

Types of Charles Chilton's Crustacea with comments on his collections in the Canterbury Museum

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The life of the New Zealand biologist, Charles Chilton (1860–1929), is briefly outlined, a description of his collection of Crustacea at the Canterbury Museum given, and the types catalogued. The species described by Chilton, 52 amphipods, 51 isopods, five tanaidaceans and three decapods, are listed alphabetically in their original combinations. The present-day name, family placement, type locality and a listing of available type material in alcohol and on microslides are given. Rediscovery of previously unrecognised types has led to the setting aside of two recent neotype designations: *Platyischnopus neozelanicus* Chilton, 1897 (Amphipoda: Otagiidae) by Hughes and Lörz (2013) and *Paratanais ignotus* Chilton, 1885 (Tanaidacea: Paratanaidae) by Edgar (2012). *Glycerina affinis* Chilton, 1885 is a member of *Ichnopus* Costa, 1853 (Amphipoda: Uristidae). *Ichnopus affinis* (Chilton, 1885) is a subjective junior homonym of a Mediterranean species and here replaced by *Ichnopus parriwi* Lowry & Stoddart, 1992.

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Introduction

Charles (Chas) Chilton (1860–1929) was born in Herefordshire, England, and came to New Zealand with his family as a very young child. His family settled at a farm at East Eyreton, Canterbury. This family farm later became the type locality for Chilton's first 'well-shrimps' as described in an important early paper (Chilton 1882e). Owing to hip problems, Chilton had had his leg amputated and this was said to be the reason he did not practice farming like his brothers. He took up pupil teaching as a way of entering university. He went to Canterbury College in 1875 as a non-matriculated student and gained a Master of Arts, with first class honours in zoology. The Professor of Biology was then Captain Frederick Hutton who is said to have initiated Chilton's interest in Crustacea (as well as that of his lifelong colleague G M Thomson). In 1888, Chilton gained New

Zealand's first Bachelor of Science degree, one of several 'firsts' and many notable academic achievements. He moved into teaching, quickly becoming headmaster of a district school. In 1895, he trained and then practised as a surgeon in Edinburgh and returned to Christchurch as an ophthalmic surgeon in 1901. However, soon after, Chilton became a temporary, and then by 1903 a permanent Professor of Biology at Canterbury College. Later, Chilton became Acting Director, Canterbury Museum (March 1905–April 1906) (Johns & Pollard 2002). Chilton's mostly dry taxonomic descriptions perhaps belie related interests in biogeography (Hurley 1990) and evolution (Chilton 1894). These scant biographical details omit many other activities. The information above is from an obituary by Thomson (1930), as well as from an interesting sketch by Hurley (1990), which

also lists many other sources.

An extensive archive of 655 Chilton papers and letters is held at the Canterbury Museum (1896–1930, C323, Canterbury Museum records). The contents concern scientific correspondence and also records of several associations in which Chilton was involved: The Australasian Association for the Advancement of Science, the Christchurch Beautifying Association, the Summit Road Association and the West Christchurch High School Committee. In addition there is correspondence, reports and newspaper cuttings concerning a debate over the Christchurch water supply in the 1920s.

The Chilton collection of Crustacea

The collection at Canterbury Museum comprises numerous identified whole specimens stored wet in alcohol plus many hundreds of permanent microslides. Towards the latter part of Chilton's life it appears he systematically documented his collection. It is uncertain when exactly this was done, however, two notes on microslide cards show that he was making extra catalogue entries in 1917 and c. April 1918. An annotation on the card for *Orchomenopsis chiliensis* (Heller, 1868) states "This should probably be considered a distinct species [signed] Chas. C. 1917". Another on the card for *Phreatogammarus helmsi* Chilton, 1918 has pencilled "See paper posted 29 iv 1918 to Journal. Zool. Res." This would have happened while the collection was in the Department of Zoology at the University of Canterbury. The collection was moved to Canterbury Museum in May 1959 (Johns & Pollard 2002). Much of the documentation is in his own hand.

Chilton actively acquired representative species of Crustacea for his own collection, sometimes by exchange from contemporary crustacean workers. Notable among these are K H Barnard in Cape Town, South Africa, H Richardson in Washington, USA, D Giambigi in Buenos Aires, Argentina, T R R Stebbing and others in the United Kingdom, S W Fulton and O A Sayce in Melbourne, W E Nicholls in Perth, and T Whitelegge in Sydney, Australia. A O

Walker exchanged part of the British Antarctic Terra Nova expedition. A few of the specimens donated may be syntype specimens and some are labelled as 'cotypes'. Some specimens described by other authors were identified by him as part of the large surveys on which he reported. Notable among these are those from Talé Sap, Thailand (Chilton 1926a, 1926b), Chilka Lake, India (Chilton 1916a, 1921a, 1924), New Zealand's subantarctic islands (Chilton 1909a, 1909b) and the Kermadec Islands (Chilton 1911a). Others are examples of relatively well known species that he appears to have acquired for comparative purposes and dissected by him and mounted on permanent microslides. In the case of the extensive Chilka Lake survey, Chilton identified his material by station number. Annandale and Kemp (1915) noted the existence of a log of station numbers for this survey but provided no details.

Chilton Jar Collection

The alcohol collection is arranged in 423 jars (called 'bottles' in the card catalogue). Jars are in a largely continuous series. Jar numbers 1 to 224 are Isopoda and 500 to 731 are Amphipoda. A large gap between 225 and 500 is not represented by either jars or catalogue cards. However, a few smaller gaps in the otherwise continuous series represent jars that were originally present but cannot be located currently. Chilton's original 'jars' were discarded and replaced by Agee® glass jars with sealed metal lids sometime in the latter half of the twentieth century and the original jar labels destroyed and replaced. Unfortunately the replacement jar labels, hand-written in ink, were supplied by someone who had difficulty reading the original labels and who was not familiar with crustacean nomenclature. Importantly, many of these newer jar labels include the word 'TYPE' when in fact the contents cannot be types. Most of these jar labels have now been supplemented with new jar labels.

Each of Chilton's jars contains one or more species almost always from a single genus. Rarely up to three confamilial genera were stored in the

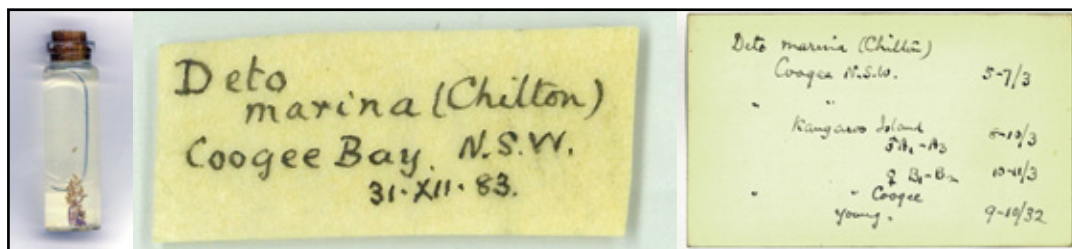


Figure 1. *Deto marina* (Chilton, 1884), syntypes. From left to right; vial, label from vial, relevant catalogue card.

same jar. Most vial labels are in his own hand with a name, brief locality and sometimes a date of collection (Fig. 1). Potential types and non-type vials were found in the same jar. Types and non-types have now been placed in separate jars (along with a record of their original Chilton Jar Number) to avoid future confusion. Rarely, on the vial labels, the word "Type!" is added, even though the relevant publication does not indicate the existence of a holotype (see section on Chilton types below). Several vials of terrestrial isopods have species names that do not appear in the literature and are therefore *nomina nuda*.

Chilton microslides

Microslides appear to be mounted in Canada balsam and most are in excellent condition. Most are stained with what is presumed to be carmine red (Fig. 2). A small number are stained black with osmic acid and these slides are mostly annotated 'osmic'.

The microslides prepared by Chilton over 47 years of publications were organised by him in four microslide cabinets of over 170 trays storing the microslides flat. The cabinets in

use today do not appear to be the ones used by Chilton. Each tray originally held 20 microslides exactly. Type specimens, examples of the same species collected later, and dissections of species described by others were mixed on the one tray. Representatives of a single species may range across more than one tray. The genus and species names on microslide and vial labels were frequently updated by Chilton. This includes type specimens, and it is common for microslides to bear both genus and species in their original combination but also an updated classification. Some vial labels of potential types are also likely to be replacement labels rewritten to reflect changed classification e.g. '*Chiltonia mihiwaka* (Chilton) Mt Mihiwaka, Port Chalmers'.

Chilton's microslides are accessed by two sets of documentation. The first is a set of three similar black-covered notebooks with blue-lined pages and embossed covers, one for Isopoda and two for Amphipoda. Each page is devoted to a single tray and lists microslides numbered from 1 to 20. Forty trays of Isopoda and 138 trays of Amphipoda are documented in the first book and 32 trays (140–171) in the second. A more recent type index to genera follows in the second

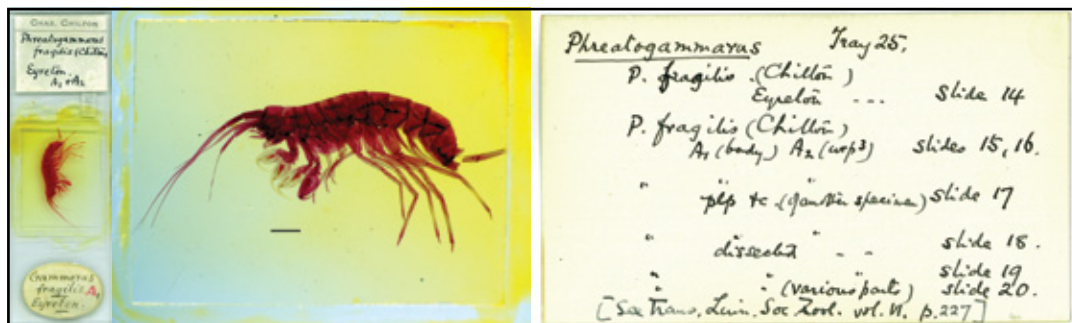


Figure 2. *Gammarus fragilis* Chilton, 1882, syntype (CMNZ 2015.149.26). From left to right; slide 15 of 20, coverslip and syntype in detail (scale = 2 mm), relevant species catalogue card.

