

Captain F.W. Hutton's Bryozoans of New Zealand

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1. Captain F.W. Hutton (1836–1905)

Frederick Wollaston Hutton (1836–1905; Figure 1A) was born on 16th November 1836 at Gate Burton, Lincolnshire, England, the second son of the Rev. Henry Frederick Hutton, rector of Spridlington, Lincolnshire and his wife Louisa (Mason 2014), and educated in Southwell, Nottinghamshire and the Naval Academy in Gosport, Hampshire. After serving briefly as a midshipman in the mercantile marine (1851), he studied applied science at King's College, London and later served in the Royal Welsh Fusiliers in the Crimean and Indian wars (1855–1859), though he kept up his interest in geology (Thomson 1885). By 1860, Captain Hutton was back in England and at Sandhurst Staff College and was elected a Fellow of the Geological Society of London. In 1862 he was promoted to Captain (by purchase) while serving with the regiment, the 23rd Foot.

On 4th February 1863 Frederick married Annie Gouger Montgomerie at Trinity Church, Paddington (the service was conducted by the Rev. H.W. Hutton—probably his uncle), and later in 1865 or 1866 (Thomson 1885) he retired from the military. The following year he travelled with his wife and their first two children to New Zealand, where his interest in geology soon found him employed by the Geological Survey and at

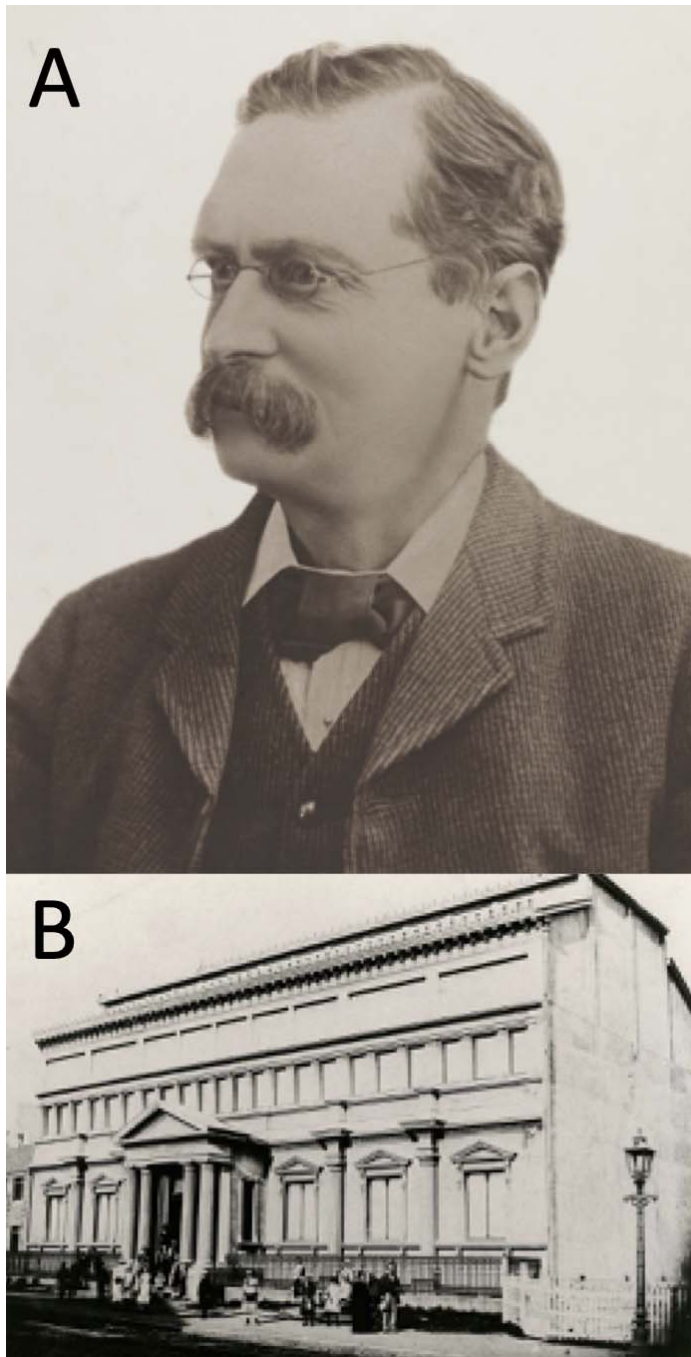


Figure 1. A. Frederick Wollaston Hutton (1836–1905). B. Otago Museum, Dunedin, New Zealand, founded in 1868. This building was completed in 1877, and the photo dates from around 1885. Courtesy of Hocken Collections - Uare Taoka o Hakena, University of Otago.

the Colonial Museum in Wellington. In 1874 he was appointed provincial geologist of Otago, in which capacity he lectured in geology at the University of Otago and was the founding (1868) Curator of the Otago Museum in Dunedin, where he oversaw the construction of a new building (Figure 1B) that opened in 1877 (and remains the location of the current Museum). He was appointed Professor of Biology at Canterbury College (now University of Canterbury) in 1880, and later Curator of the Canterbury Museum. In 1892 he was elected Fellow of the Royal Society, nominated by Australian chemist Archibald Liversidge (1847–1927), New Zealand geologist Sir James Hector (1834–1907), New Zealand naturalist and printer William Colenso (1811–1899) and others, and in 1903–1904 he was the founding President of the New Zealand Institute. Hutton died on a ship sailing from England to New Zealand on 27 October 1905 and he was buried at sea near Cape Town (Liversidge 1905). He is commemorated in the New Zealand Royal Society “Hutton Medal” (earth, plant and animal sciences award for outstanding work by a researcher in New Zealand) and in the scientific names of many creatures, ranging from freshwater fish *Gobiomorphus huttoni* (Ogilby) to Hutton’s Shearwater *Puffinus huttoni* Matthews (Parton 1993).

Hutton is one of the founders of natural science in New Zealand (Dawson 1994; Russell 1996), renowned for his reports—620 of them (Dawson, 1994)—on goldfields, fossils, fauna of New Zealand, and geology of the South Island and Stewart Island. He described many marine and terrestrial New Zealand animals, particularly snails (Hutton 1873; Marshall 1995) and fish (Russell 1996), culminating in his *Index Faunae Novae Zealandiae* (Hutton 1904). He is also notable in being the first scientist working in New Zealand to discuss and support Darwin’s theory of natural selection in conversation and in print (Stenhouse 1990).

2. From New Zealand to London

Hutton retained a strong connection to Britain through his memberships of the Geological Society of London and the Zoological Society of London. At that time, it was common for colonial museums to send duplicates, exchanges, or even type material to Britain or Ireland. Much of Hutton’s collection lodged in the Natural History Museum in London (NHMUK) dates from a shipment in 1874 (Brown 1952). Hutton noted in a letter to J.E. Gray (NHM Archives letter DF200/4) that “a great many of these are types of my new species.” Russell (1996) described neglect, poor storage, and careless transport as having damaged and destroyed many of Hutton’s fish types lodged in New Zealand, so that the London material is sometimes all that remains. Large numbers of fish specimens were sent from the Otago Museum both to the Natural History Museum, London and to the Smithsonian Institution in Washington, D.C. (Russell 1996). The Natural History Museum catalogue reveals that amphibians, birds, fish, snakes, molluscs, sponges and bryozoans were all received from Hutton (registered under 1875.1.5.1-129 and 1875.1.12.1-11). Bryozoa were registered as “1875.1.5.” followed by numbers below 83.

