 2, p. 698 (Cecyropa) varia Broun 1881, 2, p. 698 (Cecyropa) albicans Sharp 1886, 2, 3 p. 416 (Cecyropa) macularia Broun 1886, 4, p. 961 (Cecyropa) lineifera Broun 1903, 7, 12 p. 72 (Cecyropa) alternata Broun 1904, 7, 14, p. 105 (Cecyropa) dicors Broun 1904, 7, 14, p. 106 (Cecyropa) striatella Broun 1917, 1, 5, p. 399 (Cecyropa) jucunda Broun 1917, 1, 5, p. 400 (Cecyropa) laticollis Broun 1917, 1, 5, p. 400 (Cecyropa)

Zimsen 1964, p. 213, n. 3670 Kuschel 1969, p. 789 and p. 807; 1970, p. 205 (Cecyropa)

Holotype labels:

- i. Fabricius "Curc. Modestus Fabr. Sp. Ins no. 138"
- ii. BMNH "Curculio modestus", "Type"

Locality: "nova Zelandia"

Current status: Cecyropa modesta (F.): Curculionidae, Rhyparosominae

Comment: Holotype a male, is very dirty; parts of all legs are missing. This species was omitted from recent catalogues. G. Kuschel describes and discusses this species and its synonyms fully. Zimsen records that there are 2 specimens in BMNH. There is only one, therefore it is the holotype.

## MONTICOLA, Melolontha

Fabricius 1775, p. 39, n. 38; 1801, 2, p. 184, n. 138 Junk's Catal. 1912, 20, 47, p. 96 (*Liparetrus*) Zimsen 1964, p. 150, n. 2460

Holotype labels:

- i. Fabricius "Melol. monticola Fabr. Sp. Ins. n. 67"
- ii. BMNH "Melolontha monticola", "Type"

Locality: "nova Hollandia"

Current status: *Liparetrus monticolus* (F.): Scarabaeidae, Melolonthinae.

Comment: The condition of the holotype is fair; but for the legs which are missing except for a few remains lying in the glue. In Junk's Catalogue Dalla Torres records this Fabrician species, but all earlier references until Macleay's publication in 1886, query the author of this species, though there is a labelled 'type' specimen in the Banks' Collection. Blackburn (1905: p. 315) states that the two badly broken specimens in the Macleay Museum labelled as "monticola Fab." are incorrectly labelled. The specimens are two distinct species and one is labelled elsewhere in the same collection as L. atriceps Macl. and are not L. monticolus (F.). There are two specimens labelled L. atriceps Macl. in the BMNH but these are distinct from the Fabrician type L. monticolus (F.). L. monticolus (F.) is smaller than L. sylvicolus (Fab.), but they are closely related, punctation on prothorax and striation and punctuation on elytra is very similar. This species must have been re-examined by Fabricius as the label has the later reference 1781.

## MORIO, Chrysomela

Fabricius 1787, 1, p. 66, n. 2; 1801, 1, p. 424, n. 5 Junk's Catal. 1924, 24, 68, p. 161 (Paropsisterna) Zimsen 1964, p. 96, n. 1425

Syntype labels:

- Fabricius "Chr. Morio Fabr. Mant. Ins. n. 2"
- ii. BMNH "Chrysomela morio", "Type"

Locality: "terra Diemenii"

Current status: Paropsisterna morio (F.). Chrysomelidae Chrysomelinae

Comment: The condition of the "type" is fair, parts of the antennae and tarsi of the right metathoracic leg, which is detached and lying in the glue, are missing. There is a second specimen which is in very good condition, all parts are complete. In this species there is a good deal of colour variation from pitch black to dark ferruginous or reddish. The type is black with brownish antennae, while the second specimen has a reddish colouration. Specimens from New South Wales, Tasmania and South Australia in the large series in the BMNH collection show the same variation in colour. They also show variation in the punctation of the elytra. It is possible that there is more than one species or variety under this label. Blackburn (1898: p. 225) describes this species in detail but states that the punctures on the elytra "are fine, finer than those of P. rubrosignata Boh. and P. sexpustulata Marsh. P. rubrosignata Boh. is now regarded as a synonym of P. beta Newm. In the Fabrician type, however, the punctures are stronger and coarser than in either of those species.

## MORIO, Erotylus

Fabricius 1775, p. 123, n. 4; 1801, 2, p. 19, n. 14 (Cistela)

fovea-seriatus Fairm. 1877 p. 187 (Amarygmus) curvipes Geb. (alienus Blk. nom. praeocc. 1893 p. 89 and 93) Amarygmus)

var. uniformis Blk. 1889, p. 1272 and 1893, p. 93 (Amarygmus)

var. tasmanicus Blk. 1893, p. 105 (Amarygmus) Zimsen 1964, p. 117, n. 1825 Carter 1913, p. 37 and 1926, p. 158

Holotype labels:

- i. Fabricius "Erotylus morio Fab. Entom. p. 123 n. 4"
- ii. BMNH "Cistela morio", "Type"

Locality: "nova Hollandia"

Current status: Amarygmus morio (F.): Tenebrionidae, Amarygminae.

Comment: The holotype is in a poor state of preservation. It has been broken between the pro and mesothorax and glued together again; glue obscures most of the ventral surface; all legs, except for the left metathoracic leg, are damaged and parts

missing. Carter (1913, p. 6) discusses the synonymy of this species and on page 35 he quotes a letter from Blair of the BMNH describing how the Fabrician type was so dirty the colouration was completely obscured but after cleaning the true colours were revealed. Fabricius (1775; p. 123) describes the colour as "ater" (dull black), this must have been due to the dirty state of the specimen which he must have described without cleaning it. This species as Carter notes was omitted from the catalogues.

#### MYSTACINA, Hispa

Fabricius 1775, p. 70, n. 1; 1801, 1, p. 328, n. 1 (Ptilinus)

Junk's Catal. 1925, 11, 81, p. 6 (Rhipicera) Zimsen 1964, p. 79, n. 1102

Holotype labels:

- i. Fabricius "Ptil. Mystacinus" written on the underside of the label. "Derm. navalis Fab. Entom. p. 56 9" was originally written on the label but has been crossed out. The writing on both sides of the label is the same and appears to be that of Fabricius.
- ii. BMNH "Ptilinus mystacinus" and the register number 63-46.

Locality: "nova Hollandia"

Current status: Rhipicera mystacina (F.): Rhipiceridae.

Comment: Holotype is in good condition, most of the left antenna is missing and also tarsi of the left metathoracic leg. This was one of the specimens Fabricius must have re-examined during his later visit to London. By then, he had studied many more species and had created new genera as his knowledge of insects increased. Therefore we find that this species is no longer in the genus *Hispa* but is put in the genus Ptilinus and is published as such in 1801. How the label of Dermestes navalis F. came to be on this specimen we do not know. As the "type" of D. navalis F. was evidently missing when Fabricius made his last study of the Banks Collection, he meant only to use this label temporarily when he changed the generic name of H. mystacinus F.

## NAVALIS, Dermestes

Fabricius 1775, p. 546, n. 9; 1801, 1 p. 155, n. 23 (Lyctus)

Junk's Catal. 1910-11, 18, 28, p. 395 (Tribolium) Zimsen 1964, p. 48, n. 497

Locality: "nova Zelandia"

Comment: Zimsen records "D. navalis in Nova Hollandia, Mus D. Banks, type lost". The 1775 reference is given in which the habitat is "nova

Zelandia". Zimsen records that *D. navalis* F. is a synonym of *Tenebrio ferrugineus* F. the locality of which is given as "African aequinoctali" and the type as being in Mus. Dom. Banks."

In the Fabricius reference 1801, 1, p. 155 n. 23 for Trogosita ferruginea there are two synonyms listed—Ips testacea Ent. Syst. Suppl. p. 179 n. 14 and Lyctus navalis Ent. Syst. 1, 2 p. 504 n. 10 and the "habitat" is given as "India utrague". In Junk's Catalogue (idem) Tenebrio ferrugineus F. is listed under the generic name of Tribolium with the reference Mant. Ins. 1787, 1 p. 212. Zimsen gives an earlier reference still for this species, Spec. Ins. 1781, 1 p. 324. In Junk's Catalogue T. navale Herbst (1792: p. 138) is listed as a synonym of T. ferrugineus F., but in the index of the catalogue T. navalis is correctly attributed to Fabricius. K. G. Blair (1913: p. 222) proposed the generic name of Triboloides for T. ferrugineus F.

The "Type" of *D. navalis* F. has recently been found in the Hunterian Collection in Glasgow. It is in a poor state of preservation and is carded in a larged amount of glue. See Introduction (p. 157).

## NIGRICORNIS, Chrysomela

Fabricius 1775, p. 98, n. 20; 1801, 1, p. 435, n. 79 Junk's Catal. 1924, 24, 68, p. 201 (*Phyllocharis*) Zimsen 1964, p. 99, n. 1485

Holotype labels:

- i. Fabricius "Chrys. Nigricornis Fab. Entom. p. 98, n. 20".
- ii. BMNH "Chrysomela nigricornis", "Type"

Locality: "nova Hollandia"

Current status: *Phyllocharis nigricornis* (F.): Chrysomelidae, Chrysomelinae.

Comment: The condition of the "type" specimen is fair. It has been pinned twice through the right elytron which is cracked. The antennae are missing except for the basal joint of the right one, the left metathoracic leg is also missing. The condition of the second specimen is much the same as that of the "type" only the left antenna is complete, and the left not the right metathoracic leg is missing. There is a marked variation in colour and size of the ferrugineous spots in this species. The "type" is brassy-black; head ferrugineous with a black frontal patch, antennae black; thorax brassy-black with ferrugineous lateral margins; elytra finely punctuated, brassy-black with two ferrugineous humeral spots placed obliquely; abdomen blue-black, base and apex ferrugineons. Baly (1855: p. 175) in his discussion of this genus described a new species P. cyannipennis, but realised that it was "very closely allied" to P. nigricornis (F.). Baly's type in the BMNH Collection is labelled P. nigricornis (F.)

Weise in Junk's Catal. (idem) lists P. cyannipennis Baly as a variety of P. cyanipes (F.).