Amphipoda book, after which is a further listing of apparently uncatalogued material added by M M Darby, in March 1967. These pages and cards are marked with Box III or Chilton III. D E Hurley may have had a hand in these additions.

The second is an index of 3" x 5" cards, alphabetical by genus and species, prepared in Chilton's hand. Some Isopoda and Amphipoda are in two separate card drawers. Following the species name is a description of each microslide that indicates how many microslides were prepared from each specimen. He used upper-case letters (A, B etc.) to indicate specimens and subscripts to denote microslides prepared (A₁, A₂ etc.). These data sometimes enabled decisions on what could be type material and what could not. Often, the microslides were labelled and indexed with a genus name other than that by which the species had been initially described. Additional lined cards have been more recently added to the microslide card catalogue. The contents and handwriting on these cards match the notebook entries attributed to M M Darby.

Chilton types

Chilton rarely designated types so for many species where he indicated more than one specimen or he described both males and females we assume these to be syntypes. Occasionally he reported a single specimen, which we take to be the holotype. Rarely he described more than one specimen and used the phrase 'Type in Canterbury Museum, New Zealand', which, following ICZN Article 73.1.1., constitutes a fixation of a holotype. This article applies, even when considering the recommendation 73F to avoid assuming the existence of holotypes. Unfortunately Chilton failed to indicate in the collection which of the several he had at hand was the type.

The list of primary types previously given by Johns and Pollard (2002) listed only 24 of the species named by Chilton. The status of several of these is amended. Some specimens of the notable Middle Triassic fossil *Protamphisopus wianamattensis* (Chilton, 1918) were located;

some of these had been earlier reported as missing by Wilson and Edgecombe (2003).

Regrettably, some material is listed as missing and searches for this material revealed that most are unreturned loans. It would be appreciated if curators and collection managers that find or know of Chilton material from Canterbury Museum in their collections could contact Canterbury Museum to establish appropriate tenure and documentation for specimens currently in their care. For a few of these specimens it is unlikely that their type status can be firmly established except by comparing label data to Canterbury Museum catalogues.

Methods

The following taxonomic listing is alphabetical by genus within the four orders Amphipoda, Isopoda, Tanaidacea and Decapoda on which Chilton published. We append the currently accepted species name of his taxa (if different). We used current family names that were often different from those given originally.

For each species is given:

- Chilton's genus and species name
- Combination in current usage, if different, with the current family name used by the World Register of Species Names (WoRMS) (WoRMS Editorial Board 2016) or by another catalogue of accepted names which is cited
- The type locality from the original publication, usually given as 'Hab. [habitat]' or 'Localities' with any evidence of material used followed by citation of Chilton's paper describing the species and the most recent reference to the species' present-day classification. Unless otherwise stated here all type localities are in New Zealand.
- The museum acronym followed by a listing of the type material located in alcohol and on microslides; label data are given in quotation marks for some.
- Comments on the material or type locality.

Most of the material comes from the Canterbury Museum, Christchurch (CMNZ)

but all known types from the Australian Museum, Sydney (AM) and Museum Victoria, Melbourne (NMV) are included. Incidental data was discovered from the Western Australian Museum (WAM), South Australian Museum (SAM) and from the Natural History Museum, London (BMNH). Chilton type material from CMNZ is now registered with accession numbers starting 2015.149.1. Comments on the taxonomic placement of some species refer to the Australian Faunal Directory (AFD, <http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/home>). The abbreviations gn and prp are those used by Chilton and refer to gnathopod and pereopod, respectively.

Taxonomic list of type material

Amphipoda

Acanthonotozoma australis Chilton, 1912

Acanthonotozomatidae

Southern Ocean. 'Scotia', 18th March 1904. Lat. 71°22'S., long. 16°34'W.; 1410 fathoms. Station 417. One female specimen; length of body (head to base of telson), 35 mm (Chilton 1912).

CMNZ. Holotype not located or catalogued.

The deposition of the specimen was not mentioned. Likely depositories include Scottish museums.

Alicella scotiae Chilton, 1912

= *Eurythenes obesus* (Chevreux, 1905)
Eurytheneidae

Southern Ocean. Station 468, South Atlantic, lat. 39°48'S., long. 2°33'E.; 2645 fathoms. 29th April 1904. One specimen, 20 mm long (Chilton 1912, De Broyer et al. 2007).

CMNZ. Holotype not located or catalogued.

The deposition of the specimen was not mentioned. Likely depositories include Scottish museums.

Atyloides calceolata Chilton, 1912

= *Schraderia gracilis* Pfeffer, 1888
Pontogeneiidae

South Atlantic. South Orkneys, Scotia Bay, Station 395; 10 fathoms. A few specimens, mostly imperfect, about 5 mm long (Chilton 1912, De Broyer et al. 2007).

CMNZ. Syntypes: 1 specimen on 4 microslides 'Atyloides calceolata sp. nov, A₁-A₄, South Orkneys' (2015.149.1); 1 specimen in alcohol, South Orkneys, 'Scotia', March 1903 (2015.149.21).

According to the microslide card catalogue these were 'Mounted in Plymouth, 1912'.

Bircenna fulvus Chilton, 1884

= *Bircenna fulva* Chilton, 1884 Eophliantidae

Lyttelton Harbour, very few specimens (Chilton 1884a).

CMNZ. Syntypes: Lyttelton. gn and prp of type. 'Portions of the specimen described in 1884, other parts not preserved' (2015.149.22); a very small specimen mounted whole (2015.149.23); syntype ♀ on 6 microslides (2015.149.24) catalogued as Canterbury Museum AQ 3661 and bearing replacement SAM labels. No material in alcohol located or catalogued.

Calliope subterranea Chilton, 1882

= *Paraleptamphopus subterraneus* (Chilton, 1882) Paraleptamphopidae

Pump at Eyreton, North Canterbury (Chilton 1882d) (February 1882); later described in detail (Chilton 1882e) (May 1882).

CMNZ. Syntypes: 4 syntypes on 11 microslides (2015.149.90-93); 7 syntypes (label states 8) 'Eyreton, Type, b' in alcohol (2015.149.94-100).

Another male specimen on 4 slides (C₁-C₄; 2015.149.1762) is here considered to be a later collection. See remarks by Fenwick (2006) on the difficulties in species identification of syntypes, especially those in alcohol. Male specimens in the syntype series in ethanol are likely to include misidentified specimens of *Ringanui toonuiiti* Fenwick, 2006, or *R. koonuiroa* Fenwick, 2006. One non-type male, illustrated by Chilton (1894: pl. 23 fig. 1; 2015.149.101) was identified as *R. toonuiiti* by Fenwick (2006). A holotype was incorrectly listed by Johns & Pollard (2002).

Corophium lendenfeldi Chilton, 1884

= *Haplocheira barbimana barbimana*
(Thomson, 1879) Corophiidae

Lyttelton Harbour (Chilton 1884a, Thomson 1879).

CMNZ. Syntypes: 1 microslide (2015.149.8) with circular label, dissected specimen '*Corophium barbimanum* = *lendenfeldi* Chilton, Lyttelton'; 1 microslide with whole animal (2015.149.9) with circular label '*Corophium barbimanum* [*barbimanum* crossed out] *lendenfeldi*, Lyttelton'. No specimens in alcohol located or catalogued.

Crangonyx compactus Chilton, 1882

= *Paracrangonyx compactus* (Chilton, 1882)
Paracrangonyctidae

Pump at Eyreton, North Canterbury (Chilton 1882d) (February 1882); later described in detail (Chilton 1882e) (May 1882); transferred to *Paracrangonyx* by Stebbing (1899).

CMNZ. Syntypes: 4–6 specimens on 16 microslides (2015.149.10–16); 5 specimens in alcohol (2015.149.102–106).

The exact number of specimens mounted on microslides is impossible to determine. A holotype was incorrectly listed by Johns & Pollard (2002).

Cyproidia (?) *crassa* Chilton, 1883

= *Tetradeion crassum* (Chilton, 1883)
Stegocephalidae

Lyttelton Harbour, '2 specimensThe details (fig. 1 a–d) were taken from a small specimen ...' (Chilton 1883b).

CMNZ. Syntype: 1 specimen dissected in part on 1 microslide (2015.149.17) 'part of type, *Cyproidea* (?) *crassa*, portions of body and abdomen'. No types in alcohol located.

The card catalogue states 'portion of the small specimen used for description of "*Cyproidia* (?) *crassa*". Two other microslides are potential syntypes, both from Lyttelton: 1 specimen on 4 microslides (Microslides 15–18, B₁-B₄, Tray 148); 1 specimen on 1 microslide (Microslide 19 Tray 148). Three vials of non-types exist in alcohol plus another specimen on 3 microslides from Lyttelton collected by H(enry) Suter that

cannot be considered part of the original series because of its apparent later collection date. The generic name *Cyproidea* Haswell, 1879 was misspelled by Chilton (1883b).

Cyproidia otakensis Chilton, 1900

= *Neocyproidea otakensis* (Chilton, 1900)
Cyproideidae

Otago Harbour, New Zealand. A few specimens obtained by surface-netting (Chilton 1900, Hurley 1955).

CMNZ. Syntypes: 1 specimen on 3 microslides '*Cyproidia otakensis*, Port Chalmers, N.Z.' (2015.149.18); 1 or more syntypes missing from empty vial of alcohol '*Cyproidea otakensis* Lightship (surface), Port Chalmers' from 'Bottle 691'.

Chilton misspelled the generic name *Cyproidea* Haswell, 1879.

Elasmopus bollonsi Chilton, 1915

Maeridae

Dredged off the Three Kings Islands, north of New Zealand, at a depth of 60 fathoms, one male and two small females (Chilton 1915a).

CMNZ. Syntype: 1 male on 6 microslides, 'Type' (2015.149.19). No specimens in alcohol, however, a missing jar is mentioned in catalogue as 'spec. from New Zealand. Bottle 703'.

Elasmopus neglectus Chilton, 1915

Maeridae

Blueskin Bay, Otago (G M Thomson); Moko Hinou (C R Gow) (Chilton 1915a).