In October 1946, Mr David A. Brown (a native New Zealander who was working with bryozoans at the Natural History Museum, London towards his Ph.D. at the Imperial College in London) wrote to the New Zealand Geological Survey asking for the types of Hutton's species. A note dated 1946 in the Register at NHMUK (possibly in Anna B. Hastings' handwriting) states "they replied that there are none of Hutton's Polyzoa in the Museum at Wellington." Gray's copy of Hutton's 1873 catalogue contains a pencil note on the front page which states that some of Hutton's material found its way to the Berlin Museum, but only molluscs. Brown (1952, p. 6) later commented that the NHMUK specimens were better labelled and curated than material in the Dominion Museum (now Te Papa Tongarewa National Museum of New Zealand) of New Zealand, and he designated lectotypes. It appears that he did not know about Hutton's material at Otago Museum.

Examination of bryozoan material in the four largest museums in New Zealand—Auckland War Memorial Museum (AM), Te Papa Tongarewa National Museum of New Zealand (NMNZ) in Wellington, Canterbury Museum in Christchurch (CM) and Otago Museum in Dunedin (OM)—revealed that at least some of Hutton's material, including types, are lodged at Otago Museum and Te Papa Tongarewa National Museum of New Zealand. Alongside the NHMUK material, many of the types of Hutton's bryozoans have been found.

3. Hutton's Bryozoans

Hutton's first foray into the Bryozoa (or Polyzoa as he termed them) appeared in his 1873 *Catalogue of the Marine Mollusca of New Zealand* (Hutton 1873). He listed 91 species, of which 26 were newly described. In 1877 he published 23 corrections and additions, including three new species (Hutton 1877). Hutton (1878) listed 24 bryozoan species from South Australia, describing six new species, two of which are still valid (Gordon and Parker 1991). In his *Manual of the New Zealand Mollusca* (Hutton 1880), some 101 bryozoans (as Polyzoa) were listed, and a further four species described. This list was revised ten years later (Hutton 1891), tallying 133 species in New Zealand, and Hutton stated that "a nearly complete collection of my types has also been submitted to Miss Jelly for comparison and identification..." In fact, he delayed publication of that list of New Zealand bryozoans in order to have Jelly's (1889) work before him. In the same introduction (Hutton 1891, p. 102), he noted "that several of my new species of 1873 have been redescribed and renamed by Mr Hincks or Mr Waters. In all these cases my names must be taken as synonyms, for the descriptions were not accompanied by figures." Hutton's final list, with additions and modifications, was included in the *Index Faunae Novae Zealandiae* (a complete list of all the animals recorded so far in New Zealand) (Hutton 1904). Bryozoa (Polyzoa) occupied pages 293 to 299, with a total of 160 species (126 cheilostomes, 29 cyclostomes, 2 ctenostomes, 2 phylactolaemates, and 1 entoproct) listed.

Through the three decades and five publications (see reference list) in which he worked on bryozoans, Hutton frequently changed his mind as to the identity of various New Zealand species. To his credit, he was ruthless in discarding his own names in favour of earlier authors when appropriate. In total, 259 species are mentioned in all five of his bryozoan lists (Appendix Table).

4. Catalogue of Hutton's New Zealand Bryozoans

Hutton described over 30 new bryozoan species from New Zealand (Hutton 1873, 1877, 1880), of which 25 are considered valid. We list here his New Zealand species in taxonomic order by their most current names, and provide a brief synonymy, including especially all of Hutton's references. We give Hutton's description and lists of where his (and other) New Zealand material can be found, as well as updated distribution information, and comments. Where possible we provide images of the type material and accompanying labels.

Phylum Bryozoa

Class Gymnolaemata Allman, 1856

Order Ctenostomata Busk, 1852

Family Flustrellidridae Bassler, 1953

Elzerina binderi (Busk, 1861)

Farciminaria binderi Busk, 1861, p. 156.

Muscaria armata Hutton, 1873, p. 93 [*Muscaria* gen. nov.]: Hutton 1880, p. 186; 1891, p. 107.

Flustrella binderi (Busk, 1861): Hutton 1891, p. 107; Hamilton 1898, p. 197; Hutton 1904, p. 293.

Flustrellidra binderi (Busk, 1861): Macken 1958, p. 103.

Elzerina binderi (Busk, 1861; Cook 1964, p. 294 (cum syn.))

Description: "Branches robust, flattened; cells oval, convex, arranged in longitudinal rows which are divided by elevated ridges; cells in the same series contiguous; a long curved smooth spine by the side of every alternate cell; aperture small, transverse, oval, the lower lip prominent. Avicularia — — (?). Polyzoarium about an inch in height, brown. When viewed by transmitted light, pale brown, with the lips of the aperture dark brown. Motanau [sic]. On the roots of *Boltenia pedunculata*." (Hutton 1873, p. 93).

Material: Holotype of *Elzerina binderi* is NHMUK 1890.8.27.3 Busk Collection, a specimen from Kirchenpauer, locality Sydney, Australia.

The type of *M. armata* Hutton could be NMNZ PZ.000002, a bushy colony loose in a small plastic box (Figure 2A). See also NHMUK 1875.1.5.62, a (paratype?) Hutton specimen

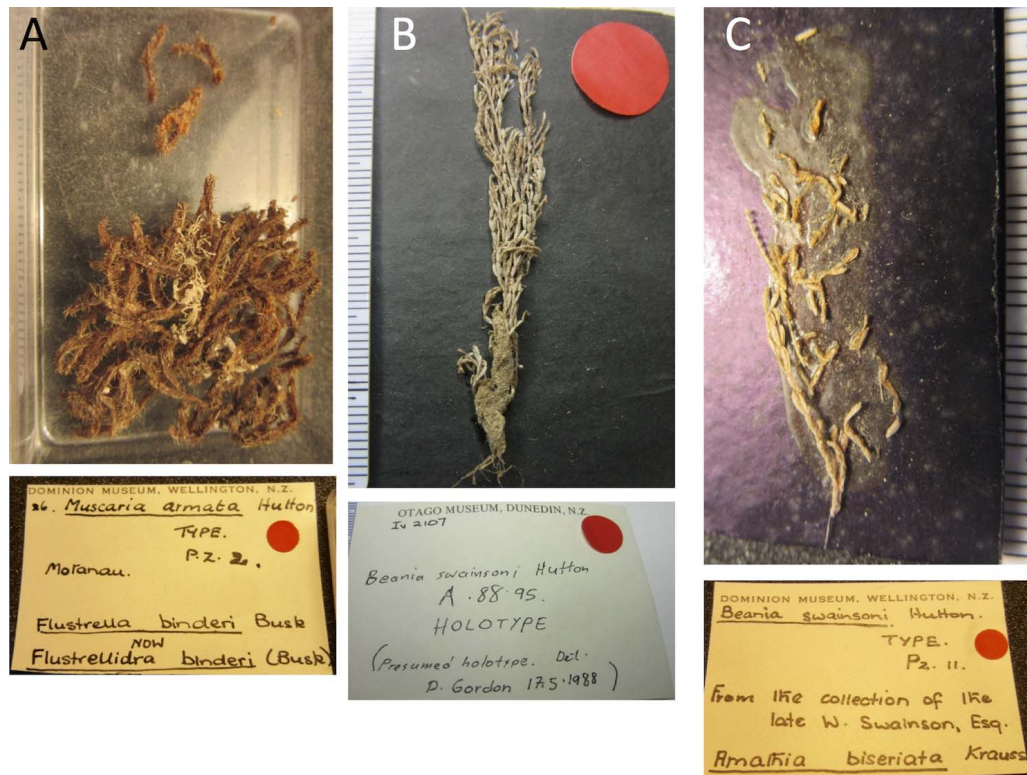


Figure 2. Type specimens of A. *Muscaria armata*, PZ.000002, National Museum of New Zealand; B. *Beania swainsoni*, A.88.95, Otago Museum; C. *Beania swainsoni*, PZ.000011, National Museum of New Zealand. Scale bars are in mm.

sent on exchange. NHMUK also has 1886.11.17.2 and others from New Zealand (Cook 1964).