A study of the large series of this genus in the BMNH Collection showed that there are a great many variations in colour and colour patterns, often one grading into another. It seems likely that there are a number of geographical subspecies or varieties of the different species which have yet to be worked

In the second specimen in the Banks Collection there is a ferrugineous apical spot as well as the two humeral spots on the elytra. Fabricius in his original (1775) description does not mention this so the specimen labelled "Type" by C. O. Waterhouse must be the holotype. Fabricius' description is "C. ovata, nigro-aenea, capite, thoracis lateribus elytrorumque macula duplici, baseos ferrugineis"an oval Chrysomela, brassy-black, head, sides of thorax, two spots on elytra, base ferrugineous.

## NIGRIPES, Crioceris (Lema)

Fabricius 1775, p. 120, n. 14; 1801, 1, p. 476, n. 30 (Lema)

australis Jac. 1876, p. 807 and 1878, p. 152 Junk's Catal. 1924, 24, 51, p. 48 Zimsen 1964, p. 107, n. 1646

Syntype labels:

- i. Fabricius "Crioceris nigripes Fab. Entom. p. 120, n. 14".
- ii. BMNH "Lema nigripes", "Type"

Locality: "nova Hollandia"

Current Status: Crioceris nigripes F.: Chrysomelidae, Criocerinae.

Comment: The condition of the "type" is good and all structures are complete but meso and metathoracic legs are entangled in glue. The condition of the second specimen is much the same, but the ventral surface is not so clean. Fabricius reclassified this species into the genus Lema in the 1801 publication but since then it has been restored to original genus. Zimsen only records one specimen as being in the collection.

#### NOVAEHOLLANDIAE, Scarabaeus

Fabricius 1775, p. 29, n. 113; 1801, 1, p. 57, n. 15 (Ateuchus hollandiae) hollandiae F. 1781, 1, p. 32; piceum Hope 1841, p. 44 (Tesserodon) Junk's Catal. 1911, 19, 38, p. 40 (Tesserodon)

Zimsen 1964, p. 30, n. 173

Matthews 1974, p. 87 (Tesserodon)

Holotype labels:

- i. Fabricius "Scarab. N. Hollandiae" Fabr. Sp. Ins. No. 144.
- ii. BMNH "Ateuchus N. Hollandiae"

Locality: "nova Hollandia"

Current status: Tesserodon novaehollandiae (F.): Scarabaeidae, Scarabaeinae.

Comment: The specimen is very dirty. C. O. Westwood found this type specimen among the unarranged specimens in the last drawer of the Bank's Collection. The reference on the label is the 1781 reference indicating that Fabricius re-examined this specimen in 1780-1. In this reference Fabricius omitted the N. for "nova", although it is on his label, and gave the specific name as Scarab. hollandiae. This was copied in his later publications and in later catalogues. The valid name now is T. novaehollandiae (F.).

## NOVEMMACULATA, Coccinella

Fabricius 1775, p. 81, n. 15; 1781, 1, p. 97, n. 26; 1801, 1, p. 366 and 61.

novempunctate F. 1775, p. 81;

picta Muls. Voet. 1796, p. 61 (Coelophora) Junk's Catal. 1931-32, 16, 120, p. 294 (Coelophora) Zimsen 1964, p. 85, n. 1212

Holotype labels:

- i. Fabricius "Coccinella 9-maculata Fabr. Spec. 97 n. 26"
- ii. BMNH "Coccinella 9-maculata"

Locality: "nova Hollandia". This species has been recorded from the Philippines and Indonesia, not from Australia. It is probable that the "type" was collected in Java, as Banks collected at Batavia when the Endeavour stopped there for some weeks for

Current status: Coelophora novemmaculata (F.) synonym C. novempunctata (F.). Coccinellidae, Coccinellinae

Comment: Holotype has been badly pinned through left elytron, and there is a great deal of glue on ventral surface obscuring most of the abdomen and entangling the metathoracic legs. The right membranceous wing is unfolded and lying out beyond the elytra. The apical segments of both antennae, the right prothoracic leg and the terminal tarsi of the right mesothoracic leg are missing. Musgrave (1932: p. 87) in his listings of Fabrician types from "nova Hollandia" recorded in the Species Insectorum (1781), states, C. 9-maculata (1781: 1, p. 97) nom. nov. for Cocc. 9-punctata Fab. preoccupied by Cocc: 9-punctata Linne 1758". Fabricius, however, although changing the specific name, continued to publish both names in the publication 1781, and in 1787 and 1801 as separate species. Although the Linnean and Fabrician species are now in different genera, the valid name for the Fabrician species is C. novemmaculata F. according to the International Code. There is no specimen in

the Bank's Collection labelled 9-punctata F. The type is marked with two median dark brown or black spots on the thorax. There is no basal black line nor is the sutural margin black. There are four black spots on each elytron and one posterior spot which is divided so that one half lies on each elytron.

#### NOVEMPUNCTATA, Coccinella

See NOVEMMACULATA, Coccinella

C. novempunctata is the junior homonym.

## OBSCURUM, Callidium

Fabricius 1787, 1, p. 151, n. 1; 1801, 2, p. 333, n. 1.

lentiginosus Newm. 1841, p. 7 (Phacodes)

Junk's Catal. 1912, 22, 39, n. 70 (Phacodes)

Zinsen 1964, p. 178, n. 3008

McKeown 1947, p. 22

Syntype labels:

- Fabricius "Call. obscurum Fabr. Mant. Ins. n. 1".
- ii. BMNH "Callidium obscurum", "Type"

Locality: "terra Diemenii"

Current status: *Pachydissus obscurus* (F.): Cerambycidae, Cerambycinae

Comment: The condition of the "type" is good. There is a second specimen, which is very dirty; terminal joints of antennae, left metathoracic leg and all tarsi are missing. This large well known insect has a wide distribution throughout Tasmania, South and Eastern Australia.

## OCTODECIMGUTTATA, Chrysomela

Fabricius 1775, p. 100, n. 31; 1801, 1, p. 439, n. 101. keyserlingi Ws. (Phola)

sedecimpustulata Stal. (Phyllophila)

Junk's Catal. 1924, 24, 68, p. 199 (Chalcolampra) Zimsen 1964, p. 99, n. 1502

Syntype labels:

- i. Fabricius "Chrys. 18-Guttata Fab. Entom.p. 100 n. 31"
- ii. BMNH "Chrysomela 18-guttata", "Type"

Locality: "nova Hollandia"

Current status: Chalcolampra octodecimguttata (F.): Chrysomelidae, Chrysomelinae.

Comment: The specimen labelled "Type" is not in good condition; ventral surface is in a bad state of preservation; right antenna and all but five joints of left antenna, tarsi of left mesothoracic and right metathoracic legs are missing. The condition of the second specimen is not as good as the "type". Baly (1855: p. 186) described this species and put it into

its present genus. He notes that there are eight not nine spots on the elytra. The depth of colour of this species varies considerably, and the elytral spots may or may not be distinct. These spots are arranged in two longitudinal lines. On examination of the large series in the BMNH it is seen that these spots may or may not coalesce. In the "type" the spots in the outer or marginal line have coalesced and therefore definition of the actual number of spots is obscure. The prothorax in this species varies in colour from dark ferrugineous to pale, with or without three black spots arranged medianly in the form of an inverted triangle, as it is in the "type".

#### OCULATA, Crioceris

Fabricius 1775, p. 121, n. 15 (C. oculata); 1801, 1, p. 458, n. 43

sculpta Blkb 1890, p. 363 (Candezea) Junk's Catal. Suppl. 1973, 78, 3, p. 580 (Monolepta) Zinsen 1964, p. 103, n. 1578

Syntype labels:

- i. Fabricius "Crioc. oculata Fab. Entom. p. 121 n. 15"
- ii. BMNH "Crioceris oculata", "Type"

Locality: "nova Hollandia"

Current status: Lema oculata (F.): Chrysomelidae, Criocerinae.

Comment: The condition of the "type" is poor, mainly due to the presence of a large amount of glue on the ventral surface. Right antenna and terminal joints of the left antenna, the right prothoracic leg except for coxa, tarsi of the left metathoracic leg and the right metathoracic leg are missing. The condition of the 2nd specimen is also in a very poor state, both antenna and all legs are missing.

In Junk's Catal. (1924, 24, 51, p. 72) this species was incorrectly attributed to Olivier (1791: p. 200). Fabricius's later references are given but not the original (1775) one. Olivier attributes it to Fabricius and gives the original reference in which the name of the species is spelt *oculatata*. Fabricius himself changed the spelling to *oculata*, "a justified emendation", first, in his Species Insectorum (1781) and then in his later publications.

N.B. Wilcox in Junk's Catalogue Suppl. (idem.) gives full references and synonyms.

## OCULATUS, Staphylinus

Fabricius 1775, p. 265, n. 4; 1801, 2, p. 592, n. 2 Junk's Catal. 1914, 5, 57, p. 399 (*Creophilus*) Zimsen 1964, p. 230, n. 3982 Steel 1949, p. 59

Syntype labels:

i. Fabricius "Staphyl. oculatus Fab. Entom. p. 265 n. 4"

ii. BMNH "Staphylinus oculatus", "Type"

Locality: "nova Hollandia et Zelandia"

Current status: Creophilus oculatus (F.): Staphylinidae, Staphylininae.

Comments: "Type", a male, has been pinned twice, previously through the base of the prothorax and now through the right elytron; terminal joints of right antenna are missing, membranous wings are unfolded and extend out beyond the abdomen.

Second specimen, a female, is pinned through the left elytron, terminal joints of both antennae and tarsi of right metathoracic leg are missing, prothoracic legs are immersed in glue and membranous wings are unfolded.

See W. O. Steel (idem.) for description of this species and table of Australian species of this genus.

#### PEDICORNIS, Lamia

Fabricius 1775, p. 170, n. 1; 1801, 2, p. 282, n. 4

tuberculata Hope 1841, p. 49 (Rhytophora)
obscura Breuning 1938, p. 363 (Saperdopsis)
bispinosa Breuning 1938, p. 364 (Saperdopsis)
Junk's Catal. 1922-23, 23, 73, p. 267 (Platyomopsis)
Zimsen 1964, p. 167, n. 2784
McKeown 1947, p. 153

Holotype labels:

- i. Fabricius "Lama pedicornis Fab. Entom. p. 170 n. 2"
- ii. BMNH "Lamia pedicornis", "Type"

Locality: "nova Hollandia"

Current status: *Platyomopsis pedicornis* (F.): Cerambycidae, Lamiinae.