CMNZ. Syntypes; 1 syntype female on 4 microslides '♀ described in T.N.Z.J. v 47 p. 328' (2015.149.20); 'type male' Moko Hinou C R Gow 1914 (in alcohol) and also with parts on microslide 'type ♂ gn & prp' (microslide mentioned on label but not in card catalogue) (2015.149.49); 34 syntypes in alcohol, Moko Hinou N.Z (2015.149.107–140).

Eurystheus persetosus Chilton, 1921

= *Gammaropsis persetosus* (Chilton, 1921)
Photidae

Australia. 40 miles [64 km] west of Kingston,

South Australia, 30 fathoms. Four specimens, about 12 mm. (Reg. No. E. 4862) (Chilton 1921b).

AM. Syntypes: E.6561.001 (microslide); P.5933 (2 syntypes from E.4862).

CMNZ. No type specimens in alcohol or on microslides. One non-type microslide from Kangaroo Is, South Australia, E R Waite.

Eusirus splendidus Chilton, 1912

= *Eusirus perdentatus* Chevreux, 1912
Eusiridae

South Atlantic. South Orkneys, Scotia Bay, Station 325. 15th August 1903. 54 fathoms. Two specimens, both males: No. 1, 30 mm, No. 2, 35 mm. in length of the body (Chilton 1912).

CMNZ. No material on microslides or in alcohol located or catalogued.

The deposition of the specimens was not mentioned.

Gammarus barringtonensis Chilton, 1917

= *Austrocrangonyx barringtonensis* (Chilton, 1917) Paramelitidae

Australia. Barrington Tops, 4,600 ft., NSW (C. Hedley). (Barnard & Karaman 1983, Chilton 1917d)

CMNZ. 1 paralectotype on 4 microslides (2015.149.25); 1 paralectotype [urp 3 abnormal] Barrington Tops, 4,600 ft., NSW (C Hedley). xii.15 (in alcohol; 2015.149.141).

AM. P.4083.001 (female 'i' lectotype on microslide); P.4080 (4 paralectotypes) selected by Barnard & Karaman (1983).

Gammarus fragilis Chilton, 1882

= *Phreatogammarus fragilis* (Chilton, 1882)
Phreatogammaridae

From a pump at Eyreton, North Canterbury (Chilton 1882d) [March 1882]; described in detail (Chilton 1882e) [May 1882].

CMNZ. Syntypes: 2–6 specimens on 7 microslides with original circular labels (2015.149.26–31). Non-type collection, May 1921 C. Chilton, illustrated by Hurley (1954). 'Bottle 590' and other material not located.

Johns & Pollard (2002) incorrectly catalogued a holotype.

Glycerina affinis Chilton, 1885

= *Ichnopus parriwi* Lowry & Stoddard, 1992.
Uristidae

Australia. Two specimens from Sydney Harbour (Chilton 1885c).

CMNZ. No material located or catalogued.

Ichnopus affinis (Chilton, 1885) is a subjective junior homonym of the Mediterranean species, *Ichnopus affinis* Heller, 1866, itself a subjective junior synonym of *I. taurus* Costa, 1853 (J K Lowry, pers. comm. 13 Dec 2015). Chilton's name is here replaced by *Ichnopus parriwi* Lowry & Stoddard, 1992 (ICZN Article 60.2).

Grandidierella gilesi Chilton, 1921

Aoridae

India, Chilka Lake. Off Samal Island, 8–15 ft. One male, two females. Off Satpara, 4–5 ft., 17.ix.13, five females. / 8 miles W. by S. of Breakfast Island, two males, one female. / off north shore of Samal Island, three females. Barkul Point, one male. / Satpara Bay, one male and one female (Chilton 1921a).

CMNZ. 2 potential syntypes on 4 microslides, 'Chilka Lake Sta. 9' and 'Chilka Lake, Sta. 19' (2015.149.32–33); 4 syntypes in alcohol 'Off Samal Is, Chilka Lake' (2015.149.142–145).

The microslide card catalogue states 'Syntypes, see Mem. Indian Mus. V. P.'

Haliragoides australis Chilton, 1912

Calliopiidae

South Atlantic. South Orkneys, Scotia Bay, Station 32; 9–10 fathoms. May 1903. A few small specimens, about 3 mm. long; all very delicate and fragile (Chilton 1912).

CMNZ. Syntypes: 3 specimens on 3 microslides. 2015.149.36 states '*Haliragoides australis* sp. nov., Bay A, Sth. Orkneys, 9–10 fath., 'Scotia', Apr. 1903'. 2015.149.34 & 2015.149.35 *ibid.* plus 'Sta 325, May 1903'. No material in alcohol located or catalogued.

Hyale grenfelli Chilton, 1916

= *Protohyale (Boreohyale) grenfelli* (Chilton, 1916) Hyalidae

Cuvier Island, off the coast of Auckland, New Zealand; between tide-marks, male specimen, (Bousfield & Hendrycks 2002, Chilton 1916c).

CMNZ. Holotype male on 3 microslides, 'Type ♂, Cuvier Island, P.W. Grenfell, 1916' (2015.149.37). Non-types: Moko Hinou C R Gow 26.xi.16 (C.C. determ.) (on slides).

Johns & Pollard (2002) incorrectly listed syntypes.

Hyale saldanha Chilton, 1912

Hyalidae

South Africa, entrance to Saldanha Bay, Station 483; 25 fathoms. 21st May 1905. Several specimens, males and females, the largest about 9 mm long. (Chilton 1912)

CMNZ. Syntype: 1 female on 5 microslides (2015.149.38), '*Hyale saldanha* sp. nov. Entrance to Saldanha Bay, 25 fathoms 'Scotia' 21.v.04'. Non-types: vial of many specimens from Cape Town collected by K H Barnard in 1914.

Hyalella mihiwaka Chilton, 1898

= *Chiltonia mihiwaka* (Chilton, 1898) Chiltoniidae

Mountain streams near Port Chalmers, up to about 1500 feet above sea-level (Chilton). In hillside stream at Rast [sic] Taieri; from spongy moss at top of Mount Cargill, 2200 feet, and on Swampy Hill, 2400 feet (G M Thomson) (Chilton 1898, Stebbing 1899).

CMNZ. Syntypes: 3 specimens on 10 microslides '*Hyalella mihiwaka*' (2015.149.39–45); 103 specimens in alcohol, '*Chiltonia mihiwaka*, Mt Miniwaka, Port Chalmers' (2015.149.440–542); 17 specimens in alcohol, '*Chiltonia mihiwaka*, Creek at Hope Hill, East Taieri, G.M. T[homson]' (2015.149.543–559); 15 specimens in alcohol, '*Chiltonia mihiwaka*, Mt Cargill (2400 ft) and Flagstaff Hill (2000 ft), G.M. T[homson]' (2015.149.560–574).

Idunella chilkinsis Chilton, 1921

Liljeborgiidae

India, Chilka Lake. 1 mile E. by N. of Patsahanipur. Five males, one female. / 2–6 miles E. by S. ½ S. of Patsahanipur. One male, one female (Chilton 1921a).

CMNZ. Syntypes: 1 male specimen on 1 microslide, Chilka Lake (2015.149.46); 3 specimens in alcohol (male and female) Chilka Lake Sta. 61 (2015.149.146–148).

This species has been cited in WoRMS as *Listriella chilkinsis* Chilton, 1921.

Moera incerta Chilton, 1883

= *Quadrimeaera incerta* (Chilton, 1883) Maeridae

Listed but not diagnosed, without locality (Chilton 1882c). Lyttelton Harbour (Chilton 1883b).

CMNZ. Syntypes: 5 specimens in alcohol in vial, stored with algal frond (Catalogue AQ 3278; 2015.149.149–153). No microslides located or catalogued.

Johns & Pollard (2002) incorrectly listed a holotype for *Maera* (sic) *incerta*. The genus name *Maera* Leach, 1814 misspelled by Chilton (1883b), (Krapp-Schickel & Ruffo 2000).

Moera festiva Chilton, 1885

= *Melita festiva* (Chilton, 1885) Melitidae

Australia. Sydney Harbour, several specimens (Chilton 1885c).

CMNZ. Syntypes: 2 specimens on 2 microslides '♂ + ♀ Type, Sydney' catalogued but currently missing; '*Melita festiva* (Chilton) cotypes ♂ + ♀ Sydney Harbour 1 .1.84' in alcohol (2015.149.154–155).

It is possible that an unreturned loan may contain other syntypes.

Neoniphargus westralis Chilton, 1925

= *Uroctena westralis* (Chilton, 1925) Paramelitidae

Australia. Darlington, Western Australia (Chilton 1925a, Williams & Barnard 1988).

WAM. Lectotype: WAM 10661 male, Darlington, Darling Ranges, WA. Paralectotypes: WAM 10661 7 specimens, Darlington, Darling Ranges,

WA, selected by Williams & Barnard (1988).

CMNZ. Paralectotypes: 14 microslides from 5 specimens variously labelled (2015.149.50–54); 3 specimens in alcohol, Western Australia (from G.E. Nicholls; 2015.149.156–158); 7 specimens, Darlington, W A Brook 'A' / L Glauert 15.ix.23 (2015.149.159–165); 4 specimens, Darlington, W A Brook 'B' / L Glauert 15.9.23 (2015.149.166–169).

Nicea egregia Chilton, 1882

= ? *Ceina egregia* (Chilton, 1882) Ceinidae

Described briefly from 'Lyttelton Harbour' ?material (Chilton 1882c). Described in detail later from material at 'Lyttelton Harbour. On seaweed, usually at roots of *Macrocystis*' (Chilton 1883b).

CMNZ. Syntype: 1 microslide. '*Nicea Ceina egregia*, Lyttelton ...of original specimen' (2015.149.47). Non-type. '*Nicea Ceina egregia*, Lyttelton ... of young male of specimen described in 1883' (2015.149.48).

The original genus name is crossed out on both microslides. The microslide card catalogue makes it clear that 2015.149.47 is a type specimen.

Niphargus australiensis Chilton, 1923

= *Victoriopisa australiensis* (Chilton, 1923) Eriopisidae

Australia. South-West Rocks, Trial Bay, New South Wales (Chilton 1923b, Karaman & Barnard 1979).