Comments: Busk (1861) credited the species to Harvey (who named an alga with the same species name) but without a published reference (p. 156). Cook (1964) and Cook et al. (2018) report *E. binderi* from the Sydney area and New Zealand from the Wairarapa southwards. Hamilton (1898) found it in Napier, Wellington, Dunedin and Foveaux Strait. This species is common enough in New Zealand nearshore waters (Probert et al. 1979) to be figured and described by in a recent field guide to the New Zealand seashore (Carson & Morris 2017, pp. 265 and 269).

Family Vesiculariidae Hincks, 1880.

Amathia biseriata Krauss, 1837

Amathia biseriata Krauss, 1837, p. 23.

Beania swainsoni Hutton, 1873, p. 91: Hutton 1880, p. 185.

Amathia swainsoni (Hutton, 1873): Hutton 1891, p. 107 [after consultation with E.C.

Jelly]; Hamilton 1898, pp 194, 197; Hutton 1904, p. 294.

Amathia biseriata Krauss, 1837: Macken 1956, p. 19, figs 1–2; Gordon & Spencer Jones 2013, pp. 83–86, figs 14–18.

Description: “Polyzoarium erect, phytoid, dichotomously branched, sub-corneous; cells sub-continuous, one arising from the top of another; costae eight to twelve. From the collection of the late W. Swainson, Esq.” (Hutton 1873, p. 91).

Material: Holotype (presumed, det. D. Gordon & P. Taylor 1988): Otago Museum A.88.95 card-mounted specimen (Figure 2B). (Although Dennis Gordon and Paul Taylor examined this material together (D. Gordon, pers. comm.), all the labels only say D. Gordon).

The existence of that holotype means that the lectotype of Macken (1956) cannot stand; it is located in the Museum of New Zealand Te Papa Tongarewa, specimen NMNZ PZ.000011, card-mounted (Fig. 2C); PZ.000014 *Beania swainsoni* has no locality given but presumably is from Cook Strait, dried but now in 70% ethanol.

Otago Museum: A.88.96 welled cardboard slide; no locality but presumably from Dunedin area (Gordon & Spencer Jones 2013).

NHMUK: three specimens from New Zealand (Busk Coll. 1899.7.1.4319, 4400, 4401) with no obvious connection with Hutton (see Gordon & Spencer Jones 2013).

Comments: William John Swainson (1789–1855)—not to be confused with New Zealand’s second Attorney General William Swainson (1809–1884)—was an English naturalist who travelled the world collecting insects, plants, fish, and birds. He emigrated to New Zealand in 1841, possibly being the first Fellow of the Royal Society to move there, and established a home in the Hutt Valley, from which he collected local material until his death in 1855. Gordon and Spencer Jones (2013) point out that this species has not been recorded in New Zealand in the 20th or 21st centuries. It does occur in Australia (Cook et al. 2018, p. 51).

Order Cheilostomata Busk, 1852

Family ?Membraniporidae Busk, 1852

Membranipora brunnea Hutton, 1873

Membranipora brunnea Hutton, 1873, p. 96.

Membranipora brunnea Hutton, 1873: Hutton 1880, p. 190; Hutton 1891, p. 104; Hutton 1904, p. 296.

Original Description: “Cells broadly oval, with a single spine at the centre of each side projecting over the front; ovicells flattened with a median ridge; a cup-shaped avicularium on each side just below it. Brown. On *Turritella rosea*.” (Hutton 1873, p. 96).

Material: None found.

Comments: WORMS correctly lists this as *species inquirenda*. The description doesn’t obviously correspond to known New Zealand anascans. Whereas *Retevirgula acuta*

(Hincks, 1885) has a single spine either side of the opesia (Gordon 1986, p. 30 and plate 4), the colony is not brown and the other stated characters do not coincide. In the absence of figures or type material, we cannot know what species was intended by Hutton.

Family Foveolariidae Gordon & Winston *in* Winston, 2005

Odontionella tessellata (Hutton, 1873)

Membranipora tessellata Hutton, 1873, p. 96; Hutton 1880, p. 190; Waters 1881, p. 329.

Odontionella cyclops var. *tessellata*: Brown 1952, p. 83.

Foveolaria (*Odontionella*) *cyclops*: Gordon 1986, p. 36, plate 8B–E. Non *Odontionella cyclops* (Busk, 1854).

Description: “Cells oval, arrangement quincunc [sic], front rounded above with the sides and bottom flat, margin rough with short projecting denticulations; interspaces granular; ovicells flat, granular. Common; incrusting dead shells, &c.” (Hutton 1873, p. 96).

Material: Type of *Membranipora tessellata*: NMNZ PZ.000007, large colony encrusting an old piece of *Celleporaria agglutinans* (Figure 3A). Possible syntype: NMHUK1875.1.5.68 sent by Hutton on “colonial exchange.”

Also: NMHUK1875.1.5.29, 1875.1.5.34; OM A.88.145.

Comments: *M. tessellata* has frequently been regarded as synonymous with *Odontionella cyclops* (Busk, 1854) (see synonymy). Thanks to the courtesy of Dr Paul D. Taylor, who examined the lectotype of *O. cyclops* (NHMUK 1854.11.15.220), it is apparent that *O. tessellata* is distinguished most readily by the presence of short gymnocystal projections encroaching above the proximal end part of the membranous frontal wall. The species is encrusting and erect, foliose and branching. Secondary calcification, which is aragonitic, can be extremely variable (Smith & Girvan 2010). *O. tessellata* is more southern in its distribution compared to *O. cyclops*.

Family Macroporidae Uttley, 1949

Macropora grandis (Hutton, 1873)

Lepralia grandis Hutton, 1873, p. 98; Hutton 1880, p. 193; Hutton 1891, p. 104.

Lepralia urceolata Hutton, 1873, p. 97; Hutton 1880, p. 192; Hutton 1891, p. 104.

Monoporella crassatina Waters, 1882, p. 270 pl. VII, fig. 8; Hutton 1891, p. 104; Hamilton 1898 p. 195; Hutton 1904, p. 297.

Macroporina grandis (Hutton, 1873): Uttley 1949, p. 178 pl, 39, figs 1–2,

Macropora grandis (Hutton, 1873): Brown 1952, p. 135, figs 78–79; Gordon 1970, p. 313; Uttley & Bullivant 1972, p. 25; Gordon 1984, p. 57; Gordon 1986, p. 73.