Comment: The holotype condition is fair; terminal joints of both antennae and tarsi of left metathoracic leg are missing, right metathoracic leg is detached and lying in the glue.

## PORCATUS, Carabus

See PORCULATUM, F., Calosoma

C. porcatus. F. is the junior homonym.

## PORCATUS, Notoxus

Fabricius 1787, 1, p. 127, n. 1; 1801, 1, 287, n. 1 cribricollis Spin. 1844, p. 203 (Natalis) var inconspicus Blk. 1890, p. 124 (Natalis) Junk's Catal. 1910, 10, 23, p. 37 (Eunatalis)

Zimsen 1964, p. 72, n. 965

Holotype labels:

- i. Fabricius "Not. Porcatus I. Mant. n. 1"
- ii. BMNH "Notoxus porcatus"

Locality: "terra Diemenii"

Current status: Eunatalis porcata (F.): Cleridae

Comment: The type has been badly pinned once through the prothorax and once through the right elytron. The specimen has been broken between the pro and mesothorax and then glued together, the glue spreading over parts of the elytra and ventral structures. Both head and legs are covered with dirt. This specimen would have been collected by David Nelson who travelled with Cook on his third voyage when the *Discovery* called in at Adventure Bay, Tasmania.

## PORCULATUM, Calosoma

Fabricius 1775, p. 239, n. 16 (Carabus porcatus); 1801, 1, p. 211, n. 3 porcatus F. 1775, p. 239. caraboides Kirby 1818, p. 466. (Adelium)

caraboides Kirby 1818, p. 466. (Adelium, Junk's Catal. 1911, 18, 28, p. 510 (Adelium) Zimsen 1964, p. 60, n. 727 Carter 1926, p. 154

Holotype labels:

- i. Fabricius "Carabus porcatus Entom. p. 239 n. 16"
- ii. BMNH "Carabus porcatus" A later label has been added "Tenebrionid".

Locality: "nova Hollandia"

Current status: Adelium porculatum (F.): (Tenebrionidae, Ulominae.

Comment: The holotype is pinned through the left elytron which is cracked. Glue conceals most of the right metathoracic leg. Neither antenna is complete, 3 joints are missing of the left antenna, and 5 from the right one. Most tarsi are missing and remnants of the left meso and metathoracic legs are lying in the glue. E. Zimsen lists *Calosoma porculatum* F. with the 1801 reference as a synonym. In this reference Fabricius lists the name *C. porcatus* as the synonym with the reference of Ent. Supt. 1792, 1, p. 147. Fabricius himself changed the original name *porcatus* to *porculatum* in 1801 and this now stands as the valid name according to the International Code.

## QUADRIDENS, Curculio

Fabricius 1775, p. 153, n. 139; 1801, 2, p. 536, n. 175 Junk's Catal. 1931, 28, 114, p. 21 (Leptops) Zimsen 1964, p. 219, n. 3787

Holotype labels:

- i. Fabricius "Curc. 4-dens Fab. Entom. p. 153 n. 139
- ii. BMNH "Curculio 4-dens"

Locality: "nova Hollandia"

Current status: Leptopius (Oke 1951) quadridens (F.): Curculionidae, Leptopiinae.

Comment: The condition of the "type" is good. There is a second specimen minus its head and prothorax so I have designated the better specimen as a holotype rather than a syntype. There is a large series in the BMNH under the label *L. quadridens* (F.). However, these specimens were considered by G. J. Arrow in 1929 to have been incorrectly identified. The posterior region of the elytra in the Fabrician type is vertically declined, while in all the above-mentioned specimens it is not nearly so abruptly declined.

#### **QUADRIPUNCTATA**, Galleruca

Fabricius 1775, p. 112, n. 4 (Altica albicollis); 1801, 1, p. 499, n. 110
 albicollis F. 1775, p. 112 (Altica)
 splendidus Jac. 1885, p. 928 (Licyllus).
 Synonymy after Bryant 1923, p. 143
Junk's Catal. 1940, 25, 166, p. 7 (Licyllus)
Zimsen 1964, p. 113, n. 1748

Holotype labels:

- i. Fabricius "Altica Albicollis Fab. Entom. p. 112, n. 4"
- ii. BMNH "Crioceris albicollis", "Type"

Locality: "nova Hollandia"

Current status: Licyllus quadripunctata (F.): Chrysomelidae, Halticinae.

Comment: The "type" is in a poor state of preservation. It is a very small insect and has been pinned twice, formerly through the right elytron and now through the suture; left elytron, right and left antennae except for basal joints, tibiae and tarsi of metathoracic legs are missing. Fabricius re-classified this species into the genus *Galleruca* (1792: p. 29) and in 1801 he changed the specific name to 4-punctata due to the pre-occupation of the specific name albicollis which he had given to a Brazilian species. Though both species are now in different genera, according to the International Code quadripunctata is the valid name.

## QUADRIPUSTULATUM, Sphaeridium

Fabricius 1775, p. 67, n. 6; 1801, 2, p. 575, n. 2 (Scaphidium)

bimaculatum Macl. 1864, p. 119 (Scaphidium) Junk's Catal. 1910, 8, 13, p. 8 (Scaphidium) Zimsen 1964, p. 229, n. 3943 Löbl 1976, p. 287-8

Holotype labels:

- i. Fabricius "Sphaerid 4-pustulatum Fab. Entom. p. 67-6"
- ii. BMNH "Type"

Locality: "nova Hollandia"

Current status: Scaphidium quadripustulatum (F.): Scaphidiidae

Comments: Holotype is a male, synonym bimaculatum Macl. is a female. The condition of the holotype is fair, both antennae and mesothoracic legs is are missing. It seems that when the Bank's Collection was arranged in the order of that in Systema Eleutheratorum this specimen was not included. Later it must have been discovered, perhaps in the last drawer among the unnamed specimens by C. O. Waterhouse when he was adding type-labels to the collection and as the label is Sphaeridium 4-pustulatum he put it in that genus and added a type-label to it but no other BMNH label. In 1929 when I was studying the collection K. G. Blair of the BMNH placed it in its correct position according to the order in the Systema Eleutheratorum.

E. Csiki in Junk's catalogue (idem) and in some literature it has been attributed to Olivier. This is incorrect and has been corrected by Y. Löbl (idem) in his revision of the Australian species of Scaphidium.

#### QUADRIPUSTULATUS, Scarabaeus

Fabricius 1775, p. 27, n. 107; 1801, 1, p. 53, n. 105 (Copris)

bipustulatus F. 1775, p. 30

Matthews 1927, p. 220 (Onthophagus)

albertisi Harold 1877, p. 71 (Onthophagus)

minusculus Macleay 1888, p. 903 (Onthophagus)

Junk's Catal. 1927, 19, 90, pp. 215 (Onthophagus) Zimsen 1964, p. 29, n. 155

Holotype labels:

- i. Fabricius "Scarab. 4-pustulatus Fabr. Sp. Ins. No. 137"
- ii. BMNH "Copris 4-pustulatus", "Type"

Locality: "nova Hollandia"

Current status: Onthophagus quadripustulatus (F.): Scarabaeidae, Scarabaeinae.

Comment: The holotype is badly pinned; head is sharply deflexed, right elytron and meso and metathoracic legs are detached and lying in glue. The club of the left antenna and some tarsi are missing. The reference on the label is the 1781 reference indicating that Fabricius re-examined this specimen in 1780-1. O. bipustulatus (F.) is the female of O. quadripustulatus (F.) (Matthews idem).

#### RUFIPES, Gyrinus

see AUSTRALIS, Gyrinus

G. rufipes F. is a synonym of G. australis F.

## RUFIPES, Helops

Fabricius, 1775, p. 258, n. 5; 1801, 1, p. 161, n. 34. australis Boisd 1835, p. 282 (Allecula) angusticollis Boh. 1858, p. 100 (Allecula) Carter 1915, p. 79, and 1930, p. 269 Zimsen 1964, p. 50, n. 531

Holotype labels:

- i. Fabricius "Helops rufipes Fab. Entom. p. 258 n. 5"
- ii. BMNH "Helops rufipes" and the BMNH register number 63/46

Locality: "nova Hollandia"

Current status: Homotrysis rufipes (F.): Alleculidae

Comment: Holotype has been broken between meso and metathorax and badly glued together again so that the anterior part is lying at an angle to the posterior region. The terminal joints of the antennae are missing and the right antenna is detached and lying in the glue. H. J. Carter (idem.) established that *Allecula angusticollis* Boh. is a synonym. Blair (1920: p. 154) referring to this synonym notes that "this is another name (*H. rufipes F.*) that seems to have disappeared from recent catalogues".

## SANGUINIPES, Tenebrio

Fabricius 1775, p. 256, n. 7; 1801, 1, p. 148, n. 20 consentanea Perroud 1864, p. 119 depressa Pasc. 1886, p. 454 laticornis Pasc. (Achthosus) 1869, p. 294 Carter 1926, p. 137 Zimsen 1964, p. 46, n. 474

Holotype labels:

- i. "Fabricius Tenebrio sanguinipes Fab. Entom. p. 256, n. 7"
- ii. BMNH "Tenebrio sanguinipes" and the register number <sup>63</sup>/<sub>46</sub> and "Type"
- iii. Achthosus laticornis Pasc.

Locality: "nova Hollandia"

Current status: *Uloma sanguinipes* (F.): Tenebrionidae, Ulominae

Comment: The condition of the holotype is poor. It has been broken and glued together at the junction of the meso and metathorax. All legs on left side are missing. The holotype is a female and differs from the male described by Pascoe (idem.) as Achthosus laticornis in that the prothorax has no excavation, the anterior tibiae are without internal emargination and it is smaller in size. U. sanguinipes (F.) is not listed by H. Gebien in Junk's Catalogue but it is in Carter's check list (idem.) together with its synonyms.