AM. Holotype: P.5852 (in alcohol); P.5852.001 (microslide).

CMNZ. No material located or catalogued.

Niphargus chilkinsis Chilton, 1921

= *Victoriopisa chilkinsis* (Chilton, 1921) Eriopisidae

India, Chilka Lake. Off Samal Island, 3–15 ft., 22-ix-13. One. / Off Barkul, 21-vii-13. Two. / One mile S. of Kalidai. Several. 4 to 9 miles E.½S. of Barkul bungalow. Several. / 3 to 2 miles S.E. by E.½S. of Patsahanipur. Four. 1 mile E. by N. of Patsahanipur. Five. / 2 miles E. by S.½S. of Patsahanipur. Several. / 1 to 9 miles N.E. by E.

of Kalidai. Several (Chilton 1921a, Karaman & Barnard 1979).

CMNZ. Syntypes: male K (5 microslides, 2015.149.55); ?male P (5 microslides, 2015.149.56); male H (3 microslides, 2015.149.57); fragments (1 microslide, 2015.149.58); 4 specimens in alcohol, Chilka Lake (2015.149.170–173).

Niphargus indicus Chilton, 1923

= *Indoniphargus indicus* (Chilton, 1923) Mesogammaridae

India. In Jamuria Colliery, 300 ft. deep, Asansol, Bengal (Chilton 1923a).

CMNZ. Syntypes: 5–7 syntypes on 7 microslides (2015.149.59–65), '*Niphargus indicus* Chilton sp nov. Jamuria Colliery, Asansol, Bengal'; 35 syntypes in alcohol (2015.149.174–208).

Niphargus philippensis Chilton, 1920

= *Flagitopisa philippensis* (Chilton, 1920) Eriopisidae

Philippines. From a well at Los Baños, Luzon. Collected by S. Lantican (Chilton 1920a, Sawicki et al. 2005).

CMNZ. Syntypes: female A (4 microslides, 2015.149.66); female B (4 microslides; 2015.149.67); various appendages (1 microslide, 2015.149.68); various appendages 'of cliff event specimens' (1 microslide, 2015.149.69); 12 specimens 'From a well at Los Banos, Luzon. Collected by S. Lantican sent by C.F. Bauer' (in alcohol; 2015.149.424–435).

Orchestia chiliensis gracilis Chilton, 1921

= *Transorchestia gracilis* (Chilton, 1921) Talitridae

Chile, Juan Fernandez Archipelago, Masatierra, Portezuelo, under stones 3.XII.16. S.P.E. No. 32. One male specimen only (Bousfield 1982, Chilton 1921c).

CMNZ. Holotype not located. Non-types: 9 slides from Masatierra with similar but non-identical data. One vial from Chile was found amongst 5 jars of *O. chiliensis* but this has very different data.

Orchestia bollonsi Chilton, 1909

= *Transorchestia bollonsi* (Chilton, 1909)
Talitridae

Bounty Islands, under guano (Dr L Cockayne, July 1903); Snares (Chilton, 11th November 1907) Type in the Canterbury Museum, Christchurch (Bousfield 1982, Chilton 1909b).

CMNZ. 4 potential holotypes in alcohol: '♂ and ♀, Bounty Islands, Type! D.L. Cockayne 1903' (2015.149.436–439). Also abundant non-type material in alcohol and on microslides.

Although Chilton cited a 'type' he did not separate a single specimen from the vial of four specimens.

Orchestia miranda Chilton, 1916

= *Transorchestia miranda* (Chilton, 1916)
Talitridae

Mr. T. B. Smith, of the Stephen Island Lighthouse, a large number of specimens (Bousfield 1982, Chilton 1916b).

CMNZ. 2 syntypes on 14 slides A₁-A₁₀ (2015.149.605), B₁-B₄ (2015.149.606); Syntypes in alcohol: 5 large males (2015.149.607–611); 29 medium-sized males (2015.149.612–640); 64 medium-sized females '? or *O. chiliensis*' (2015.149.641–704); 31 medium-sized males and females (2015.149.705–731).

Orchestia parva Chilton, 1909

= *Makawe parva* (Chilton, 1909) Talitridae

Several specimens from Norman's Inlet taken in company with *P. maynei* (J B Mayne); others under logs on Auckland Island (Professor W B Benham). Type in the Canterbury Museum. (Chilton 1909b, Duncan 1994).

CMNZ. Holotype: '*Parorchestia parva* Chilton, Auckland Island, C.P.I. expedition 1907, Type!' (in alcohol, abdomen missing; 2015.149.209). 5 microslides, A₁ to A₅, apparently from the holotype are currently missing.

Orchomenopsis (?) *coatsi* Chilton, 1912

= *Pseudorchomene coatsi* (Chilton, 1912)
Lysianassidae

Antarctica. Scottish National Antarctic

Expedition station 411, Coats Land, lat. 71°S, long. 22°W: 161 fathoms. 12th Mar 1904. Many specimens, about 13 mm long (Chilton 1912, De Broyeret al. 2007).

Royal Scottish Museum. Lectotype: 1921.143.938 (Lowry & Stoddart 1983)

AM. Paralectotype: P.32402.001 (microslide).

CMNZ. Paralectotypes: 2 specimens on 10 microslides (2015.149.70–71); specimens in alcohol 'Bottle 660' missing.

Panoploaea translucens Chilton, 1884

= *Whangarusa translucens* (Chilton, 1884)
Calliopiidae

Lyttelton Harbour. Three specimens taken in company with numerous specimens of *P. debilis* (Barnard & Karaman 1987, Chilton 1884a).

CMNZ. Syntypes: entire specimen labelled *Panoploea translucens* on 1 microslide (2015.149.74); 2 possible syntypes labelled *Apherusa translucens* male and female on 7 microslides (2015.149.72–73).

Paranaenia longimanus Chilton, 1884

= *Gammaropsis longimana* (Chilton, 1884)
Photidae

Lyttelton Harbour (Chilton 1884a).

CMNZ. No material located or catalogued.

Paranaenia typica Chilton, 1884

Photidae

Lyttelton Harbour (Chilton 1884a).

CMNZ. Syntypes: 2 specimens on 1 microslide (2015.149.75–76). No specimens in alcohol located or catalogued.

Parorchestia improvisa Chilton, 1909

= *Kanikania improvisa* (Chilton, 1909)
Talitridae

Snares, five female specimens (G R Marriner). Also found in Stewart Island. Type in Canterbury Museum (Chilton 1909b, Duncan 1994).

CMNZ. Potential holotype: in alcohol 'Type!, The Snares, C.P.I. Exped. 1907' (2015.149.210). 1 potential holotype on six microslides A₁-A₆ but not located.

The six microslides from one specimen have not been located [according to Duncan (1994) this specimen most closely resembles the original description]. The Snares and Stewart Island specimens have not been located either. Duncan (1994) described various specimens not from the original series as paratypes which they cannot be.

Parorchestia insularis Chilton, 1909

= *Makawe insularis* (Chilton, 1909) Talitridae
Campbell Island (Mr G R Marriner and Messers Des Barnes and Chambers), only a comparatively small number of specimens were actually secured. Type in the Canterbury Museum (Chilton 1909b, Duncan 1994).

CMNZ. Holotype: 'Type!, Campbell Island, C.P.I. Exped. 1907' in alcohol (2015.149.211); 1 microslide, 'Type, ♂, gn1 & gn2' (Tray 39, Microslide 7) from the same specimen is missing.

Hurley (1957) listed 'microslides CM1, CM2' as syntypes. He and Johns & Pollard (2002) were incorrect when they stated that there are syntypes.

Parorchestia maynei Chilton, 1909

= *Makawe maynei* (Chilton, 1909) Talitridae
Several specimens, both male and female. From Norman Inlet, Auckland Island (J B Mayne), and one male and two females from Disappointment Island (Professor W B Benham). To this species I refer also some female specimens collected on Adams Island at a height of 2000 ft. by Mr R Speight, and also others collected by myself on Auckland Island. Type in the Canterbury Museum (Chilton 1909b, Duncan 1994).

CMNZ. Holotype (male) and paratype (female) in alcohol (2015.149.212–213). Parts of holotype on 7 microslides currently missing.

The designation of the male as holotype is based on its slide catalogue card which states 'type ♂ A₁ to A₇'. Duncan (1994) stated that a holotype is present but did not label it, and implied that Hurley (1957) mentioned syntypes. Johns & Pollard (2002) incorrectly stated that a lectotype is present.

Phreatogammarus helmsi Chilton, 1918

Phreatogammaridae

Rona Bay, Wellington Harbour; Waikawa and Torea Bays, Queen Charlotte Sound; Kenepuru Sound (C Chilton); Greymouth (R Helms); Akaroa (C. Chilton). At the mouths of fresh-water streams near high water mark (Chilton 1918b).

CMNZ. Syntypes: 7 specimens on 9 microslides (2015.149.77–83). Material in alcohol 'Bottle 590' not located. For redescriptions of this species see Hurley (1954) and Chapman (2003).

Phreatogammarus propinquus Chilton, 1907

Phreatogammaridae

A small pool near the top of Mount Anglem, 2800 feet above sea-level, Stewart Island, New Zealand (J Crosby Smith), only one specimen (Chilton 1907).

CMNZ. Holotype: 1 microslide (2015.149.87), 'Type, ii.07', seen by Hurley (1954). Non-type: 'May 1921 C. Chilton', illustrated by Hurley (1954).

Podocerosopsis insignis Chilton, 1926

= *Gammaropsis insignis* (Chilton, 1926)
Photidae

Thailand. Talé Sap, Station 27. Four specimens (Chilton 1926a).

CMNZ. Syntypes not located. 2 non-types on 2 microslides from other stations: male *Podocerosopsis insignis* n.s. Tale Sap. Sta. 35; young male *Podocerosopsis insignis* n.s. Tale Sap. Sta. 36, 30.1.(19)16. No specimens in alcohol located or catalogued.