Descriptions:

L. urceolata: “Cells large (.04 inch), ovate, ventricose immersed behind; surface finely granular without any pores; mouth simple, scarcely thickened, sub-orbicular, lower lip

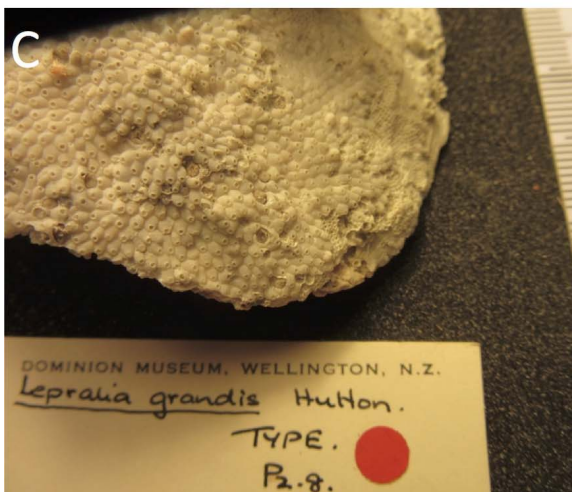
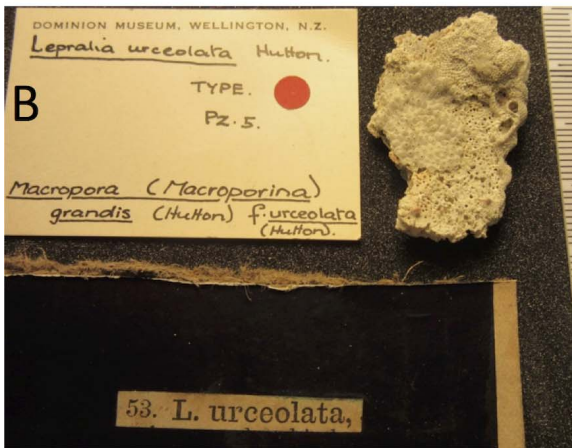


Figure 3. Type specimens of A. *Membranipora tessellata*, PZ.000007, National Museum of New Zealand; B. *Lepralia urceolata*, PZ.000005, National Museum of New Zealand; C. *Lepralia grandis*, PZ.000008, National Museum of New Zealand. Scale bars are in mm.

straight; from four to seven spines on the upper margin. On dead shells.” (Hutton 1873, p. 97)

L. grandis: “Cells large (.04 inch), ovate, ventricose; surface shining, sub-granular often with one or two longitudinal wrinkles, and with distant pores; mouth simple, slightly thickened, sub-orbicular, with the lower lip flattened; ovicell ?. Pale brown. Common on dead shells.” (Hutton 1873, p. 98)

Material: Type specimens: NMNZ PZ.000005 *L. urceolata* (Figure 3B) and PZ.000008 *L. grandis* (Figure 3C). In both cases dry, encrusting on shell, not mounted. Brown (1952) chose as lectotype NHMUK 1875.1.5.27, but it can now only be a syntype. See also NHMUK 1875.1.5.24 (part). There are plenty of specimens in the NIWA invertebrate collections (see Gordon 1984, 1986).

Comments: This species really is “*grandis*” with zooids easily visible to the naked eye. Distribution New Zealand.

Family Catenicellidae Busk, 1852

Pterocella scutella (Hutton, 1880)

Catenicella alata Hutton, 1873 p. 89 (non Thomson (1858, p. 80, pl. 6, fig. 4)).

Catenicella scutella Hutton, 1880, p. 181 (nom. nov. for *C. alata* Hutton, non Thomson): Hutton 1891, p. 103; Hamilton 1898, p. 194; Hutton 1904, p. 294.

Pterocella scutella (Hutton, 1880): Gordon 1989, pp. 22–23.

Description: “Cells ovate, narrowed below; lateral processes projecting horizontally and forwards from the whole length of the cell; mouth round, simple, with a thickened rim, placed in the upper part of the cell; surface smooth, with a single median pore (fenestra?) and occasionally another on each side of it. Lyall Bay.” (Hutton 1873, p. 89).

Material: Lectotype: Otago Museum A 88.86 designated by D. P. Gordon (Figure 4A). Invertebrate collections at NIWA from various places in New Zealand, see Gordon (1989)

Comments: Gordon (1989) noted that Hutton’s original specimen of *C. scutella* from Lyall Bay is not lodged at NMHUK or Te Papa NMNZ—but that he found it in the Otago Museum collection and designated specimen A.88.86 the lectotype. Gordon (1989) points out that this specimen is Busk’s *Catenicella carinata* (Busk 1852; MacGillivray 1879) which was later called *Pterocella harmeri*, but that *scutella* is the senior synonym. Gordon (1989) lists the distribution of *Pterocella scutella* as Three Kings, Napier, Wanganui, Cook Strait, Fiordland, Stewart Island; 24–220 m. Also Victoria, Bass Strait. World Register of Marine Species list gives this species as “(Hutton, 1891)” but it should be “(Hutton, 1880)”.

Family Hippothoidae Busk, 1859

Antarctothoa buskiana (Hutton, 1873)

Diachoris buskiana Hutton, 1873, p. 94.



Figure 4. Type specimens of A. *Catenicella alata*, A.88.86, Otago Museum; B. *Diachoris buskiana*, A.88.104, Otago Museum; C. *Diachoris buskiana*, PZ.000004, National Museum of New Zealand. Scale bars are in mm.

Diachoris buskiana Hutton, 1873: Hutton 1880, p. 188.

Diachoris buskiana Hutton, 1873: Jelly 1889, p. 228.

Schizoporella hyalina (Linnaeus, 1767): Hutton 1891, p. 106; Hutton 1904, p. 297.

Celleporella buskiana (Hutton, 1873): Gordon et al. 2009 p. 291; OM specimen labelled by D. Gordon 1988.

Antarctothoa buskiana (Hutton, 1873): Bock & Gordon 2019a; Gordon 2020, p. 471.

Description: “Cells semi-erect, membranous, oval, open in front; mouth circular, with a projecting lower lip, and often a small nodule in the centre; nodule and lower lip granulated, the rest finely transversely striated; connecting tubular processes short, about eleven to each cell. Lyall’s Bay. Encrusting seaweeds, loosely attached.” Hutton, 1873, p. 94.

Material:

Lectotype (here designated): Otago Museum A88.104—encrusted seaweed glued to card (Figure 4B).

Paralectotypes: NMNZ PZ.000004, tiny fragments in glue on a card (Figure 4C); NHMUK 1875.1.5.78, split into two boxes—second box says it is *Schizoporella hyalina* var. *discreta*.

Comment: Our choice of lectotype is the largest and most complete specimen in a New Zealand-based collection (Otago Museum), and it was from Dunedin that Hutton sent syntype material to London. Named after George Busk.

***Antarctothoa cancer* (Hutton, 1873)**

Lepralia cancer Hutton, 1873 p. 97.

Lepralia cancer Hutton, 1873: Hutton 1880, p. 192.

Lepralia cancer Hutton, 1873: Jelly 1889, p. 228.

Schizoporella hyalina var. *cornuta* Busk, 1854 (BMC ii p. 84): Hutton 1891, p. 106.

Hippothoa cancer (Hutton, 1873): note in NHM catalogue.

Celleporella cancer (Hutton, 1873): Gordon et al. 2009, p. 291.

Antarctothoa cancer (Hutton, 1873): Hughes et al. 2008; Bock and Gordon 2019b; Gordon 2020, p. 472.

Hippothoa cornuta var. *holostoma* Levinsen, 1909, p. 278, pl. 21, fig. 8.

Description: “Cells ovate, sub-immersed, separated by depressed lines; surface coarsely granular; lower lip produced into a mucronate hollowed process, which covers the mouth, and is transversely striated; a short blunt incurved spine on each side of the mouth; in the fertile cells the lower lip is not mucronate but rounded, and the spines are absent; ovicells globose, coarsely granular. Lyall’s Bay. On *Fuci*.” (Hutton 1873, p. 97).

Lectotype (here designated): OM A.88.110 an encrusted alga glued to card (Figure 5A).

Paralectotypes: OM A88.111; NHMUK 1875.1.5.22 dry slide sent by Hutton.