## SCABER, Dermestes

Fabricius 1775, p. 57, n. 16; 1801, 1, p. 318, n. 32 integer Sharp (Ulonotus), new synonym Junk's Catal. 1930, 15, 107, p. 39 (Ulonotus) Zimsen 1964, p. 77, n. 1073

Holotype labels:

- i. Fabricius "Derm. Scaber Fab. Entom. p. 57, n. 16"
- ii. BMNH "Dermestes scaber"

Locality: "nova Zelandia"

Current status: Ulonotus scaber (F.): Colydiidae

Comment: Specimen is very dirty and pinned badly through left elytron. Hope (1840: p. 145) created a new genus *Pristoderus* for this species. However, both Lacordaire (1854, p. 359 nota) and Sharp (1876, p. 17) state that this name should be dropped as the description given by Hope was insufficient for indentification. The species is now classified in the genus *Ulonotus* Er. see Junk's Catalogue (idem.). A. Hetschko in Junk's Catalogue lists *U. integer* Sharp (1877, p. 268) as a separate species. Sharp's type is in the BMNH on comparing this type with *D. scaber* F. it is found to be synonymous with it. This is a new synonym.

#### SCUTELLARIS, Curculio

Fabricius 1781, 1, p. 115, n. 196; 1801, 2, p. 519, n.

exsertus F. 1801, 2, p. 534, n. 163 var. murinus Lea 1911, p. 63 (Prypnus) Junk's Catal. 1939, 27, 164, p. 259 (Prostomus) Zimsen 1964, p. 215, n. 3702

Holotype labels:

- Fabricius "Curc. Scutellaris Fabr. M. Ins. n. 196"
- ii. BMNH "Curculio scuterllaris", "Type"

Locality: "Terra Diemenii"

Current status: *Prostomus scutellaris* (F.): Curculionidae, Brachyderinae

Comment: Holotype has been pinned twice, previously through prothorax, now through right elytron. It is in fair condition; both antennae, left prothoracic leg except for coxa and trochanter, tarsi and remaining legs except for right mesothoracic leg, are missing. At one time this species was placed in the genus *Prypnus*. In Junk's Catalogue *C. exsertus* F. is given as a synonym. Fabricius records this species from "nova Cambria", and the type as being in "D. Billardiere".

## SEMIPUNCTATUS, Curculio

Fabricius 1775, p. 135, n. 43; 1801, 2, p. 200, n. 11 (Lixus)

cyaneipennis Boh. 1859, p. 118 (Belus) lineatus Donov. 1805 (Brentus) var. poverus Lea 1917, p. 597 (Belus) Junk's Catal. 1935, 28, 144, p. 11 Zimsen 1964, p. 210, n. 3615

Holotype labels:

- i. Fabricius "Curc. semipunctatus Fab. Entom. p. 135, n. 43"
- ii. BMNH "Lixus semipunctatus", "Type"

Locality: "nova Hollandia"

Current status: Belus semipunctatus (F.): Belidae

Comment: Holotype is in fairly good condition, only right antenna and tarsi of right prothoracic leg are missing. This is a well known species. The number of small whitish tufts of hairs varies tremendously.

## SEMIPUNCTATUS, Stenocorus

Fabricius 1775, p. 180, n. 8; 1801, 2, p. 306, n. 8. inscripta Germar. 1848, p. 226 (Phoracantha) Junk's Catal. 1912, 22, 39, p. 90 Zimsen 1964, p. 172, n. 2901 McKeown 1947, p. 26

Syntype labels:

- i. Fabricius "Stenoc. Semipunctatus Fab. Entom. p. 180 n. 8"
- ii. BMNH "Stenocorus semipunctatus", "Type"

Locality: "nova Hollandia"

Current status: *Phoracantha semipunctata* (F.): Cerambycidae, Cerambycinae.

Comment: The "type" is in fairly good condition; some joints of both antennae and the left metathoracic leg are missing. There is a second specimen, this is in much the same condition.

The series in the BMNH Collection show that this species varies in size and in the yellow markings on the anterior half of elytra. It has a wide distribution throughout Australia and also been recorded from New Guinea.

## SERRATICORNIS, Pyrochroa (Lycus)

Fabricius 1775, p. 203, n. 8; 1801, 2, p. 111 n. 6 (Lycus)

Junk's Catal. 1910, 9, 128, p. 73 (Trichalus) Zimsen 1964, p. 134, n. 2155

Holotype labels:

- i. Fabricius "Lyc. Serraticornis Fab. Mant. Ins. n. 5"
- ii. BMNH "Lycus serraticornis", "Type"

Locality: "nova Hollandia"

Current status: *Trichalus serraticornis* (F.): Lycidae.

Comment: Very little remains of the type and the pieces have been carded. The left antenna is complete, there are seven segments of the right one. The elytra are broken. The legs are missing except for parts of the left pro and mesothoracic legs. The abdomen is detached but still has remains of the wings attached to it. K. G. Blair in 1929 compared this type with the only specimen then in the BMNH, which was from Queensland. The reference given on the label is not the original reference but must have been put on by Fabricius after he had changed its genus but before the publication of Mantissa Insectorum as there is no page number which is p. 164. In this reference he also gives the original genus *Pyrochroa* with the 1781 reference.

## SMARAGDULUS, Erotylus

Fabricius 1775, p. 123, n. 6; 1801, 2, p. 13, n. 5 (Cnodolon)
cupricollis Hope 1803, omitted from Carter's list semiticus Pasc. 1869, p. 349 (Chalcopterus)
triangularis Haag 1878, p. 104 (Chalcopterus)
vigilans Blkb. 1892, p. 432 (Chalcopterus)
cairnsi Blkb. 1893, p. 60 (Chalcopterus)
Junk's Catal. 1911, 18, 28, p. 578 (Amarygmus)
Carter's Check list 1926, p. 162

Holotype labels:

- i. Fabricius "Erot. smargdulus Fab. Entom. p. 123 n. 6"
- ii. BMNH "Cnodulon smaragdulus", "Type"

Locality: "nova Hollandia"

Zimsen 1964, p. 116, n. 1805

Current status: Chalcopterus smaragdulus (F.): Tenebrionidae, Amarygminae.

Comment: The condition of the holotype is fair; the mouth parts are covered in dirt and parts of both antennae, left mesothoracic and both metathoracic legs are missing. As in most species of this genus there is a good deal of colour variation. In this species it varies from a golden coppery metallic colour through various shades of purple to greenish copper, which is the colouring of the holotype.

In Carter's Revision of the Australian Amaryginae (1913: p. 10-11) he noted that *Ch. cupricollis* Hope was a synonym of *Ch. smaragdulus* (F.), the synonym being determined by K. G. Blair (see Carter's reference 1913: p. 11) but omitted it in his check list (1926: p. 162). This is another species which Fabricius re-classified into another genus.

#### SOLANDRI, Lamia

Fabricius 1775, p. 177, n. 31; 1801, 2, p. 304, n. 126 Junk's Catal. 1922, 23, 73, p. 269 (Depsages) McKeown 1947, p. 160 Zimsen 1964, p. 172, n. 2892

Holotype labels:

- i. Fabricius "Lamia Solandri Fabr. Entom.p. 177, n. 31"
- ii. BMNH "Lamia Solandri", "Type".

Locality: "nova Hollandia"

Current status: Depsages solandri (F.): Cerambycidae, Lamiinae

Comment: The specimen is badly rubbed, most of the pubescence on dorsal surface is absent; terminal joints of right antenna and tarsi of both metathoracic legs are missing. This specimen was named after Dr. C. Solander of the British Museum who went with Banks on the *Endeavour* as another naturalist. Froggatt 1907 p. 199 describes this Cerambycid "as a large beetle clothed with a dense coat of buff hairs". Due to abrasion of the "type" the punctation is distinct. Disc of prothorax is rough and rugose with no distinct tubercles, humeral angle of elytra well marked, striae indistinct but there are large scattered punctures diminishing in size towards the apex.

#### SPECTABILIS, Curculio

Fabricius 1775, p. 155, n. 144; 1801, 2, p. 537, n. 184 Junk's Catal. 1936, 28, 150, p. 4 (*Chrysolopus*) Zimsen 1964, p. 219, n. 3796

Syntype labels:

- i. Fabricius "Curc. spectabilis Fab. Entom. p. 155, 144".
- ii. BMNH "Curculio spectabilis", "Type"

Locality: "nova Hollandia"

Current status: Chrysolopus spectabilis (F.): Curculionidae, Aterpinae.

Comments: The condition of the "type" is fairly good though most of the tarsi are missing. In a second specimen all structures are complete. It is probable that the type locality may be Botany Bay as it is a common species in that region and it is where Cook made his first landing in Australia. The genus *Chrysolopus* was put in the sub-family Cleoninae by E. Csiki in Junk's Catalogue 1931, 28, 134, p. 3. In 1936 S. S. Schenkling and G. A. K. Marshall transferred it to the sub-family Aterpinae, see Junk's Catalogue (idem.) with a foot note that before, it had been "incorrectly placed in the sub-family Cleoninae and is now put in its correct position".

## STOLATA, Cetonia

Fabricius 1775, p. 50. n. 33 (Cetonia fasciata); 1781, p. 58, n. 45; 1801, 2, p. 153, n. 89 fasciata F. 1775, p. 50 perversa Schaum 1844, p. 371 (Glycyphana)

brunnipes Kirby 1818, p. 454-478 (Glycyphana). Junk's Catal. 1921, 21, 72, p. 271 (Glycyphana) Zimsen 1964, p. 142, n. 2312 Bacchus 1974, pp. 113 and 122. (Glycyphana)

Holotype labels:

- i. Fabricius "Stolata Ins. n. 45"
- ii. BMNH "Cetonia stolata", "Type"

Locality: "nova Hollandia"

Current status: Glycyphana stolata (F.): Scarabaeidae, Cetoninae.

Comment: The Fabrician label has been mutilated and only part of it is left. The condition of the holotype is good and all structures are complete, but its colour has faded. Fabricius changed the name of this species from fasciata in the 1775 publication to stolata in 1781 because the name fasciata was preoccupied (Master's 1932: p. 87). The full reference on the label should be Spec. Ins. p. 58 n. 45. In this reference Fabricius also gives the original 1775 reference with the name C. fasciata. M. E. Bacchus (idem.) gives a full discussion and explains the confusion that has arisen in recognising this species and its synonyms.