Podocerus frequens Chilton, 1883

= *Ventojassa frequens* (Chilton, 1883)
Ischyroceridae

Listed but not diagnosed, without locality (Chilton 1882c). Lyttelton Harbour (Barnard 1970, Chilton 1883b).

CMNZ. Syntypes: 1 male on microslide (2015.149.84); 1 female on microslide (2015.149.85); 1 sex unstated on microslide (2015.149.86). Non-types: The vial mentioned

in the entry for *Podocerus latipes* (see next) is considered to be a later collection and not part of the syntype series for *P. frequens*.

Podocerus latipes Chilton, 1884

= *Ventojassa frequens* (Chilton, 1883)
Ischyroceridae

Lyttelton Harbour (Barnard 1970, Chilton 1884a).

CMNZ. Possible syntypes. The only mention of this name found in catalogues or labels is a vial with a mix of *Podocerus frequens* and putative male *P. latipes*, 30 specimens in alcohol labelled '*Jassa frequens* (Chilton), ♂ *Podocerus latipes* Chilton, Lyttelton Harbour' (2015.149.575–604) (also see previous entry).

Platyschnopus neozelanicus Chilton, 1897

= *Otagia neozelanicus* (Chilton, 1897)
Otagiidae

Otago Harbour, New Zealand, only a single specimen taken by surface-netting on the night of September 19th, 1891 (Barnard & Karaman 1991, Chilton 1897, Hughes & Lörz 2013).

CMNZ. Holotype: 1 specimen on 2 microslides, both labelled 'Type!' (2015.149.88).

NIWA. Neotype [set aside]: NIWA 85992, South Taranaki Bight, south of Hawera, New Zealand.

Hughes & Lörz (2013) assumed that Chilton's type material was lost and erected a neotype from South Taranaki, New Zealand. Following ICZN Article 75.8 this neotype designation must be set aside.

Syndexamine carinata Chilton, 1914

Dexaminidae

Oamaru, on East Coast of South Island of New Zealand, four specimens; one small immature specimen from Lyttelton Harbour (Chilton 1914).

CMNZ. Syntype: 1 specimen on 6 microslides, 'Type!' (2015.149.89). Potential syntypes (in alcohol) 'Oamaru, N.Z.' missing from empty Chilton jar 601.

Talorchestia sinensis Chilton, 1925

= *Sinorchestia sinensis* (Chilton, 1925)

Talitridae

China. 'Recently received from Professor S. F. Light, University of Amoy ... both specimens were males' (Chilton 1925c, Hisashi & Hiroshi 1999).

CMNZ. Syntype: male on 2 microslides, '*Talorchestia sinensis* n.s.', catalogued in microslides as 'ant, gn, prp' (2015.149.1862). Potential syntype specimens in alcohol missing, empty vial labelled 'Kulangu Is. Amoy, China. S F Light [Type – see microslides]'

Chilton (1925c) did not specify a type locality, only from whom he received the two specimens.

Teraticum typicum Chilton, 1884

= *Seba typica* (Chilton, 1884) Sebidae

Lyttelton Harbour. Three specimens only (Chilton 1884a).

CMNZ. Syntypes: 2 specimens on microslides 11 (2015.149.1868) and 12 (2015.149.1869), the former 'type'. The microslide catalogue states 'These are the two specimens originally described as *Teraticum typicum* Chilton. Microslide 12 was sent to M. Chevreux about 1898 for comparison with *S. armata*, was damaged in transit and remounted in Edinburgh'.

Thaumatelson inermis Chilton, 1912

= *Prothaumatelson nasutum* (Chevreux, 1912) Stenothoidae

South Atlantic. South Orkneys, Scotia Bay. Station 325; 9–10 fathoms. April and May 1903. Several specimens, the largest 3 mm. long (Chilton 1912, Krapp-Schickel 2006).

CMNZ. No material located or catalogued.

The deposition of the specimen was not mentioned. Likely depositories include Scottish museums.

Thaumatelson walkeri Chilton, 1912

= *Antatelson walkeri* (Chilton, 1912)
Stenothoidae

South Atlantic. South Orkneys, Scotia Bay. Station 325. April and May 1903. Several specimens, the largest 3 mm. long (Chilton 1912, Krapp-Schickel 2006).

CMNZ. No material located or catalogued.

The deposition of the specimen was not mentioned. Likely depositories include Scottish museums.

Isopoda

Actaecia opihensis Chilton, 1901

Scyphacidae

Timaru, under seaweed at high water mark (Chilton 1901, Schmidt 2002).

CMNZ. Syntypes: 3 specimens on microslides, 'Actoecia [sic] opihensis Chilton, Timaru N.Z.' (2015.149.1773–1775). No material in alcohol located or catalogued.

Anthura affinis Chilton, 1883

= *Mesanthura affinis* (Chilton, 1883)

Anthuridae

Listed without description from Lyttelton Harbour (Chilton 1882c). Lyttelton Harbour. Found on seaweed at low tide (Chilton 1883b).

CMNZ. Syntypes: 1 specimen 'Anthura affinis Chilton Lyttelton, N.Z. C.C.' illustrated by Poore & Lew Ton (1986) (in alcohol; 2015.149.214); 1 specimen on 2 microslides, Lyttelton (2015.149.1776).

Barnard (1925) reported seeing 'two of Chilton's cotypes of *A. affinis*,' sent to him in Cape Town and his label '=Haliophasma maculata Has. [undecipherable] K.H.B.' is in the tube. Johns & Pollard (2002) incorrectly listed a holotype.

Anthura (?) flagellata Chilton, 1882

= *Paranthura flagellata* (Chilton, 1882)

Paranthuridae

Lyttelton, single specimen (Chilton 1882b) [February 1882]; (Chilton 1882b) [May 1882] (Barnard 1925).

CMNZ. Holotype: entire specimen on 1 microslide (2015.149.1777). Non-type in alcohol: Lyttelton Harbour, C(has) C(hilton), figured by DCH (2015.149.370).

Barnard (1925) reported seeing 'male cotypes from Chilton' who sent him material. These cannot be types since a single specimen was reported in the first, albeit brief, description.

Barnard (1925) incorrectly synonymised this with *Paranthura ciliata* Whitelegge, 1901 (Poore 1984).

Armadillo hamiltoni Chilton, 1901

= *Coronadillo hamiltoni* (Chilton, 1901)

Armadillidae

Petane, near Napier (A Hamilton), only the dried specimen originally described and figured, but not named, by Mr Thomson (Chilton 1901, Vandel 1977)

CMNZ. Holotype: 1 microslide, 'Petane Napier A. Hamilton' (2015.149.1778).

Armadillo macmahoni Chilton, 1901

= *Sphaerilloides macmahoni* (Chilton, 1901)

Armadillidae

Kenepuru, Malborough, in the bush (MacMahon) (Chilton 1901, Vandel 1977).

CMNZ. Syntypes: 22 specimens in alcohol, 'Cubaris macmahoni Chilton, Kenepuru, J. Macmahon, [Co-types]' (2015.149.215–236). No microslides located or catalogued.

Cassidina pulchra Chilton, 1924

Sphaeromatidae

India. Chilka Lake. Eight miles W. by S. of Breakfast Island. One specimen. / Off Samal Island, 8-15 ft. Several specimens (Chilton 1924).

CMNZ. Syntypes: 1 specimen on 3 microslides 'Cassidina pulchra Chilton n.s. Chilka Lake' (2015.149.1779); 'ser. No. 4 - 4 specimens' in alcohol (2015.149.2–5).

Cirolana nigra Chilton, 1924

= *Anopsilana willeyi* (Stebbing, 1904)

India, Chilka Lake. Chirriya Island, 2 specimens. / Maludai Kuda Island, several. / Barkul Point, 4 specimens. / Found along with the terrestrial isopod, *Alloniscus pigmentatus*, B. L., under stones at the edge of the lake (Bruce 1986, Chilton 1924).

CMNZ. 4 syntypes Chilka Lake sta. 5 (in alcohol; 2015.149. 243–246); 1 potential syntype on microslide 'dissection' catalogued as tray 29 not located. No details of localities of stations given in this paper nor in introduction to Chilka Lake

survey by Annandale & Kemp (1915).

Cruregens fontanus Chilton, 1882

Paranthuridae

Pump at Eyreton, North Canterbury (Chilton 1882d) [February 1882]; later described in detail (Chilton 1882e) [May 1882].

CMNZ. Syntypes: 3 or more syntypes on 10 microslides (2015.149.1780–1789). 45 syntypes in 3 vials in alcohol 'Eyreton (in wells)' 2015.149.736–739; 2015.149.740–749; 2015.149.750–780). Non-types: One specimen, Waddington, in well 18 feet deep W Deans Aug 1922 (2015.149.781).

Johns & Pollard (2002) incorrectly referred to a holotype from Eyreton.

Cubaris claytonensis Chilton, 1917

Armadillidae

Australia, South Australia: Clayton Creek, 2 specimens; Higgins Dam, 1 specimen (Chilton 1917c).

CMNZ. No material located or catalogued.

Cubaris helmsianus Chilton, 1917

= *Merulana helmsiana* (Chilton, 1917)

Armadillidae

Australia. Barrington Tops, (4,600 feet), NSW (C Hedly); Mount Kosciusko, (R Helms). (Chilton 1917d, Green et al. 2002)

CMNZ. Syntypes: 2 specimens in alcohol, 'Mt Kosciusko, R. Helms, 1889' (2015.149.6–7). 1 syntype on microslide '*Cubaris helmsianus* ♂, Kosciusko, p¹ p² p³' catalogued as 'prp of type of Haploph. h(elsmii)' (2015.149.1820)

AM. Syntypes: Mount Kosciusko, P.4077; Mount Kosciusko, P.4084.001 (microslide); Barrington Tops: P.4078 (3 syntypes).

Cubaris milleri Chilton, 1917

= *Coronadillo milleri* (Chilton, 1917)

Armadillidae

Under the bark of fallen logs in the bush, Levin, Wellington, 8 specimens (Chilton 1917a, Taiti et al. 1998, Vandel 1977).

CMNZ. Syntype: 1 microslide 'D. Miller 1916

Levin' (2015.149.1791); 6 syntypes in alcohol (2015.149.237–242).