Comments: Distribution Wellington, Napier, Leigh.

Family Arachnopusiidae Jullien, 1888***Arachnopusia unicornis* (Hutton, 1873)**

Eschara unicornis Hutton, 1873 p. 99.

Eschara unicornis Hutton, 1873: Hutton 1880, p. 194; Hutton 1891, p. 106; Hutton 1904, p. 298.

Cribrilina monoceros (Busk, 1879): Waters 1887, p. 52; Hamilton 1898, pp. 196, 198.

Arachnopusia unicornis (Hutton, 1873): Brown 1952, p. 175; Brown 1954, p. 424; Uttley & Bullivant 1972, p. 22; Gordon 1984, p. 69; Gordon 1989, p. 28.

Description: “Polyzoarium expanded; cells short with a few large pores on the surface; interstices finely granulated; mouth sub-orbicular, flattened below, lower lip produced into a rather incurved spout; a single spine on the right or left side of the mouth.” Hutton, 1873, p. 99).

Material: Lectotype chosen by D. Brown (1952, p. 175): NMNZ PZ.00006 (Figure 5C).

Paralectotype (det. D. Gordon May 1988): Otago Museum A88.126 (Figure 5B).

Other: OM specimen A88.67.

NIWA invertebrate collections have many specimens of this species (see Gordon, 1989).

Comments: Common throughout New Zealand. NMHUK material of this species mainly comes from Australia. Very variable in appearance.



Figure 5. Type specimens of A. *Lepralia cancer*, A.88.110, Otago Museum; B. *Eschara unicornis*, A.88.126, Otago Museum; C. *Eschara unicornis*, PZ.000006, National Museum of New Zealand. Scale bars are in mm.

Family Romancheinidae Jullien, 1888

Escharoides angela (Hutton, 1873)

Lepralia angela Hutton, 1873, p. 96.

Lepralia angela Hutton, 1873: Hutton 1880, p. 191

Lepralia variolosa Hutton, 1873 p. 97: Hutton 1880, p. 191.

Mucronella praestans Hincks, 1882 p. 168: Waters 1881, p. 329; Hutton 1891, p. 105; Hamilton 1898, p. 195.

Escharoides angela (Hutton, 1873): Brown 1952, p. 298 cum syn.; Gordon 1984, p. 71; Gordon 1989, p. 31.

Description: "Cells ovate, immerse, with radiating grooves; mouth cub-orbicular, the lower lip prolonged into a deep spout-like projecting sinus; a spoon-shaped avicularium on each side just below the mouth, directed horizontally outwards; ovicell large, globose, granular." (Hutton 1873, p. 96).

Material: Lectotype: NHMUK 1875.1.5.28 specimen was mentioned by Waters 1881 p. 329, and then chosen as lectotype by Brown (1952 p. 298).

NHMUK 1946.9.2.1 is identified as *Mucronella angela* Hutton; collection locality unknown,

Numerous samples in NIWA invertebrate collections (see Gordon 1984, 1989)

Comments: Bright orange in life, common in the NZ intertidal. Endemic to NZ; distribution from Kermadec Ridge to Fiordland and Foveaux Strait (Gordon 1989).

***Hippomenella vellicata* (Hutton, 1873)**

Lepralia vellicata Hutton, 1873, p. 98.

Lepralia vellicata Hutton, 1873: Hutton 1880, p. 193.

Lepralia rectilineata Hincks, 1883, p. 201: Hutton 1891, p. 105.

Hippomenella vellicata (Hutton, 1873): Brown 1952, pp. 278–281, figs 209–210; Gordon 1984, p. 77; Gordon et al 1994, p. 245.

Description: “Cells immersed, areolate; mouth higher than broad, rounded at the top and contracted in the middle, the lower lip arched slightly upwards and raised; ovicell globose, areolate.” (Hutton 1873, p. 98).

Material: Lectotype of Brown (1952) NHMUK 1875.1.5.23 two pieces.

Paralectotype Otago Museum A.88.109, det. D. Gordon May 1988, dried on card (Figure 6A).

NHMUK 1875.1.5.30 on a shell is also from Hutton. Material in NIWA invertebrate collection (Gordon 1989).

Comments: This is the “cornflake coral” that is common on Otago shelf and elsewhere in New Zealand. Distribution from Three Kings to Otago, also Tertiary fossil in New Zealand, Juan Fernandez Island (Brown 1952; Gordon 1984).

Family Smittinidae Levinsen, 1909

***Parasmittina delicatula* (Busk, 1884)**

Hemeschara fairchildi Hutton, 1873, p. 100 (part).

Smittia unispinosa Waters, 1889, p. 15: Hutton 1891, p. 105; Hamilton 1898, p. 195.

Smittina unispinosa (Waters, 1889): Brown 1952, p. 327–329 cum syn.

Parasmittina unispinosa (Waters, 1889): Powell 1967, p. 330.

Mucronella delicatula Busk, 1884, p. 156

Parasmittina delicatula (Busk, 1884): Gordon 1984, p. 95, pl. 35A; Gordon & Mawatari 1992, p. 33; Gordon & Mills 2016, p. 32.

Description “Cells ovate, immersed, granular, punctured round the edge; mouth simple, lower lip straight or with a sinus; occasionally with an avicularium on one side of the mouth; ovicell globose, granular. White. Cook Strait. Forming an easily detached crust on dead shells.” (Hutton 1873, p. 100).

Material: The type of *Parasmittina delicatula* (Busk) is NHMUK 1887.12.9.620 in the Challenger Collection, collected in Honolulu, Hawaii.

NHMUK 1875.1.5.32 comprises two specimens sent by Hutton, who seems to have described them both as *H. fairchildi*. Brown (1952) selected one as the lectotype for *Smittina* (now *Hippomonavella flexuosa*); and the other was re-registered as *Smittina unispinosa* Waters, NHMUK 1947.9.10.1. The former specimen (NHMUK 1875.1.5.32)



Figure 6. Type specimens of A. *Lepralia vellicata*, A.88.109, Otago Museum; B. *Eschara flexuosa*, A.88.127, Otago Museum. Scale bars are in mm.

was designated by Brown as the lectotype for *Hemeschara fairchildi* (Brown, 1952, p. 326).

Otago Museum has a specimen of *P. delicatula* from St Vincent's Gulf, South Australia A88.172, coll. B. Tate and sent to Hutton for identification.

Comments: Encrusts shells, rocks, piles, but comes off easily. Found throughout NZ, Australia, Hawaii, Japan (Gordon & Mills 2016). "*Fairchildi*" might refer to Capt. John Fairchild (?–1898), master of several government steamers in New Zealand during the 1800s.

Family Bitectiporidae MacGillivray, 1895

Hippomonavella flexuosa (Hutton, 1873)

Eschara flexuosa Hutton, 1873, p. 99.

Eschara flexuosa Hutton, 1873; Hutton 1880, p. 184.

Lepralia flexuosa (Hutton, 1873): Hamilton 1898, p. 195; Hutton 1904, p. 297.

Smittina flexuosa (Hutton, 1873): Brown 1952, pp. 325–326 cum syn.; Macken 1958, p. 105.

Hippomonavella flexuosa (Hutton, 1873): Gordon 1989, p. 56, pl. 29E.

Description: “Foliaceous, infundibuliform, much waved, springing from a broad base; cells elongated, granular, separated by one or two rows of pores; mouth transverse, oval; a large spoon-shaped avicularium in the centre, below the lower lip.” (Hutton 1873, p. 99)

Material: Lectotype by Brown (1952) is Hutton’s NHMUK 1875.1.5.32 A, selected for *Smittina* (now *Hippomonavella*) *flexuosa*.