## STREPIDUS F., Rhynchaenus

see STUPIDUS F., Curculio

R. strepidus F. is a synonym of C. stupidus F.

## STRIOLA, Coccinella

Fabricius 1775, p. 79, n. 5; 1801, 1, p. 359, n. 17; 1803, Index p. 32

lineola F. 1775, p. 79

Junk's Catal. 1931-32, 16, 120, p. 309 (Verania) Zimsen, 1964, p. 83, n. 1179

Holotype labels:

- i. Fabricius "Cocc. Lineola Fab. Entom. p. 79, n. 5"
- ii. BMNH "Coccinella lineola"

Locality: "nova Hollandia"

Current status: Verania striola (F.): Coccinellidae

Comment: The condition of the holotype is only fair. There is a large amount of glue present on both dorsal and ventral surfaces, both antennae and left elytron are missing. The pro and mesothoracic legs are covered in dirt and the methathoracic legs are immersed in glue. There has been some confusion in the past over the name of this species. In Gemminger et Harold catalogue it appears as Alesia lineola (F.). Mulsant (1866: p. 17) described it under the specific name striola, given by Fabricius in the Index 1803 and used by Schonherr (1808: p. 156), who put it in his new genus Verania. Korschefsky

lists it in Junk's Catalogue under this genus. Mulsant recognised the Fabrician name Cocc. lineola F. as the type name but used the name V. striola. In his book (1850: p. 367) he gives no reason for this but just followed Schonherr's nomenclature. Both Zimsen and Korschefsky give Cocc. striola F. as a synonym of Cocc. lineola F. Zimsen records a second type for Cocc. lineola F. The two references are:—

- 1. No. 1179 "Cocc. lineola F. in nova Hollandia, Mus. Dom. Banks., synonym Coccinella striola Index Alphabeticus 1803, p. 32".
- No. 1235 "Cocc. lineola Ent. Syst. 1, p. 283, 77" in Americae meridionalis Insulis dom. Smidt, Syst. El. p. 373.96". The type is in Copenhagen where there are seven speciments. This species is now placed in the genus Psyllobora.

Sometimes Fabricius named two species in the same genus with the same name, then realising his error he changed the specific name of one. In this case he changed the specific name lineola to striola for his later publications. Now even though the two species named lineola are placed in different genera, according to the International Code the valid name for this species is striola.

## STUPIDUS, Curculio

Fabricius 1775, p. 139, n. 65; 1801, 2, p. 473, n. 172 (Rhynchaenus strepidus)

strepidus F. 1801, p. 473

ingrata Faust 1892, p. 182 (Tentegia) new synonym

Zimsen 1964, p. 206, n. 3529

Holotype labels:

- i. Fabricius "Curc. stupidus Fab. Entom. p. 139 n. 65"
- ii. BMNH "Rhynchaenus strepidus"

Locality: "nova Hollandia"

Current status: *Tentegia stupida* (F.): Curculionidae, Cryrtorrhynchinae.

Comment: Holotype is in good condition, all structures complete though terminal joints of right antenna are hidden beneath rostrum. It is pinned through left elytron.

The name of this species has been omitted from recent catalogues. The type of *T. ingrata* Faust. is at Dresden. There are two specimens in the BMNH identified by Lea as *T. ingrata* Faust. G. J. Arrow in 1929 verified for me that *T. ingrata* Faust. is a synonym of *T. stupida* F. This is another species for which Fabricius changed the name in his later publications, using the name *R. strepidus* in Syst. El. 1801. It is possible that this was merely a spelling error in copying down from one list to another.

Therefore the synonyms of *T. stupida* (F.) are *Rhynchaenus* strepidus F. and *T. ingrata* Faust. The BMNH label *R. strepidus* would have been added when the collection was arranged in the order given in Systema Eleutheratorum.

#### SULCATUM, Callidium

Fabricius 1775, p. 189, n. 11; 1801, 2, p. 340 n. 41 acutipennis White 1846, p. 20 (Coptomma) Junk's Catal. 1912, 22, 39, p. 489 (Navomorpha) Zimsen 1964, p. 179, n. 3037

Syntype labels:

- i. Fabricius "Callid. sulcatum Fab. Entom. p. 189 n. 11"
- ii. BMNH "Callidium sulcatum", "Type".

Locality: "nova Zelandia"

Current status: Navomorpha sulcata (F.): Cerambycidae, Cerambycinae.

Comment: There are two specimens, a male and female. The "type" label is on the male, which is dirty, pinned through left elytron and left metathoracic leg is missing. The female has several parts missing—Both antennae, left prothoracic, right meso and metathoracic legs; left mesothoracic leg is complete but is detached. The male specimen is just over half the length of the female. Broun (1880: p. 590) describes this species fully.

## SUTURALIS, Melolontha

Fabricius 1775, p. 34, n. 2; 1801, 2, p. 166, n. 31 chlorophylla Boisd. 1835, p. 188 (Micronyx) prasina Cast. 1840, p. 143 (Paranonca) Junk's Catal. 1912, 20, 47, p. 89 (Chlorochiton) Zimsen 1964, p. 145, n. 2361

Holotype labels:

- i. Fabricius "Melolontha Suturalis Fabr. Sp. Ins. no. 15"
- ii. BMNH "Melolontha suturalis", "Type"

Locality: "nova Zelandia"

Current status: *Chlorochiton suturalis* (F.): Scarabaeidae, Melolonthinae.

Comment: The condition of the holotype is fair; except for the left antenna (only 2 basal joints present), and the tarsi of all legs are missing, one set of tarsi are lying in the dried glue.

Broun (1880: p. 261) describes this species and Arrow (1903: p. 305) gives the characters of the genus *Chlorochiton* and its relation to nearby related genera.

## SYLVICOLA, Melolontha

Fabricius 1775, p. 39, n. 34; 1801, 2, p. 181, n. 123 convexus Boisd. 1835, pl 209 (Liparetrus) salebrocus Macl. ♀ 1886, p. 27 (Liparetrus)

macleayi Blkb. & 1888, p. 27 (Liparetrus) Junk's Catal. 1912, 20, 47, p. 98 (Liparetrus) Zimsen 1964, p. 148, n. 2445

Syntype labels:

- i. Fabricius "Melolontha sylvicola Fab. Sp. Ins. n. 57"
- ii. BMNH "Melolontha sylvicola", "type"

Locality: "nova Hollandia"

Current status: Liparetrus sylvicolus (F.): Scarabaeidae, Melolonthinae.

Comment: The condition of the holotype is poor; it is pinned through the left elytron; ventral surface is covered with a thick felt of dried mycelial hyphae and glue; left mesothoracic and both metathoracic legs are missing. Fabricius must have re-examined this species before publishing in 1781 and put the later reference on the label.

Blackburn (1905: p. 311) in his revision of the Australian species of Liparetrus gives the following synonyms for L. sylvicolus (F):—L. salebrocus Macl. 9, L. basalis Blanch. ♂ and L. macleayi Blkb. ♂. Burmeister (1855: p. 198) describes both the male and female L. sylvicolus (F.)— He says, "nigro pilosus, pronoto canaliculato, pygidio rugoso varioloso carinato"-black, hairy, pronotum grooved, pygidium rough and variously ridged. Fabricius's description states, "Caput et thorax glabra, nigra, immaculata"-head and thorax glabrous, black and unmarked. From Blanchard's description (1850: p. 105) of L. basilis and that of Burmeister's of L. sylvicolus (F.) they could be the same species. In the BMNH there are eleven specimens labelled L. basalis Blanch., the habitat labels are from Tasmania, South Australia and Nova Hollandia. In 1929 G. J. Arrow compared these specimens with Blanchard's and Burmeister's descriptions and agreed with me that they were all L. basalis Blanch. Burmeister's descriptions were made from specimens sent to him by Hope. He had both sexes and they are not L. sylvicolus (F.), but are probably L. basalis Blanch., which is now regarded as a distinct species. In Junk's Catalogue 1912 it is listed as a synonym of L. sylvicolus (F.). Blackburn never saw the Fabrician type and was evidently misled by Burmeister's description of the specimen he obtained from Hope, as Burmeister stated that he had examined the Fabrician types of the Melolonthinae in London. Blackburn assumed he would have studied and described the type of L. sylvicolus (F.), although in his description Burmeister states that he obtained the specimens from Hope. Blackburn did note that Burmeister's description did not coincide with Fabricius's description as regards sculpture and pubescence, but was so sure that Burmeister's description was of the Fabrician type that he concluded that Burmeister's specimens were

of the same of species. Fabricius had more than one specimen, there is one in his own collection in Copenhagen, as he adds to his description, "variat interdum elytris fuscus"—at times there is a variation in the elytra which may be dark to tawny.—The type, he describes as "elytra abdomine breviora, laevia nigra"—elytra shorter than abdomen, smooth, black—He also states that the type was in the Banks Collection, but it is possible that he kept the "type" specimen in his own collection and returned another specimen, a variety, to Banks. The specimen, in the Banks Collection has reddish or fuscus elytra, therefore these two specimens should both be regarded as syntypes.

L. basalis Blanch is not a synonym of L. sylvicolus (F.) but is a separate species. N. B. In Junk's Catalogue the species is spelt silvicola.

## TOMENTOSA, Lagria

Fabricius 1775, p. 125, n. 9; 1801, 2, p. 70, n. 9 pulchrivaria Lea. \$1917, p. 175 Junk's Catal. 1910, 17, 2, p. 13 Zimsen 1964, p. 128, n. 2037

Holotype labels:

- i. Fabricius "Lagria tomentosa Fab. Entom. p. 125, n. 9"
- ii. BMNH "Lagria tomentosa", "Type"

Locality: "nova Hollandia"

Current status: Lagria s.g. Ecnolagria (Borch. 1936 p. 142) tomentosa F.: Lagriidae.