Cubaris suteri Chilton, 1915

= *Coronadillo suteri* (Chilton, 1915)

Armadillidae

Henderson, Auckland, a single specimen (H. Suter) (Chilton 1915b, Taiti, Paoli & Ferrara 1998, Vandel 1977).

CMNZ. Holotype: 'H. Suter Henderson Auckland', 1 microslide [antenna of holotype] and in alcohol 'Type!' [left antenna missing] (2015.149.258).

Cymodocea cordiforaminalis Chilton, 1883

= *Dynamenella cordiforaminalis* (Chilton, 1883) Sphaeromatidae

Lyttleton Harbour (Chilton 1883d, Hurley & Jansen 1977).

CMNZ. Syntypes: 1 syntype, abdomen only, on 1 microslide, 'Lyttleton, pleon of type' (2015.149.805); 23 specimens in alcohol, Lyttleton (2015.149.782–804).

Johns & Pollard (2002) incorrectly listed a holotype.

Exosphaeroma parva Chilton, 1924

Sphaeromatidae

India, Chilka Lake. Maludai Kuda Island, 2 specimens. / off Samal Island, 8–15 ft. Several specimens. / Rambha. 22-9-13, several specimens (Chilton 1924).

CMNZ. Syntypes: 1 specimen on 3 microslides 'Chilka Lake'; 5 specimens in alcohol 'Chilka Lake ser. No. 5' (2015.149.247–251).

Haloniscus searlei Chilton, 1920

Oniscidea Chrinocheata incertae sedis

Australia. Lake Corangamite, Victoria (in salt water), March April 1918, eight in number (Chilton 1920b, Schmalfuss 2003).

CMNZ. Syntypes: male 'a' on 6 microslides (2015.149.1793); 5 specimens in alcohol [AFD reported these 'could not be located by Williams (1970)'] jar 47 (2015.149.252–256).

NMV. Syntypes: Lake Corangamite, Victoria,

04/1918, J1650 (2 syntypes); J1651 (3 syntypes).

Together, the material from the two museums totals more than the eight specimens cited by Chilton (1920b).

Haplophthalmus australis Chilton, 1909

= *Notoniscus australis* (Chilton, 1909)
Styloniscidae

Campbell Island, on decaying wood and at roots of plants. Type in Canterbury Museum, New Zealand (Chilton 1909b, Chilton 1915b, Vandel 1952).

CMNZ. Holotype: specimen A, body and dissected limbs, on 3 microslides labelled 'Notoniscus australis (Chilton) cotype! female Campbell Island Nov 1907' (2015.149.1794). Other material: entire specimen on microslide labelled 'Notoniscus australis (Chilton) Campbell Island N.Z. 1907' (2015.149.1795). 6 specimens in alcohol labelled 'Notoniscus australis Campbell Island 1907' (2015.149.259–264); 2 specimens in alcohol labelled 'Haplophthalmus australis Campbell Island C.P.I. [Canterbury Philosophical Expedition] Exped 1907' (2015.149.265–266).

Haplophthalmus helmsii Chilton, 1901

= *Notoniscus helmsii* (Chilton, 1901)
Styloniscidae

Greymouth. A single specimen collected by R Helms (Chilton 1901, Chilton 1915b, Vandel 1952).

CMNZ. Holotype: 'Notoniscus helmsii (Chilton) [=Haplophthalmus helmsii Chilton] Greymouth (R. Helms) Type! ix.1888" in alcohol with pereopods on 1 microslide (2015.149.257).

Haplophthalmus tasmanicus Chilton, 1915

= *Notoniscus tasmanicus* (Chilton, 1915)
Styloniscidae

Australia. Under rotten logs, Fern Tree Gully, Hobart, Tasmania; collected by Dr Dendy in 1889, only a single specimen (Chilton 1915b, Green 1961).

CMNZ. Holotype: specimen in alcohol and microslide labelled 'Haplophthalmus tasmicus [sic] Chilton ant prp of Type!' (2015.149.258).

Hemiporcellio strzelecki Chilton, 1917

= *Agnara strzelecki* (Chilton, 1917) Agnaridae
Australia, South Australia. Strzelecki Creek, 2 specimens (Chilton 1917c, Schmalzfuss 2003).

CMNZ. No material located or catalogued.

SAM. Syntype: male, Strzelecki Creek, South Australia

Idotea festiva Chilton, 1885

= *Takearana festiva* (Chilton, 1885) Idoteidae
Sumner, Canterbury, New Zealand. A single specimen, taken on the under surface of a boulder exposed at low tide (Chilton 1885a). (Poore & Hurley 2015)

CMNZ. Holotype: Sumner (2015.2.267; was dry on microslide but transferred to alcohol in the past). Non-type: New Brighton E W Bennett 2 Jul 1927 (2015.149.268)

Jaera novae-zelandiae Chilton, 1883

= *Jaera novaezelandiae* Chilton, 1883
Janiridae

Lyttleton Harbour (Chilton 1883d)

CMNZ. No type material located or catalogued. Two vials of unidentified *Jaera* sp. from Akaroa and Port Chalmers cannot be types.

Jaeropsis neo-zelandica Chilton, 1892

= *Joeropsis neozelandica* Chilton, 1892
Joeropsididae

Akaroa: a single specimen on the under-surface of a stone exposed at low tide. Lyttleton: a single imperfect specimen forwarded by Mr R M Laing (Chilton 1892b).

CMNZ. Syntype: 1 entire specimen on microslide 'Jaeropsis curvicornis (Nicolet) Akaroa = Jaeropsis neozelandica Type' on oval and square Chas. Chilton labels (2015.149.1797).

Chilton (1892b) misspelled the genus name.

Janira longicauda Chilton, 1884

= *Iathrippa longicauda* (Chilton, 1884)
Janiridae

Lyttleton Harbour. A single specimen (Chilton 1884a).

CMNZ. Non-type: specimen B (4 microslides labelled *Iathrippa longicauda*; 2015.149.1798). Other specimens missing from empty Jar 177 (in alcohol).

The fact that the only material in the collection is labelled 'specimen B' indicates that it is not the holotype.

Janira neglecta Chilton, 1909

= *Ianiropsis neglecta* (Chilton, 1909) Janiridae

Carnley Harbour, Auckland Islands, 2 fathoms (Professor W B Benham); also known from Port Chalmers, and from Lyall Bay, Wellington, New Zealand (Chilton 1909b).

CMNZ. Syntypes: 1 specimen on 1 microslide, Carnley Harbour (2015.149.1799); 1 specimen on 1 microslide, Port Chalmers (2015.149.1800); 1 specimen on 2 microslides (2015.149.1801), Port Chalmers; 1 specimen in alcohol, Port Chalmers (2015.149.269)

Limnoria segnis Chilton, 1883

Limnoriidae

Listed but not diagnosed as 'Found on seaweed, Lyttelton Harbour' (Chilton 1882c). Described from material 'On seaweed, Lyttelton Harbour' (Chilton 1883b).

CMNZ. Syntypes: 105 specimens in 3 vials; 3 specimens in microvial 'Co-types' (2015.149.806–808); 13 specimens, Telson and parts of one ♀ figured RJ Menzies 1950 (2015.149.898–910); 89 specimens in alcohol; (2015.149.809–897); whole specimen mounted under circular coverslip on microslide with round label (2015.149.911); dissected specimen 'A' mounted under round coverslip (2015.149.912). 3 non-types on microslides with square white 'Chas. Chilton' labels labelled '*Limnoria segnis* Chilton / Lyttelton Hr' with no date, ii.03 or iii.03 respectively (2015.149. 913–915).

Munna neozelanica Chilton, 1892

Munnidae

Port Chalmers and Brighton, New Zealand, between tide-marks (Chilton 1892a) [Jan 1892]. Redefined as *Munna neo-zelanica* citing type

locality as 'Port Chalmers and Brighton, near Dunedin, between tide-marks' (Chilton 1892b) [May 1892].

CMNZ. Syntypes: 7–8 syntypes on 16 microslides with circular labels 'Port Chalmers' (2015.149.916–923); many specimens in alcohol 'Port Chalmers, N.Z. C.C. 11.xi.89' (2015.149.924–1015).

Oniscus kenepurensis Chilton, 1901

= *Phalloniscus kenepurensis* (Chilton, 1901) ?Oniscidae

Kenepuru (J. McMahan) (Bowley 1935, Chilton 1901, Schmalfuss 2003, Wahrberg 1922).

CMNZ. Syntypes: ant prp on microslides (2015.149.1802); male dissection on microslides 'Marlborough' (2015.149.1803). No type material in alcohol.

Paravireia typicus Chilton, 1925

Sphaeromatoidea incertae sedis

In freshwater, The Horns, Waipuru Creek, Chatham Islands, G E Archey 25 Jan 1924, 5 specimens (Chilton 1925b). Systematic position discussed by Brökeland et al. (2001).

CMNZ. Syntypes: 1 male on 6 microslides (2015.149.804); 1 syntype of unknown sex in alcohol (many appendages removed; 2015.149.270).

Johns & Pollard (2002) incorrectly listed a holotype.

Philougria otakensis Chilton, 1901

= *Styloniscus otakensis* (Chilton, 1901) Styloniscidae

Widely distributed throughout the South Island, New Zealand, in damp situations (Chilton 1901, Green 1971, Vandel 1952).

CMNZ. Syntypes: female on 3 microslides, '*Trichoniscus otakensis* Chilton. Mihiwaka, N.Z. 26.v.90' (2015.149.1805); 3 microslides, 'Dunedin, N.Z.' (2015.149.1806–1808); female and young on 4 microslides, 'Flagstaff Hill, Dunedin, 30.xi.87' (2015.149.1809). 7 specimens in alcohol 'Styloniscus otakensis Heathcote Estuary' (2015.149.271–277); 36 specimens in alcohol 'Flagstaff Hill Dunedin

N.Z.' (2015.149.278–313); 3 specimens in alcohol 'Hooker Valley Suter' (2015.149.314–316); 14 specimens 'Keneperu J. McMahon' (2015.149.317–330).

Philougria marina Chilton, 1884

= *Deto marina* (Chilton, 1884) Detonidae

Australia. In rock-pools at Coogee, NSW, considerable numbers (Budde-Lund 1904, Chilton 1884b).