Paralectotype: Otago Museum A88.127, a small dry piece in a cardboard slide. Labelled by D. Gordon & P. Taylor May 1988 (Figure 6B).

NIWA invertebrate collections, see Gordon (1989).

Comments: Gordon (1989) describes the distribution as from Cook Strait to Foveaux Strait.

Family Microporellidae Hincks, 1879

Microporella pellucida (Hutton, 1873)

Lepralia pellucida Hutton, 1873, p. 97.

Microporella pellucida (Hutton, 1873): Hutton 1891, p. 105; Hutton 1904, p. 297.

Description: “Cells ovato-ventricose, smooth, thin, translucent, a pore in the centre; mouth nearly terminal, oblong, transverse, with four or five long spines on its upper margin; ovicell — (?). On *Fuci*.” (Hutton 1873, p. 97).

Material: none found.

Comments: This was probably a species of *Fenestulina*, species of which were formerly included in *Microporella*; Hutton mentions no avicularia and many species of *Fenestulina* are pellucid (transparent). It was not listed by Hamilton (1898), but was included in Hutton’s (1904) *Index*. It must be regarded as a *species inquirenda*.

Family Celleporidae Johnston, 1838

Celleporaria agglutinans (Hutton, 1873)

Cellepora agglutinans Hutton, 1873, p. 99.

Cellepora agglutinans Hutton, 1873; Hutton 1877, p. 24; Hutton 1880, p. 194; Hutton 1891, p. 106; Hamilton 1898, p. 196; Hutton 1904, p. 298.

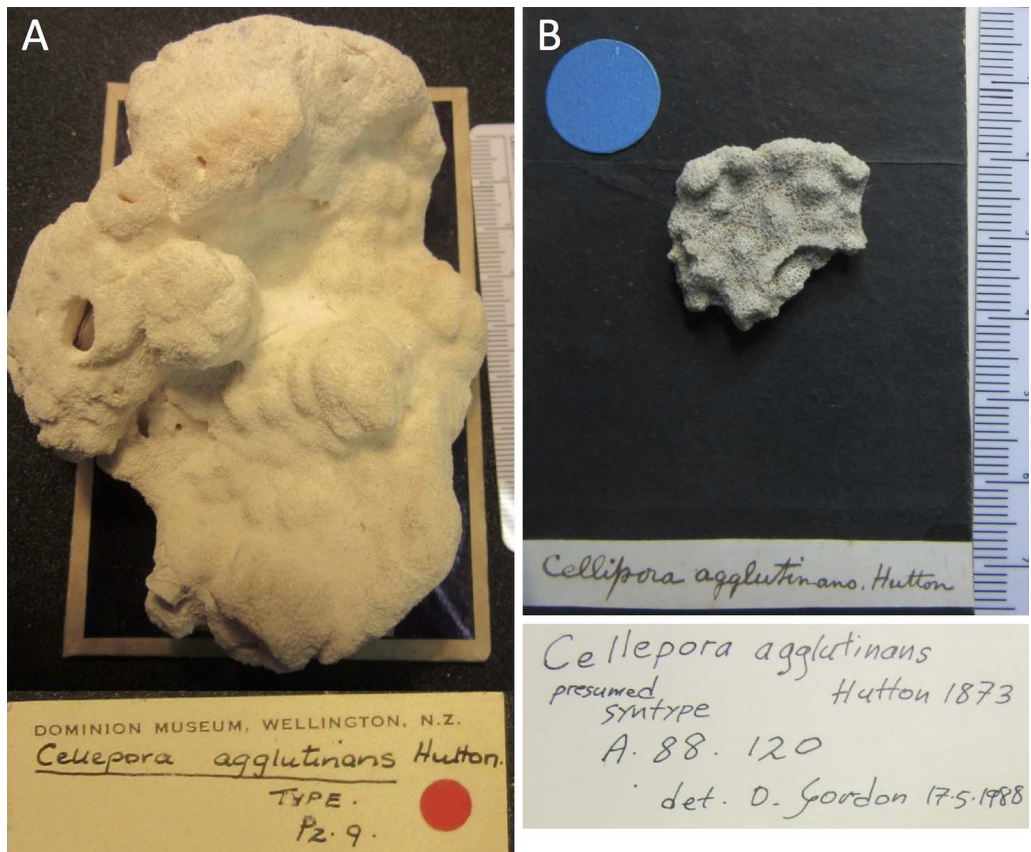


Figure 7. Type specimens of A. *Cellepora agglutinans*, PZ.000009, National Museum of New Zealand; B. *Cellepora agglutinans*, A.88.120, Otago Museum. Scale bars are in mm.

Cellepora ampliata Hutton, 1873; Hutton 1880, p. 194; Hutton 1891, p. 106; Hutton 1904, p. 298.

Celleporaria agglutinans: Bradstock & Gordon 1983, p. 160; Gordon 1989, p. 33, plate 16A–C.

Holoporella ampliata (Hutton, 1873): Brown 1952, p. 369.

Celleporaria ampliata (Hutton, 1873): WoRMs.

Description: “Massive, free, enclosing serpulæ, &c.; cells agglomerated, vertical, finely granulated, ovate; mouth sub-orbicular, lower lip flattened, sometimes produced into a short incurved spout. Lyall’s Bay.” Hutton 1873, p. 99.

Material: Type: NMNZ PZ.000006. A large loose colony with traces of glue, plus six balsa slides with various small specimens (which look like Uttley’s working slides) (Figure 7A).

Syntype (proposed here as Lectotype): Otago Museum A88.120, a small colony piece glued to cardboard (Figure 7B).

Syntypes: NHMUK 1875.1.5.42 four balsa slides, one dry specimen sent by Hutton. NIWA invertebrate collections has many specimens of this species (see Gordon 1989). Other material: NHMUK 1977.5.6.3 Whitten specimen. NHMUK 1845.6.18.134 Sinclair specimen referred to in Brown (1952, p. 369).

Comments: Brown (1952) considered the NHMUK specimens to be syntypes. Whitten (1979) chose them as lectotypes, but his actions are invalid as his study was unpublished. Gordon (1989) did not comment on type specimens. As the Otago Museum specimen is the largest and most complete, we propose it as the lectotype. Common around New Zealand, also South Australia. One of the important large structure-forming ecosystem engineers found on the NZ mid-shelf (Bradstock & Gordon 1983; Batson & Probert 2000; Wood et al. 2012). Can be very large and heavy.

Cellepora ampliata was described by Hutton (1873) as “Massive, free; cells agglomerated, vertical, smooth, ovate, with a row of large punctures round the margin; mouth ovate or sub-orbicular, thin. Lyall’s Bay.” NHMUK 1845.6.18.134 comprises one very old specimen labelled as “a zoophyte on *Mytilus*” from New Zealand sent by Dr A. Sinclair. Brown (1952, p. 369) referred to this specimen as *Holoporella ampliata* (Hutton, 1873). Possibly because the specimen is somewhat eroded, the suboral umbo with an asymmetrically placed transverse avicularium at its base, characteristic of *C. agglutinans*, is not abundantly in evidence. It is, however, present in enough zooids (examined using SEM by Dr Paul D. Taylor) to show that this species is identical to *C. agglutinans*. Although *C. ampliata* is described immediately prior to *C. agglutinans* in Hutton’s text, the latter binominal is well-enough known in the literature to be retained. *Cellepora ampliata* effectively constitutes a nomen oblitum.

***Galeopsis porcellanicus* (Hutton, 1873)**

Pustulipora porcellanica Hutton, 1873, p. 102.