Comment: The condition of the holotype is poor, pinned at the sutural margin of left elytron and cracking it; ventral surface distorted; mouth parts covered in dirt; both antennae, terminal tarsus of left prothoracic leg, right prothoracic leg, both mesothoracic legs and tarsi of both metathoracic legs are missing. Lea (1917: p. 175) described the male under the name *L. pulcharivaria*. Blair (1920: p. 155) determined this synonymy. Champion (1895: p. 229) pointed out that the species commonly known as *L. tomentosa* F. from Western Australia does not agree with the Fabricius type, it should be known as *E. aeneoviolacea* Champ. In Masters Catalogue 1885, p. 387 the locality is erroneously given for the Fabrician species as Western Australia.

## TRIBULUS, Curculio

Fabricius 1775, p. 153, n. 138; 1801, 2, p. 536, n. 174 ?echidna Macleay 1863-66, p. 280 Junk's Catal. 1931, 28, 114, p. 23 (Leptops) Zimsen 1964, p. 219, n. 3786

Holotype labels:

- i. Fabricius "Curc. Tribulus Fab. Entom. p. 153, n. 138"
- ii. BMNH "Curculio tribulus", "Type"

Locality: "nova Hollandia"

Current status: *Leptopius* (Oke 1951) *tribulus* (F.): Curculionidae, Leptopiinae.

Comment: Holotype is in good condition, only tarsi of prothoracic legs are missing. There has been confusion about the identity of this species. G. A. K. Marshall (1952: p. 265) compared the types of L. tribulus (F.) and L. ferus (Pasc.), both of which are in the BMNH and stated that they are separate species. What A. M. Lea (1906 p. 326) describes as L. ferus (Pasc.), agrees with the Fabrician type of L. tribulus. Lea in his table, states that L. ferus (Pasc.) has "a rostrum carinate in the middle" which applies to L. tribulus (F.) not to L. ferus (Pasc.) which is grooved. The description given by Lea of L. tribulus (F.) describes that of L. duponti (Boisd.). L. duponti Boisd. is the common species often erroneously called L. tribulus (F.), and mentioned as such in R. J. Tillyard's book of Insects (1926: p. 242). There is a large series in the BMNH labelled L. duponti (Boisd.) from Australia. Two specimens in this series have been identified by Lea as L. tribulus (F.) but are definitely L. duponti (Boisd:). L. duponti (Boisd.) (1835: p. 333) is given as a female synonym of L. tribulus (F.) in the Gemminger et Harold catalogue. It is not a matter of sexual differences, it is a distinct species.

Therefore, L. duponti (Boisd.), L. tribulus (F.), and L. ferus (Pasc.) are distinct species. L. echidna (Boisd.) is given as a synonym in Dejean's Catalogue and Junk's Catalogue and is incorrectly attributed to Macleay. The specimen in the BMNH labelled L. echidna (Macleay) (Boisd.) is the same as L. duponti (Boisd.) not L. tribulus (F.).

## TRIDENS, Curculio

Fabricius 1787, 1, p. 122, n. 271; 1801, 2, p. 537, n. 186

sextuberculatus White 1846, p. 13 (Rhinaria) Junk's Catal. 1935, 28, 144, p. 2 (Agathinus) Zimsen 1964, p. 219, n. 2798 Kuschel 1970, p. 197

Holotype labels:

- Fabricius "Curc. Tridens Fabr. Mant. Ins. n. 271"
- ii. BMNH "Curculio tridens", "Type" There is another label but it is unintelligible. It may read "variety sexual of C. exporti—Mus Dom Labrielle"

Locality: "nova Zelandia"

Current status: Agathinus tridens (F.): Belidae.

Comments: Holotype is a female. Synonym sextuberculatus White is a male (Kuschel idem.) Holotype has been pinned twice, now through left elytron, previously through prothrorax; most of the

antennae, and all tarsi except those of the left mesothoracic and right metathoracic legs are missing.

## TRISTIS, Necydalis

Fabricius 1787, 1, p. 170, n. 5; 1801, 2, p. 370, n. 13

miranda Newm. 1851 App., p. 133 (Dohrnia)

anthina Olliff 1887, p. 154 (Ithaca)

Zimsen 1964, p. 185, n. 3148

Holotype labels:

- i. Fabricius "Necy. Tristis Fabr. Mant. Ins.n. 5"
- ii. BMNH "Necydalis tristis", "Type"

Locality: "terra Diemenii"

Current status: Dohrnia tristis (F): Oedemeridae.

Comment: Only the abdomen of the holotype remains. This species has been omitted by Schenkling in Junk's Catalogue 1915, 17, 65, p. 72 and the two synonyms are listed as separate species. Blair (1929: p. 158) determined the above synonymy but it has been overlooked by subsequent workers of the species. Blair states, "Unfortunately all that remains of the type is the abdomen attached to the pin. The description in conjunction with Olivier's figure, leaves no doubt that the insect was the female of the species better known as Dohrnia miranda Newm., and an examination of the abdomen makes this identity certain. Olliff evidently did not know Newman's insect, but his description is so full and detailed as to leave the synonymy beyond question." This reference is omitted from Musgrave's Bibliography of Australian Entomology. Also R. J. Tillyard used the name D. miranda Newm. in his book "Insects of Australia and New Zealand" on p. 225.

## TRUNCATUS, Scarabaeus

Fabricius 1775, p. 6, n. 12; 1801, 1, p. 7, n. 18 (Geotrupes)

Junk's Catal. 1937, 21, 156, p. 58 (Pericoptus) Zimsen 1964, p. 21, n. 12.

Holotype labels:

- i. Fabricius "Scarabaeus Fabr. Sp. Ins. No. 16"
- ii. BMNH "Geotrupes truncatus"

Locality: "nova Zelandia" as recorded in 1775 publication.

Current status: *Pericoptus truncatus* (F.): Scarabaeidae, Dynastinae.

Comment: The condition of the holotype is good, only the club of the left antenna and the tarsi of the metathoracic legs are missing. The reference on the label indicates that Fabricius re-examined this specimen in 1780 and put the 1781 reference on the

label. At the same time he must have recorded the locality erroneously as "nova Hollandia" which was copied in his later publications.

#### TUBERCULATA, Cicindela F.

Fabricius 1775, p. 225, n. 7; 1801, 1, p. 238, n. 32. tuberculosa Ol. 1790, p. 732

latecincta White 1846, p. 1.

Junk's Catal. 1926, 1, 86, p. 200. Zimsen 1964, p. 64, n. 800.

Holotype labels:

- i. Fabricius "Cicindela tuberculata Fab. Entom. p. 225 n. 7"
- ii. BMNH "Cicindela tuberculata"

Locality: "nova Zelandia"

Current status: Cicindela tuberculata F.: Cicindelidae.

Comment: The condition of the holotype is fair. It is pinned through the left elytron. Only the three basal joints of the antennae are present, the right mesothoracic leg is entirely missing and none of the others are complete.

There is a second specimen labelled "nova Zelandia, Nel.". This specimen is without head, pro and mesothorax. "Nel." would stand for Nelson, the collector who sailed with Cook on his third voyage. This specimen would, therefore, have been collected at a later date than the holotype.

E. Zimsen records that 2 specimens are in the Banks Collection and one at Kiel but incorrectly records the locality as "nova Hollandia". In both the 1775 and 1801 references Fabricius records the locality as "nova Zelandia". It is a New Zealand species.

## UNIFASCIATA, Crioceris (Lema)

Fabricius 1775, p. 120, n. 13; 1801, 1, p. 476, n. 28 (Lema)

Junk's Catal. 1924, 24, 51, p. 82 (Lema) Zimsen 1964, p. 107, n. 1644

Holotype labels:

- i. Fabricius "Crioc. Unifasciata Fab. Entom.p. 120 n. 13.
- ii. BMNH "Lema unifasciata", "Type".

Locality: "nova Hollandia"

Current status: Lema 'unifasciata F. Chrysomelidae, Criocerinae.

Comment: Holotype is pinned through left elytron; left antenna, and terminal segment of right antenna are missing. Femora and tibia of left mesothoracic leg and both metathoracic legs are entangled in the glue. Fabricius re-classified this species into the genus *Lema* in 1801.

## VARIEGATA, Leptura

Fabricius 1775, p. 199, n. 19; 1801, 2, p. 375, n. 2 (Molorchus)

Junk's Catal. 1912, 22, 39, p. 286 (Hesthesis) Zimsen 1964, p. 186, n. 3163

Type specimen has been lost from the Collection

Locality: "nova Hollandia"

Current status: *Hesthesis variegata* (F.): Cerambycidae, Cerambycinae.

Comment: There is a large series in the BMNH General Collection. McKeown (1947: p. 89) gives a complete list of references but he erroneously records the type as being in the BMNH. This specimen was re-classified by Fabricius in 1801 into the genus *Molorchus*.

#### VARIEGATUM, Callidium

Fabricius 1775, p. 189, n. 9; 1801, 2, p. 340, n. 39 viratum Newm. 1841, p. 18 (Coptomma) Junk's Catal. 1912, 22, 39, p. 488 (Coptomma) Zimsen 1964, p. 179, n. 3035

Syntype labels:

- i. Fabricius "Callid variegatum Fab. Entom.p. 189. n. 9"
- ii. BMNH "Callidium variegatum", "Type"

Locality: "nova Zelandia"

Current status: Coptomma variegata (F.): Cerambycidae, Cerambycinae.

Comment: There are two specimens a male and female. The male specimen has the Museum "type" label. It is pinned through the left elytron; neither antenna is complete and the legs are entangled in glue on the ventral surface. The condition of the female is in an excellent state of preservation and all structures are complete. Broun (1880: p. 589) gives a detailed description of this species.

## VILLOSA F., Saperda

see HIRTA F. Saperda

S. villosa F. is a synonym of S. hirta F.

## VIOLACEUS, Notoxus

Fabricius 1787, 1, p. 127, n. 1; 1801, 1, p. 287, n. 2

niger Sharp 1877, p. 7 (Balcus) new synonym

Junk's Catal. Suppl. 1950, p. 297 (Phymatophaea)

Zimsen 1964, p. 72, n. 966

Holotype labels:

- i. Fabricius "Notoxus violaceus Fabr. Mant. Ins. n. 2"
- ii. BMNH "Notoxus voilaceus"

Locality: "nova Zelandia"

Current status: Phymatophora violaceus (F.): Cleridae

Comment: Ventral surface is covered with dirt and all legs are closely intertwined. The type of Balcus niger Sharp is in the BMNH. A comparison of this type with N. violaceus F. shows them to be synonymous. This is a new synonym and was confirmed by K. G. Blair when I was working in the BMNH in 1929. A study of the series of this species in the BMNH shows that this species varies considerably in size, colour and markings on the elytra, which may be three pale spots, two, one or none at all. The Fabrician type has a metallic violet tinge and three pale sports on the elytra; tibiae, tarsi and base of the femorae are ferruginous. The type of B. niger Sharp is black and there are no colour spots on elytra; tibiae and tarsi are black. The Fabrician type is devoid of hairs, probably due to abrasion, while the Sharp type is scantily covered with hairs.