CMNZ. Syntypes: 3 microslides, 'Deto marina (Chilton) Coogee Bay, Sydney 1884' (2015.149.1810); '?immature 1.1.84' (2015.149.1811); 'female with eggs 31.xii.83' (2015.149.1812); 39 syntypes in alcohol 'Coogee Bay, 31.xii.83' 2015.149.331–369).

Philougria thomsoni Chilton, 1885

= *Styloniscus thomsoni* (Chilton, 1885) Styloniscidae

Spar bush, Southland (Chilton 1885b) redescribed as *Philygria thomsoni* by Chilton (1886); (Green 1971, Vandel 1952).

CMNZ. Syntype [labelled as such on card catalogue]: whole specimen on 1 microslide; prp on microslide, '*Trichoniscus thomsoni* Chilton Spar Bush, Southland (2015.149.1813)'. Abundant non-type material determined as *T. thomsoni* by Chilton from other localities in New Zealand in alcohol and on microslides.

Philoscia oliveri Chilton, 1911

= *Okeaninoscia oliveri* (Chilton, 1911) Philosciidae

Expedition Hill and Mount Junction, Sunday Island; several specimens from each locality (Chilton 1911a, Vandel 1977).

CMNZ. Syntype: 1 syntype on 4 microslides 'Kermadecs, W.R.B. Oliver, 1908' (2015.149.1814). No type specimens in alcohol located or catalogued.

Phreatoicus assimilis Chilton, 1894

= *Neophreatoicus assimilis* (Chilton, 1894) Phreatoicidae

Winchester, South Canterbury, in wells (D L Inwood) (Chilton 1894, Nicholls 1944).

CMNZ. Syntypes: male A on 16 microslides (3 microslides located 2015.149.1815, 13 slides missing), Winchester; female on 1 microslide missing. No material in alcohol located or catalogued.

Phreatoicus australis Chilton, 1891

= *Metaphreatoicus australis* (Chilton, 1891) Phreatoicidae

Australia. Mount Kosciusko Plateau – at Piper's Creek, about 5,700 feet above sea-level (Chilton 1891, Nicholls 1944).

CMNZ. Syntypes: Mt. Kosciusko, Australia, dried specimen on 1 microslide (2015.149.1816); mouthparts on 1 microslide (2015.149.1817); male γ , 1 of 3 microslides (2015.149.1818); male α , 7 microslides (not located); female δ , 3 microslides (not located).

AM. Syntypes, all from Mount Kosciusko National Park, upper Pipers Creek: G.5407 (5 specimens with 1 microslide); P.682 (5 specimens); P.683.001 (specimen on 11 microslides); P.3347 (110 specimens, some sent to Western Australian Museum and to South Australian Museum in 1936); P.3347.001 (SEM stub). Possible syntypes: P.7930 (117 specimens), Thompsons Plain.

NMV. Syntypes: J212 (3 syntypes) Mt K[osciusko], New South Wales.

Phreatoicus kirkii Chilton, 1906

= *Notamphisopus kirkii* (Chilton, 1906) Phreatoicidae

Fresh-water lagoon on Ruapuke Island (Chilton 1906, Nicholls 1944).

CMNZ. Syntype: Ruapuke Is., 1 microslide missing. Label in empty jar.

Phreatoicus kirkii var. *dunedinensis* Chilton, 1906

= *Notamphisopus dunedinensis* (Chilton, 1906) Phreatoicidae

Streams at Mosgiel and Woodhaugh, near Dunedin (Chilton 1906, Nicholls 1944).

CMNZ. Syntype: Dunedin, 1 microslide missing. Potential syntypes in alcohol missing from empty jar 40.

Phreatoicus latipes Chilton, 1922

= *Phreatomerus latipes* (Chilton, 1922)
Amphispodidae

Australia. In hot water from Marree (Hergott) bore, and in springs and streams near Coward, Central Australia. Collected by Professor F Wood Jones, Adelaide University (Chilton 1922, Sheppard 1927).

CMNZ. Syntypes: Marree Bore, Central Australia, young on 2 microslides (2015.149.1819–1820); male A on 4 microslides not located; female B on 3 microslides not located. Label in empty jar.

Phreatoicus typicus Chilton, 1883

Phreatoicidae

Pump at Eyreton, single specimen, then six other specimens (Chilton 1883c)

CMNZ. Lectotype: specimen in alcohol (CMNZ catalogue IZ 3550; 2015.149.371). 2 paralectotypes in alcohol (CMNZ catalogue IZ 3549; 2015.149.372–373); designated by Wilson & Fenwick (1999). Other paralectotypes not seen by Wilson and Fenwick (1999): Eyreton, dried whole female, 1 microslide (2015.149.1821); females A and B on 10 microslides currently missing.

Phreatoicus wianamattensis Chilton, 1918†

= *Protamphisopus wianamattensis* (Chilton, 1918) Phreatoicidae (fossil species)

Australia. Wianamatta Shale of St. Peter's Brickworks, Newtown, Sydney, New South Wales, 14 specimens figured (Chilton 1918a, Nicholls 1943).

AM. Lectotype: block 236a, F.16970, specimen "a", CN#6 designated by Wilson & Edgecombe (2003). Paralectotypes: F.16970.

BMNH. Lectotype: block 235a, IN34996, counterpart of 236, specimen "a". Paralectotypes: IN34993, IN18485, IN34996, IN34991, IN34995, IN34994, IN34992.

CMNZ. Paralectotypes on 5 blocks not listed by Wilson and Edgecombe (2003). All blocks are catalogued as Ffc 265. Chilton (1918b) numbered four blocks in red ink: 241a and 241b (2015.149.1863), 211 (2015.149.1864), and 215 (? difficult to read; 2015.149.1865). The

fifth block (2015.149.1866) does not have a red number. Figures 2 and 3 in Chilton (1918a) are from Block 241a. These numbers include ones that were reported as missing by Wilson & Edgecombe (2003). Wilson & Edgecombe (2003) designated a lectotype and paralectotypes from the same series and mentioned other material. Canterbury Museum specimens were not listed in Bradshaw et al. (1992), possibly because these specimens seem to have been previously stored with non-fossil invertebrates.

Plakarthrium typicum Chilton, 1882

Plakarthriidae

Found on brown seaweed at Lyttelton (Chilton 1882c). Described later in detail from 'Lyttelton Harbour. On stems of a brown seaweed, probably *Ecklonia radiata*' (Chilton 1883b).

CMNZ. Syntype: 1 specimen on 2 microslides, body (dried) and antennae (mounted) (2015.149.1822). Non-types: Various specimens in alcohol, none confirmable as syntypes.

Pseudosphaeroma campbellense Chilton, 1909

Sphaeromatidae

Perseverance Harbour, Campbell Island (November, 1907). Numerous specimens taken on the shore, at the mouth of a small fresh-water stream, in company with *Exosphaeroma gigas*; Auckland Island (Dr L Cockayne, 1903). Type in Canterbury Museum, New Zealand (Chilton 1909b).

CMNZ. Potential holotypes: 1 specimen in alcohol, Campbell Island; 'Type presumed, dissected by Chilton, from Cm but probably from Campbell Is series, no label in tube, Drawn by N L Bruce' (2015.149.1016); Campbell Island xi 07, 2 tubes, 1 with one specimen, (2015.149.1018), other with 205 (2015.149.1019–1223); 5 specimens in alcohol, Campbell Is, New Zealand on shore at mouth of small freshwater stream, coll. by C Chilton Canterbury Museum Nov 1907, 2 males, 2 females, 1 juvenile [label written by G C B Poore, ?1990, presumably transcribed from original] (2015.149.1224–1228); 10 specimens, Campbell Island, Perseverance Harbour, C, P. I. Exped. 1907 'Genosyntypes' (2015.149.1229–1238); 11 specimens, Auckland

Is, L Cockayne, vii.03 (2015.149.1762–1772); Male potential holotype on 3 slides, A₁-A₃, plus female co-collected specimen on 2 slides currently missing.

Rocinela simplex Chilton, 1926

= *Alitropus typus* H. Milne Edwards, 1840
Aegidae

Thailand. Talé Sap, Stations 23 (1 female 16 mm long, 1 male, 13 mm and several immature), 6 (1 female 14 long), 8 (1 immature), 31 (several, all immature, the smallest 5 mm long, the largest 11 mm), 25 (3 immature), 9 (one immature, 4.5 mm long, 2 mm broad) (Bruce 1983, Chilton 1926b).

CMNZ. Syntypes not located or catalogued.

Scyphoniscus magnus Chilton, 1909

Detonidae

Campbell Island, abundant on the shore of Perseverance Harbour about high-water mark; Ewing Island, Dr L. Cockayne). Type in Canterbury Museum, New Zealand (Chilton 1909b, Schmidt 2002).

CMNZ. Potential holotypes in alcohol: Ewing Island Dr Cockayne vii.03 4 specimens (2015.149.1720–1724); Campbell Island C.P.I. Exped. 1907 'syntypes' on large paper label, 4 specimens (2015.149.1725–1728); Campbell Island xi.07 33 specimens (2015.149.1729–1761); male, Campbell Is 'A' on 2 microslides (2015.149.1823); female 'A', Campbell Island xi.07, on 3 microslides (2015.149.1824); male, Campbell Island (appendages on microslide) (2015.149.1825).

Scyphoniscus waitatensis Chilton, 1901

Detonidae

Blueskin Bay, Otago, under seaweed, &c. at high-water mark, a few small specimens (Chilton 1901, Schmidt 2002).

CMNZ. Syntypes: 4 microslides '*Scyphoniscus waitatensis* Chilton Waitati, N.Z.' The exact number of specimens mounted on microslides is impossible to determine (2015.149.1826–1829); 9 specimens labelled '*Scyphoniscus waitensis* [sic] Chilton Type! Waitate, Otago' in alcohol

(2015.149.374–382).

Serolis bakeri Chilton, 1917

= *Serolina bakeri* (Chilton, 1917) Serolidae

Australia. Encounter Bay, 20–30 fathoms, 2 males, 3 females with eggs (Dr J. C. Verco) (Chilton 1917b, Poore 1987).