Pustulipora porcellanica Hutton, 1873: Hutton 1877, p. 361; Hutton 1878, p. 126; Hutton 1880, p. 198.

Haswellia auriculata Busk, 1884: Hutton 1891, p. 106; Hamilton 1898, p. 196; Hutton 1904, p. 298.

Galeopsis porcellanicus (Hutton, 1873): Gordon 1989, pp. 67–68 (cum syn.).

Description: “Branches slender, spreading, smooth; cells rather distant, wholly immersed, orifice sub-orbicular, neither raised nor margined; branches cylindrical, sometimes anastomosing. Lyall’s Bay.” (Hutton 1873, p. 102)

Material: In the absence of any type material, Gordon (1989) designated as the Neotype specimen H541, held at NIWA, Wellington.

Comments: This species is common all around New Zealand, especially on northern shelves, also a Plio-Pleistocene fossil.

Class Stenolaemata Borg, 1926
Order Cyclostomata Busk, 1852

Family Horneridae Smitt, 1867

***Retihornera squamosa* (Hutton, 1873)**

Hornera squamosa Hutton, 1873, p. 101.

Hornera squamosa Hutton, 1873: Hutton 1876, p. 360.

Hornera gouldiana Busk, 1859 (*nomen nudem*), p. 95: Hutton 1873, p. 101; Hutton 1876, p. 360; Busk 1886, p. 17; Jelly 1889, p. 113.

Retihornera gouldiana (Busk, 1859) (*nomen nudem*), p.95: Hutton 1880, p. 197.

Retihornera squamosa (Hutton, 1873): Jelly, 1899, p. 113.

Retihornera foliacea MacGillivray, 1868 [*sic*]: Hutton 1877, p. 25.

Hornera foliacea MacGillivray, 1868 [*sic*]: Hutton 1890, p. 107; Hamilton 1898, p. 197; Hutton 1904, p. 299; Androsova 1968, p. 41.

Description: “Foliaceous, wavy, infundibuliform, reticulated; mouths of the cells sub-orbicular, with a raised and scarcely thickened margin; interspaces finely granulated and with slightly raised, scaly longitudinal lines; back finely granulated, with slight raised, rather scaly lines; fenestrae small; branches compressed. White or pale brown. Chatham Islands only. The cells are more distant than in the last [*H. gouldiana* Busk].” (Hutton 1873, p. 101)

Material: Syntypes: MacGillivray’s *Hornera foliacea* specimens comprise eleven syntypes held at National Museum of Victoria under number F45480.

The type of *Hornera squamosa* Hutton appears to be NHMUK 1875.1.5.39 from the Chatham Islands (Figure 8B).

NMNZ PZ.000023 *Hornera gouldiana* Busk from Chatham Islands (Figure 8A).

In addition NHMUK and OM hold many specimens of this species from Otago shelf and Stewart Island, where it is very common.

Comments: *H. squamosa* was described by Hutton as “Chatham Islands only” but *H. foliacea* is very common on shelves around southern NZ and southern Australia (e.g., Probert et al. 1979; Smith et al. 2008; Bock et al. 2018) and even Antarctica. It is known in the fossil record from the Lower Miocene and Pliocene.

We use *R. squamosa* here for the New Zealand species, as it will be proposed in a paper currently in preparation (Smith et al. *in prep.*), based on skeletal and molecular criteria.

Family Cinctiporidae Boardman, Taylor & McKinney, 1992

***Cinctipora* Hutton, 1873**

Type species: *Cinctipora elegans* Hutton, 1873 by monotypy

Description: “Polyzoarium erect, ramose; branches dichotomous or irregularly divided, free, cylindrical; cells immersed; mouths attached to the stem and to one another, forming circles round it; cell walls thin, punctured internally.” (Hutton, 1873 p. 102).

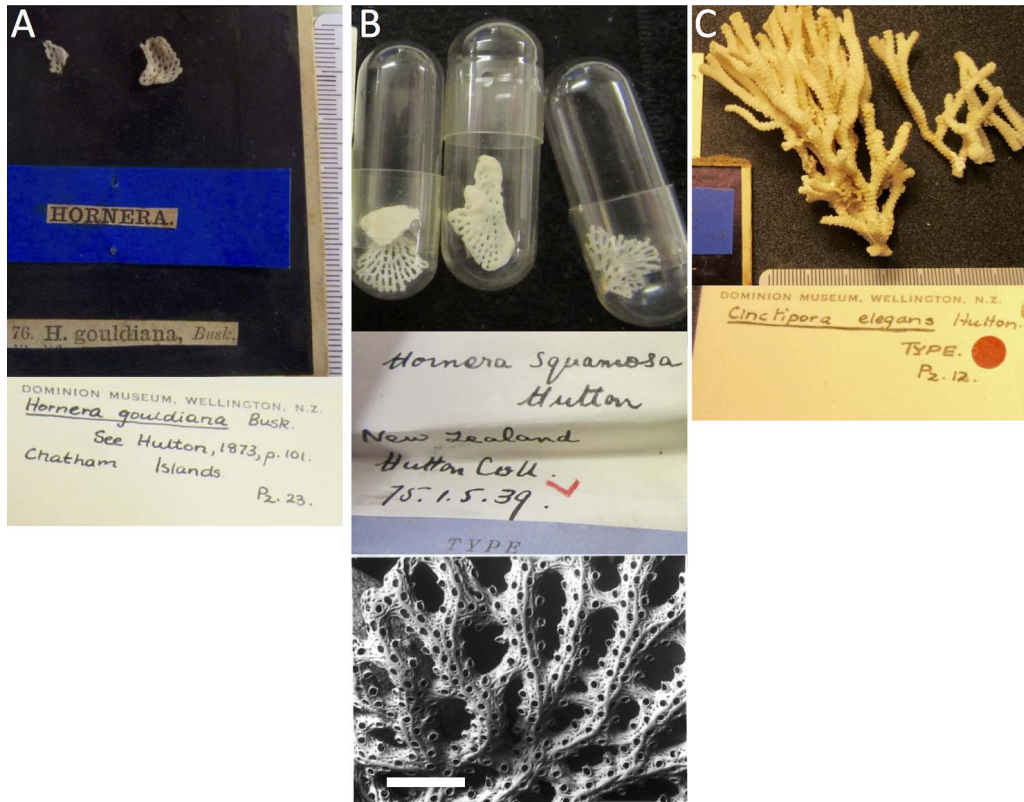


Figure 8. Type specimens of A. *Hornera gouldiana*, PZ.000023, National Museum of New Zealand; B. *Hornera squamosa*, 75.1.5.39, Museum of Natural History, UK; C. *Cinctipora elegans*, PZ.000012, National Museum of New Zealand. Scale bars are in mm, SEM scale bar is 1 mm.

Cinctipora elegans Hutton, 1873

Cinctipora elegans Hutton, 1873, p. 103.

Cinctipora elegans Hutton, 1873: Hutton 1880, p. 198; Hutton 1891, p. 107; Hamilton 1898, p. 196; 1904, p. 299; Boardman et al. 1992, pp. 56–58 (cum syn.).

Description: “Cells arranged quincuncially, minutely granular, the septum between two cells prolonged upwards into a narrow rib running up the centre of the tube in the row above. White.” (Hutton 1873, p. 103)

Material: Holotype: NMNZ PZ.000012 has a label saying “*Cinctipora* gen. nov.” and a red dot signifying holotype status (Figure 8C). It is accompanied by PZ.000162 from Stewart Island.