#### **ACKNOWLEDGEMENTS**

Many thanks go to Dr G. F. Gross and Dr E. G. Matthews of the South Australian Museum and Mr M. S. Upton of the Division of Entomology, C.S.I.R.O., in Canberra, who read the manuscript and have given me valuable help and advice, and also to the authorities of the South Australian Museum, especially to Dr G. F. Gross, who made it possible for me to use the facilities in the Entomology Section. I also thank Dr E. C. Zimmerman, and Dr E. G. Britton of the Division of Entomology, C.S.I.R.O., for their help and advice. My thanks also go to my husband for his help in checking references, and translating many of the original Latin descriptions. In the final stages, on my return to London to complete the study, I thank the authorities of the British Museum (Natural History) for allowing me to work there once more, and in particular I thank Mr R. D. Pope and Mr R. T. Thompson.

#### REFERENCES

- ARROW, G. J., 1903, On the affinities and nomenclature of certain genera of melolonthid and rutelid Coleoptera. Ann. Mag. nat. Hist. (Ser. 7) 11: 303-306.
- ARROW, G. J., 1915, Notes on the coleopterous family Dermestidae and descriptions of some new forms in the British Museum. Ann. Mag. nat. Hist. (Ser. 6) 15: 425-451.
- ARROW, G. J., 1920, A peculiar new Genus of Australian Beetles. Ann. Mag. nat. Hist. (Ser. 9) 6: 434-437.
- BALY, T., 1855, Monograph of the Australian species of Chrysomela, Phyllocharis, and allied genera. Trans. ent. Soc. Lond. (n.s.) (3) 5: 170-86.
- BALY, T., 1856, Monograph of the Australian species of Chrysomela, Phyllocharis, and allied genera. Trans. ent. Soc. Lond. (n.s.) (3) 5: 241-65.
- BANKS, Sir Joseph, 1963, The *Endeavour* journal 1768-1771, ed. by J. C. Beaglehole. Sydney: Trustees of the Public Lib. of N.S.W. in Association with Angus & Robertson. 964 pp.
- BACCHUS, M. E., 1974, Revision of Australian species of Glycyphana. Aust. ent. Soc. 13 (2): 111-128.

- BLACKBURN, T., 1896, Further notes on Australian Coleoptera, with description of new genera and species. Trans. Roy. Soc. S. Aust. 20: 35-109.
- BLACKBURN, T., 1898, Revision of the genus Paropsis. Part III. Proc. Linn. Soc. N.S.W. 23 (2):
- BLACKBURN, T., 1899, Revision of the genus Paropsis. Parts IV-V. Proc. Linn. Soc. N.S.W. 24 (3): 482-521.
- BLACKBURN, T., 1905, Further notes on Australian Coleoptera. Trans. Roy. Soc. S. Aust. 29: 270-332.
- BLAIR, K. G., 1913, Trifolium castaneum Herbst. = ferrigineum F. Ent. mon. mag. (Ser. 2) 24: 223-224.
- BLAIR, K. G., 1914, On the Fabrician types of Tenebrionidae in the Banks Collection. Ann. Mag. nat. Hist. (Ser. 8) 13: 482-90.
- BLAIR, K. G., 1920, Further notes on the Fabrician types of Heteromera (Coleoptera) in the Banks Collection. Ann. Mag. nat. Hist. (Ser. 9) 5: 153-63.
- BLANCHARD, C. E., 1850, Catalogue of Coleoptera. Ent. 1: 1-
- BLANCHARD, C. E., 1862, Monograph of Cassididae Suppl. 4:
- BOISDUVAL, J. B. A., 1835, Voyage of the Astrolabe, parts 1-7: 1-716.
- BROUN, T., 1880-6, "Manual of New Zealand Coleoptera." Published by Command, Wellington, New Zealand
- BROUN, T., 1903, New genera and species of New Zealand Coleoptera. Ann. Mag. nat. Hist. (Ser. 7), 12: 69-286.
- BROUN, T., 1904, New genera and species of New Zealand Coleoptera. Ann. Mag. nat. Hist. (Ser. 7), 14: 105-127.
- BROUN, T., 1909, New genera and species of New Zealand Coleoptera. Ann. Mag. nat. Hist. (Ser. 8), 4: 130-161.
- BROUN, T. 1917, New genera and species of New Zealand Coleoptera. Bull. N.Z. Inst. 1 (5): 347-474.
- BRYANT, G. E., 1923, Notes of synonymy in the Phytophaga. Ann. Mag. nat. Hist. (Ser. 9) 12: 130-147.
- BURMEISTER, H. C., 1855, Handbuch der Entomologie 4: 198. Berlin Theob. Ehr. Friedr. Enslin.
- CAMERON, H. C., 1966, "Sir Joseph Banks, K.B., F.R.S.". Angus & Robertson, Sydney. 341 pp.
- CARNE, P. G., 1957, A systematic Revision of Australian Dynastinae. C.S.I.R.O. Melbourne. 284 pp.
- CARNE, P. G., 1958, A Review of the Australian Rutelinae. Aust. J. Zool. 62: 162-240.
- CARTER, H. J., 1913, Notes and tabulation of the Australian Amarygminae. *Trans. Roy. Soc. S. Aust.* 37: 6-49.
- CARTER, H. J., 1915, Revision of Cistelidae. Proc. Roy. Soc. Vict. 28 (n.s.): 52-104.
- CARTER, H. J., 1926, Check list of Australian Tenebrionidae. Aust. Zool. 4 (3): 117-163.
- CARTER, H. J., 1929, Check list of Australian Buprestidae. Aust. Zool. 5 (4): 265-304.
- CARTER, H. J., 1930, Check list of Australian Cistelidae. Aust. Zool. 6 (3): 269-276.
- CARTER, H. J., 1935, Australian Coleoptera. Proc. Linn. Soc. N.S.W. 9: 3-4.
- CHAMPION, C., 1895, On the Heteromerous Coleoptera collected in Australia and Tasmania by Mr. James J. Walker, R.N., F.L.S., during the Voyage of H.M.S. *Penguin*, with descriptions of new genera and species. Part II. *Trans. ent. Soc. Lond.* 1895: 213-276.
- COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, 1970, "Insects of Australia" Melbourne University Press, Carlton. 1029 pages.
- CROWSON, R. A., 1964, A review of the classification of Cleroidea. Trans. R. ent. Soc. Lond. 16: 275-327.
- FABRICIUS, J. C., 1775, "Systema entomologiae". (Flensburgi ex Lipsiae), 832 pages.
- FABRICIUS, J. C., 1781, "Species insectorum", 1 and 2. (Hamburgi et Kilonii). 552 and 517 pages.
  FABRICIUS, J. C., 1787, "Mantissa insectorum", 1 and 2
- (Hafniae). 348 and 382 pages.
- FABRICIUS, J. C., 1792-94, "Entomologiae Systematica" 1-4. (Hafniae), 519, 487, 349 and 274 pages.
- FABRICIUS, J. C., 1798-9, "Supplementum Entomologiae Systematica". (Hafniae). 572 and 52 pages.
- FABRICIUS, J. C., 1801, "Systema Eleutheratorum", 1 and 2 (Kiliae). 506 and 687 pages.
- FABRICIUS, J. C., 1803, "Index Alphabeticus". Helmstadii, 93 pages.