CMNZ. Syntype: Encounter Bay, 20–30 f. South Australia, prp on 1 microslide (2015.149.1830); 1 syntype in alcohol, ovigerous female, 'co-type', Encounter Bay, 20–30 fathoms, Dr J C Verco (2015.149.383).

SAM. Syntypes: C383–384 1 male, 2 females, Encounter Bay, South Australia.

Scutuloidea maculata Chilton, 1882

Sphaeromatidae

Timaru and at Lyttelton (Chilton 1882c) and described in detail from 'Timaru, among seaweed at north side of the breakwater; Lyttelton Harbour' (Chilton 1883b).

CMNZ. Syntypes: 13 specimens in alcohol, '*Scutuloidea maculata* Lyttelton - Type' (2015.149.384–396). Non-type: 1 specimen on 3 microslides, Lyttelton 1906 (2015.149.1831).

Johns & Pollard (2002) incorrectly stated there was a holotype for this species and reported the locality as Timaru.

Sphaeroma (?) *egregia* Chilton, 1892

= *Cymodocella egregia* (Chilton, 1893)
Sphaeromatidae

Akaroa: two or three specimens only (Chilton 1892b, Hurley & Jansen 1977).

CMNZ. Syntype: 1 syntype on 2 microslides '*Dexamine* (?) *egregia*, Akaroa' including whole body (dried); 2015.149.1832). The corresponding slide catalogue entry states '*Cymodocella*, Akaroa, Type of *Dexamine*(?) *egregia*, Chilton (slides) 15 & 16'.

Hurley & Jansen (1977) followed Hutton (1904) who placed this species in *Cymodocella* Pfeffer, 1887; they erroneously listed Island Bay as type locality. Johns & Pollard (2002) listed this as a primary type but they may not have sighted specimens at that time (P M Johns, pers.

comm.). They also separately listed a holotype from Akaroa for *Dexamene* (sic) *egregia* Chilton. Chilton's label '*Dexamine*', an amphipod genus name, is possibly a lapsus for *Dynamene*, another sphaeromatid genus similar to *Cymodocella*. Both belong in the Dynameniinae.

Stenetrium fractum Chilton, 1884

= *Tristenium fractum* (Chilton, 1884)
Stenetriidae

Lyttleton Harbour, single specimen (Chilton 1884a, Serov & Wilson 1995).

CMNZ. Holotype: specimen 'A' on 2 microslides (body; ant gnath), catalogued as 'type' (2015.149.1833).

Trichoniscus commensalis Chilton, 1910

= *Styloniscus commensalis* (Chilton, 1910)
Styloniscidae

New Plymouth and Mount Egmont, in nests of *Amblyopone cephalotes* and *Hubena striata* (W W Smith); Rai Valley, in nests of ants (J MacMahon). Probably widely distributed in the North Island and in the north-western portion of the South Island (Chilton 1910, Green 1971, Vandel 1977).

CMNZ. Syntypes: 1 specimen, dissected on 2 microslides, '*Trichoniscus commensalis* Chilton, Rai Valley Marlborough. J. McMahon 1902' (2015.149.1239); microslide with leg fragments without coverslip (2015.149.1240); 398 specimens in alcohol, '*Trichoniscus commensalis* Chilton, Rai Valley. J. McMahon 1902' (2015.149.1241–1638).

Trichoniscus kermadecensis Chilton, 1911

= *Styloniscus kermadecensis* (Chilton, 1911)
Styloniscidae

Four specimens, labelled 'Fresh-water stream, Sunday Island' (Chilton 1911a, Vandel 1977).

CMNZ. Syntype: 1 microslide, 'prp 7, W.R.B. O[liver] 1908' (2015.149.1836).

Trichoniscus phormianus Chilton, 1901

= *Styloniscus phormianus* (Chilton, 1901)
Trichoniscidae

Very common all over Canterbury, frequently

found on the dead decaying leaves of the New Zealand flax (*Phormium*), and always in damp situations. Also from Dunedin, Kenepuru, Greymouth (Chilton 1901, Vandel 1952).

CMNZ. Syntype: 1 specimen on 2 microslides, Canterbury (2015.149.1867). No syntypes in alcohol located or catalogued.

Tylos neozelanicus Chilton, 1901

Tylidae

Lyall's Bay, Wellington (R.M. Laing), 'Wellington, under tussocks near the beach' (G.M. Thomson) (Chilton 1901).

CMNZ. Syntypes: 2 specimens on 5 microslides, 'Wellington, N.Z. G.M. Thomson' (2015.149.1834–1835); 3 specimens in alcohol 'Wellington (Beach), G.M. Thomson' (2015.149.397–399); 3 specimens in alcohol 'Lyall's Bay, Wellington 'Wanganui', R.M. Laing' (2015.149.400–402).

Tanaidacea

Apseudes chilensis Chilton, 1924

= *Ctenapseudes chilensis* (Chilton, 1924)
Parapseudidae

India, Chilka Lake. 1–3 miles S.E. by E. ½ E. of Patsahanipur. Three specimens. / 1 mile E. by N. of Patsahanipur. Many specimens. / 2–6 miles E. by S. ½ S of Patsahanipur. Several specimens. / Nalbano Island, Chilka Lake. Several specimens. 'Stomach of *Trygon imbricata*'. / Station 158. 'Chief food of *Trygon imbricata*.' Several specimens. / Off Barkul, Chilka Lake. Three specimens. / Off Samal Island, 8–15 feet. One specimen. (Chilton 1924).

CMNZ. Syntypes: specimen C on 3 microslides (2015.149.1839); specimen F on 2 microslides (1840); male J on 4 microslides (2015.149.1841); male K on 3 microslides (2015.149.1842); male cheliped (2015.149.1843); 6 specimens on 6 microslides (2015.149.1844–1849); 81 specimens in alcohol 'Chilka Lake sta. 61' (2015.149.1639–1719).

Apseudes latus Chilton, 1884

Apseudidae

Lyttelton Harbour. A single specimen found creeping in mud at the root of some seaweed (Chilton 1884a).

CMNZ. Holotype on 1 slide 'Lyttelton'; catalogue entry states '*Apseudes latus* Chilton, Lyttelton, Type' (2015.149.1850). Non-type material from Port Jackson.

Apseudes sapensis Chilton, 1926

= *Ctenapseudes sapensis* (Chilton, 1926)
Parapseudidae

Thailand. Talé Sap, Stations 5 (several specimens), 6 (1), 8 (many), 9 (5), 11 (1), 21 (5), 23 (several), 31 (5), 37 (several) (Bamber et al. 1997, Chilton 1926b).

CMNZ. Syntypes: 12 specimens, sta.8 Tale Sap Siam (in alcohol; 2015.149.403–414); specimen P (2015.149.1851); specimen Q (2015.149.1852) specimen R (2015.149.1853); specimen S (2015.149.1854); 5 specimens on 5 microslides from Stations 8, 25 or 31 (2015.149.1855–1859).

Apseudes timaruvia Chilton, 1883

= *Apseudomorpha timaruvia* (Chilton, 1883)
Metapseudidae

Timaru, single specimen (Chilton 1883a).

CMNZ. Holotype: 1 microslide gnathopod only card catalogue states 'cheliped of type. This is the only part of the type preserved – the rest being used for dissection and sacrificed'; 2015.149.1860); One jar of non-type material (Jar 170).

Paratanais ignotus Chilton, 1885

= *Leptochelia ignota* (Chilton, 1885)
Paratanaididae

Australia, collected in early January, from seaweed, &c., growing on the rocks exposed at low tide near the point known as Lady Macquarie's Chair, in Sydney Harbour (Chilton 1885c).

CMNZ. Syntypes: entire animals on 1 microslide, Sydney I.I.[18]84. Catalogue card indicates type. No specimens in alcohol located or catalogued.

AM. Neotype [set aside]: P.85770, Port Jackson, Quarantine Bay, NSW.

Edgar (2012) assumed that Chilton's type material was lost and erected a neotype from a nearby locality in Sydney Harbour. Following ICZN Article 75.8 this neotype designation must be set aside.

Decapoda

Elamena (?) lacustris Chilton, 1882

= *Amarinus lacustris* (Chilton, 1882)
Hymenosomatidae

Lake Pukuke, Auckland (Chilton 1882b) [February 1882]; later described in detail (Chilton 1882a) [May 1882].

CMNZ. Syntype: 1 specimen in alcohol (2015.149.415).

Johns & Pollard (2002) incorrectly listed this as the holotype of *Hymenosoma lacustris* Chilton, 1882.

Eupagurus norae Chilton, 1911

Replacement name for *Eupagurus edwardsii* Filhol, 1885 (preoccupied) = *Diacanthurus spinulimanus* (Miers, 1876) Paguridae

As a replacement name no types are expected (Chilton 1911b). No material of this species known at CMNZ.

Hymenicus marmoratus Chilton, 1882

= *Halicarcinus varius* (Dana, 1851)
Hymenosomatidae

Lyttelton Harbour (Chilton 1882b) [February 1882]; later described in detail (Chilton 1882a, Poore et al. 2016).

CMNZ. Syntypes: male, 3 females (in alcohol; 2015.149.416–419).

Iconaxiopsis kermadecensis Chilton, 1911

= *Dorphanaxius kermadecensis* (Chilton, 1911) Axiidae

Several specimens from Meyer Island and Coral Bay; others from rock pools at Sunday Island, collected by Captain Bollons (Chilton 1911a, Poore & Collins 2009).

CMNZ. 4 Syntypes: '53. Meyer Island. 2 rockpools, 19.5.08 W.R.B. Oliver' (2015.149.420–423).

BMNH. Syntypes: 1912.5.25.44–46 (fragments of 5 chelipeds, 1 body with only abdominal segments identifiable, 1 body with anterior carapace, 1 right uropod; annotated 'Cotypes Pres. Prof. Chilton. The specimens came back from Godstowe very macerated—only fragments left. I. G[ordan] v/46'). New Zealand, Kermadec Islands, Meyer I. and Coral Bay, rock pools at Sunday I. [= Raoul I.] (29°16'S, 177°55'W), Captain Bollons.

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