- FABRICIUS, J. C., 1845, "The Autobiography of John Christian Fabricius". Translated from the Danish by the Rev. F. W. Hope, A.M., F.R.S., Trans. ent. Soc. Lond. 4: 1-16.
- FAUST, J., 1892, Fünf neue Curculioniden von Australien. Ent. Zeitung, Stetting, 53, nr. 7-9: 179-184.
- FAUVEL, A., 1889, Liste des Coléoptéres communes à l'Europe et à Amerique du Nord. Rev. Ent. Caen, 8: 92-174.
- FROGGATT, W. W., 1894, On the life histories of Australian Coleoptera. *Proc. Linn. Soc. N.S.W.* (Ser. 2) 9 (1): 113-125.
- FROGGATT, W. W., 1907, "Australian Insects". William Brooks & Co. Ltd. Sydney, 447 pages.
- GEMMINGER et HAROLD, 1868-1876, "Catalogus Coleopterum. Hucus que descriptorum synonymicus et systematicus" 1-12. Various publishers, Paris.
- GERMAR, E. F., 1848, Beiträge zur Insekten fauna von Adelaide. Linn. Ent. 3: 153, 247.
- GROUVELLE, A. H., 1912-13, Notes sur les Nitidulides. Ann. Soc. ent. France, 81: 387-400.
- HERBST, J. F. W., 1789-1806, Natursystem aller bekannten inund auslandischen Insecten—Der Kafer, 4: 138, and 6: 29.
- HINTON, H. E., 1945, "Beetles associated with Stored Products" I. British Museum (Natural History), 441 pages.
- HOPE, F. W., 1840, "The Coleopterists Manual" 3: 1-191. Bohn, Lond.
- HUTTON, F. W., 1904, "Index Faunae Novae Zelandiae". Dulau & Co. Lond., 371 pages.
- ILLIGER, J. C. W., 1807, Magazin für Insectenkunde. (Maunch. Vieweg). p. 36.
- JACOBY, M., 1885, On new Phytophagous Coleoptera. Proc. Zool. Soc. Lond. pt. 4; 925-929.
- KIRBY, W., 1818, A Description of several new species of insects collected in New Holland by Robert Brown Esq. F.R.S. Trans. Linn. Soc. Lond. 12: 454-488.
- KUSCHEL, G., 1969, The Genus Catoptes Schonherr and two new species oblitae of Fabricius from New Zealand. New Zealand J. Sci. 12: 789-810.
- KUSCHEL, G., 1970, New Zealand Curculioniodea from Captain Cook Voyages. New Zealand J. Sci. 13: 191-205.
- LACORDAIRE, T., 1854-76, Histoire Naturelle des Insectes. 1-12. Roret, Paris.
- LAMEERE, A., 1904, Révision des Prionides. Ann. Soc. ent. Belg. 48: 7-78.
- LAPORTE, M. F. L. de., 1833, Une révision du Genre Lampyre. Ann. Soc. ent. France 2: 122-154.
- LEA, A. M., 1902, Descriptions of some new species of Australian and Tasmanian Chrysomelidae. Report from Australian Association for the Advancement of Science, p. 402-3.
- LEA, A. M., 1906, Notes on the genus Leptops with description of new species. Ann. Soc. ent. Belg. 50: 326-29.
- LEA, A. M., 1909, Revision of the Australian and Tasmanian Malacodermidae. Trans. ent. Soc. Lond. pt. 1: 45-251.
- LEA, A. M., 1913, Revision of Australian Curculionidae— Cryptorhynchides. Proc. Linn. Soc. N.S.W. 38: 457-489.
- LEA, A. M., 1913, Notes on Australian Cryptorhynchides. Trans. Roy. Soc. S. Aust. 37: 182-300.
- LEA, A. M., 1914, Notes on Australian Cetonides. Trans. Roy. Soc. S. Aust. 38: 132-218.
- LEA, A. M., 1917, Notes on some miscellaneous Coleoptera, with descriptions of new species. *Trans. Roy. Soc. S. Aust.* 41: 121-322.
- LEA, A. M., 1918, Notes on some miscellaneous Coleoptera with descriptons of new species. Trans. Roy. Soc. S. Aust. 42: 240-275
- LEA, A. M., 1923, On some Australian Galerucides. *Proc. Linn. Soc. N.S.W.* 48 (4): 519-575.
- LEPESME, P., 1939, Note synonymique sur les Dermestes. Bull. Soc. ent. France 44: 190-193.
- LESNE, P., 1897, Révision des Bostrychides. Ann. Soc. ent. France 66: 321-350.
- LINNE, C., 1788-1793, "Systema Naturae", ed. by J. F. Gmelin. 13 ed. 4.
  - LOBL, I., 1976, The Australian species of Scaphidium Oliver. Journ. Aust. ent. Soc. 15 (3): 285-292.
  - McKEOWN, K. C., 1947, Catalogue of Australian Cerambycidae. Aust. Mus. Memoirs 10. Trustees of Australian Museum, Sydney. 190 pages.
  - MACLEAY, W., 1871, Notes on a collection of insects from Gayndah. Trans. ent. Soc. N.S.W. 2 (3): 159-205.

- MACLEAY, W., 1886, The genus Liparetrus. *Proc. Linn. Soc. N.S.W.* (Ser. 2)  $\bf 1$  (3): 807-852.
- MAIDEN, J. H., 1909, "Sir Joseph Banks—The Father of Australia". W. A. Gullick, Sydney.
- MARSHALL, G. A. K., 1926, New Curculionides from New Zealand. Ann. Mag. nat. Hist. (Ser. 9) 18: 1-16.
- MARSHALL, G. A. K., 1930, New Curculionides with notes on synonymy. *Ann. Mag. nat. Hist.* (Ser. 10) **6**: 5-51.
- MARSHALL, G. A. K., 1944, On the Genera of the tribe Cyphicerini. Ann. Mag. nat. Hist. (Ser 11) 11: 73-98.
- MARSHALL, G. A. K., 1952, Taxonomic notes on Curculionidae. Ann. Mag. nat. Hist. (Ser. 12) 15: 261-270.
- MARSHALL, G. A. K., 1956, "Oribius of the Sub-family Otiorrhynchine." British Museum (Natural History), London. 134 pages.
- MARSEUL, S. A. De, 1855, Essai monographique sur la famille des Histérides. *Ann. Soc. ent. France* (Ser. 3) 3: 327-506.
- MASTERS, G., 1871, 1885-1887, "Catalogue of the described Coleoptera of Australia". Sydney.
- MATTHEWS, E. G., 1972, A Revision of the scarabaeine dung beetles of Australia. I. Tribe Onthophagini. Aust. J. Zool. Suppl. 9: 1-330.
- MATTHEWS, E. G., 1974, A Revision of the scarabaeine dung beetles of Australia. II. Tribe Scarabaeini. Aust. J. Zool. Suppl. 24: 1-211.
- MULSANT, M. E., 1850, Spec. Trimères Securipalp. Ann. Soc. d'Agri. Sci. et Indust. de Lyon (Ser. 2) 2: 1-1104.
- MULSANT, M. E., 1866, Monographie des Coccinellides. Part 1. Paris. 292 pages.
- MUSGRAVE, A., 1932, "Bibliography of Australian Entomology 1775-1930". Royal Zoological Society of N.S.W., Sydney.
- MUSGRAVE, A., 1954, "Insects of Captain Cook's expedition". Aust. Mus. Mag. 11 (7): 232-237.
- MUSGRAVE, A., 1955, Inc. 200 Captain Cook's expedition.
- Aust. Mus. Mag. 11 (9): 303-306.NEWMAN, E., 1951, On the characters and affinities of Dohrnia. Zoologist 9: 133-137.
- Dohrnia. Zoologist 9: 133-137. OCHS, G., 1949, Revision of Australian Gyrinidae. Rec. Aust.
- Mus. 22 (2): 170-192.

  OKE, C., 1951, Coleoptera of Russell Grimwade Expedition.
- Mem. nat. Mus. Vic. 17: 19-25.

  OLIVIER, A. G., 1780-1807, "Histoire Naturelle des Insectes",
- OLIVIER, A. G., 1780-1807, "Histoire Naturelle des Insectes", Vols. 1-6, Paris.
- OLLIFF, A. S., 1887, Contributions toward a knowledge of the Coleoptera of Australia. IV. Description of a new genus and species of Oedemeridae. Proc. Linn. Soc. N.S.W. 2 (1): 153-155.
- PASCOE, F. P., 1866, New or little known species of Coleoptera. Journ. Ent. 2: 443-499.
- PASCOE, F. P., 1867, Characters of some new genera of the Cerambycidae,—genus Zorion. Ann. Mag. nat. Hist. (Ser. 3) 19: 410-413.
- PASCOE, F. P., 1867, Description of new Genera and Species of New Zealand Coleoptera. Ann. Mag. nat. Hist. (Ser. 4) 1: 16-19.
- PASCOE, F. P., 1869, Tenebrionidae from Australia and Tasmania. Ann. Mag. nat. Hist. (Ser. 4) 31: 277-296.
- PASCOE, F. P., 1882, Additions to Australian Curculionidae. Ann. Mag. nat. Hist. (Ser. 5) 9: 374-383.
- PRELL, H., 1934, Beitrage zur Kenntnis der Dynastiden. Ent. Bl. 30: 55-60.
- ROSSI, P., 1790, "Fauna Etrusca. Iistens insecta, quae in provinciis Florentina et Pisana praesertim Collegit". 1. Masi, Liburni. 272 pages.
- SAUNDERS, W. W., & JEKEL, H., 1855, Curculionidae. Ann. Soc. ent. France (3) 3 (2): 289-306.
- SCHENKLING, S. (ed.) 1926, "Coleopterorum catalogus auspiciis et auxilio" W. Junk. Vols. 1-30. W. Junk, Berlin.
- SCHONHESS, C. J., 1808, Synonymia Insectorum. Cryptocephalus. Marguard, Stockholm. 424 pages.
- SHARP, D., 1876, On the Colyiidae of New Zealand. Ann. Mag. nat. Hist. (Ser. 4) 18: 17-29.
- SHARP, D., 1876, New Genera and species of New Zealand. Coleoptera. Ent. mon. Mag. 1-3: 78-79.
- SHARP, D., 1877, Descriptions of some new species and indications of New Genera of Coleoptera from New Zealand. *Ent. mon. Mag.* 14: 7-10.
- SHARP, D., 1880-2, On Aquatic Carnivorous Coleoptera or Dytiscidae. Sci. Trans. Roy. Soc. Dublin 2 (2): 179-1003.

- SLOANE, T. G., 1923, New Genera and species of Coleoptera. Proc. Linn. Soc. N.S.W. 48 (2): 17-39.
- STAIG, R., 1931, "The Fabrician Types of Insects in the Hunterian Collection in the Glasgow University" 1, University Press, Cambridge. 110 pages.
- STEEL, W. O., 1949, On Australian species of Creophilus. Proc. Linn. Soc. N.S.W. 74 (1-2): 57-61.
- TILLYARD, R. J., 1926, "Insects of Australia and New Zealand". Angus and Robertson Ltd., Sydney. 560 pages.
- TUXEN, S. L., 1959, Der Entomologe J. C. Fabricius und Typen der von ihm beschriebenen Arten. *Zool. Anz.* 163: 343-350.
- TUXEN, S. L., 1967, The entomologist, J. C. Fabricius. Ann. Rev. Ent. 12: 1-14.
- WATT, J. C., 1968, Specific synonymy in Mimopeus Pasc. and the status of some related genera. New Zealand Ent. 4 (1): 35.30

- WESTWOOD, J. O., 1843, On the longicorn Coleoptera of New Zealand. Arcana Ent. Lond. Smith 2: 25-28.
- WESTWOOD, J. O., 1871, Descriptions of some new exotic species of Lucanidae. *Trans. ent. Soc. Lond.* pt. 3: 353-374.
- WESTWOOD, C. O., 1906, Report. In "History of the Collections contained in the Natural History Departments of the British Museum", p. 580. British Museum (Natural History), London.
- WHITE, A., 1846, Zoology. Voyage of the *Erebus* and *Terror*. E. W. Janson, London 2: 1-27.
- ZIMMERMANN, A., 1917 (1919), Die Schwimmkäfer des Deutchen Entomologischen Museums in Berlin—Dahlem. Arch. f. Naturgesch. 83 (A. 12): 213.
- ZIMSEN, E., 1964, "The Type Material of J. C. Fabricius". Munksgaard, Copenhagen. 656 pages.