A lectotype was described and figured by Boardman et al. (1992): NHMUK 1875.1.5.37a (dry, slides, peels) (specimen a is the lectotype, b-f are paralectotypes). They were apparently unaware of the specimen at Te Papa Tongarewa Museum of New Zealand.

Comments: This species is extremely common throughout southern New Zealand in mid-shelf depths (50–80 m).

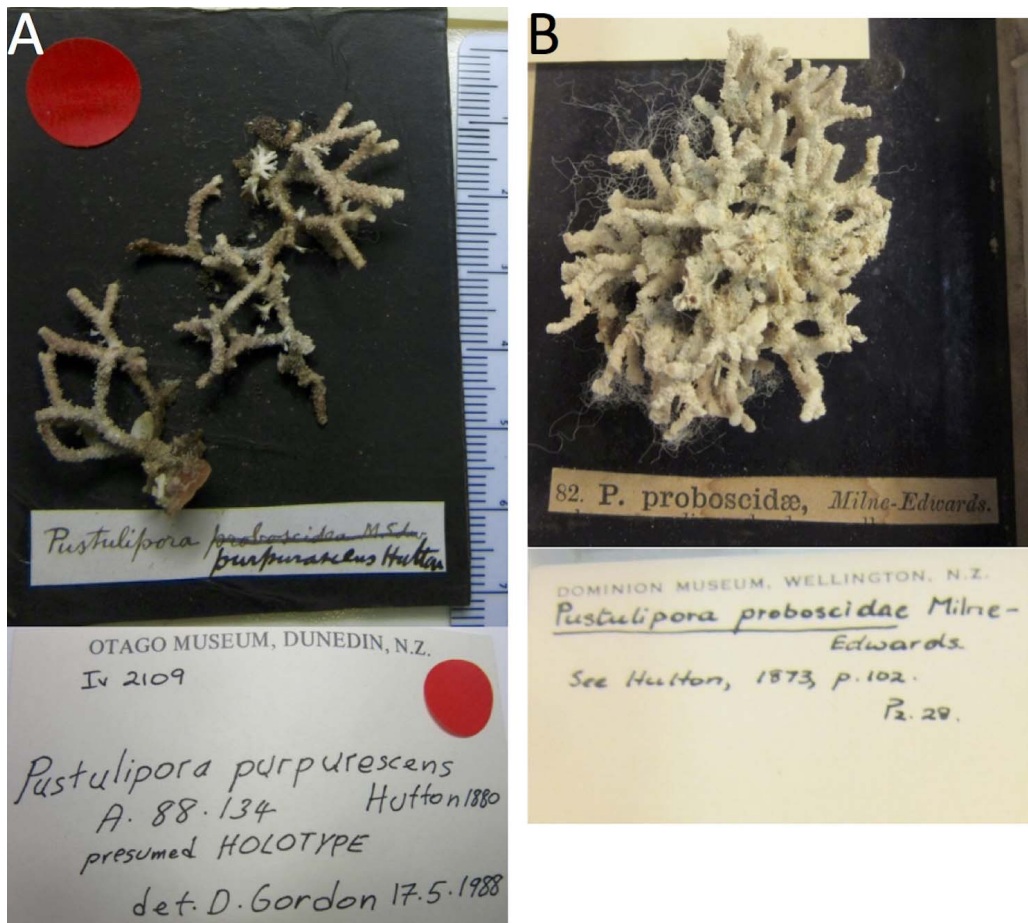


Figure 9. Type specimens of A. *Pustulipora purpurascens*, A.88.134, Otago Museum; B. *Pustulipora proboscidea*, PZ.000028, National Museum of New Zealand. Scale bars are in mm.

Family Diaperoeciidae Canu, 1918

Diaperoecia purpurascens (Hutton, 1877)

Pustulipora proboscidea [sic] Milne-Edwards, 1838, p. 24; Hutton 1873, p. 102. [Error for *proboscidea*.]

Pustulipora purpurascens Hutton, 1877, p. 361; Hutton 1880, p. 198.

Entalophora purpurascens (Hutton, 1877): Hutton 1891, p. 107; Hutton 1904, p. 299.

Mecynoecia purpurascens (Hutton, 1877): sometimes found on labels.

Diaperoecia purpurascens (Hutton, 1877): Taylor et al. 2015, pp. 527–528 (cum syn.).

Description: “Irregularly branched; branches spreading, slender; cells numerous, granular; mouths projecting, recurved, slightly contracted; purplish.” (Hutton 1880, p. 198)

Material: Holotype OM A.88.134, a dry specimen glued to black card labelled *Pustulipora purpurascens* (sic, presumably a typographic label transcribing error); also contains a

D.P. Gordon & P D Taylor label calling it *Mecynoecia purpurascens* (Figure 9A). NMNZ PZ.000028 *Pustulipora* “*probsocidae* [sic]” Milne-Edwards—one large colony mounted on black card (Figure 9B).

Comments: This is a widespread and common species found on the shelf around New Zealand, and as a fossil back to the Late Pliocene (Taylor et al. 2015).

Family Hastingsiidae Borg, 1944

Telopora dentata (Hutton, 1880)

Tennysonia stellata Busk, 1875, p. 34: Hutton 1873, p. 103.

Not *T. stellata*, “intermediate between *Discoporella* and *Defranceia*”: Hutton 1877, p. 361.

Defranceia [sic] *dentata* non Busk: Hutton 1880, p. 199.

Defrancheia [sic] *dentata* (Hutton, 1880): Hutton 1891, p. 107.

Defranchia [sic] *dentata* (Hutton, 1880): Hutton 1904, p. 299.

Defranceia [sic] *dentata* (Hutton, 1880): Jelly 1889, p. 81.

Telopora watersi (Harmer, 1915): Gordon et al. 2009, p. 293.

Descriptions: “Fronds much curled; tubes with thin mouths, slender, erect, rather closer towards the margin, but ceasing altogether before reaching it. Cape of Good Hope.” (Hutton 1873, p. 103). “Capitulum broadly expanded, lobed, and curled; cells in elevated branching rows, which form a denticulated margin to the lobes; mouths slender, erect, rather closer towards the margin, but ceasing altogether before reaching it. Stewart Island.” (Hutton 1880, p. 199).

Material: Hutton’s type, MNZ PZ.000027 (Figure 10A), is labelled *Tennysonia stellata*. It comprises a large compound colony of a species that has been previously been identified as *Telopora watersi* (Harmer, 1915), a species that is otherwise known only from Indonesia. If the two species are confirmed to be identical, Hutton’s name takes precedence.

Comments: At first Hutton (1873) ascribed this specimen to the South African species *Tennysonia stellata* though that species name was not published by Busk until 1875; whether he was aware of it via correspondence or an early draft is unclear (their descriptions are quite different). Busk himself was dubious about the species, stating it was probably *Heteropora* (Busk, 1875, p. 34). Hutton (1877) then renamed it *Defranceia dentata* (not of Busk).

Hutton (1880) noted in a footnote: “The name of this genus is too much like *Defranchia* (Millet.) [a gastropod]” (Hutton, 1880 p. 199), and indeed he spells the genus three different ways in three different lists. Jelly (1888) spelled it *Defranceia dentata*.

We here include *Telopora* in the Hastingsiidae based on several morphological characters in common, including autozooids mostly in lobed fascicles, a variety of mural spines including palmate, and a laterally arcuate oeciostome closely adnate to an autozooidal peristome. *Tennysonia stellata* is a current valid taxon (Taylor et al. 2011); *Defranchia* Bronn, 1825 is now *Apsendesia* (Fron diporidae) according to WoRMS.

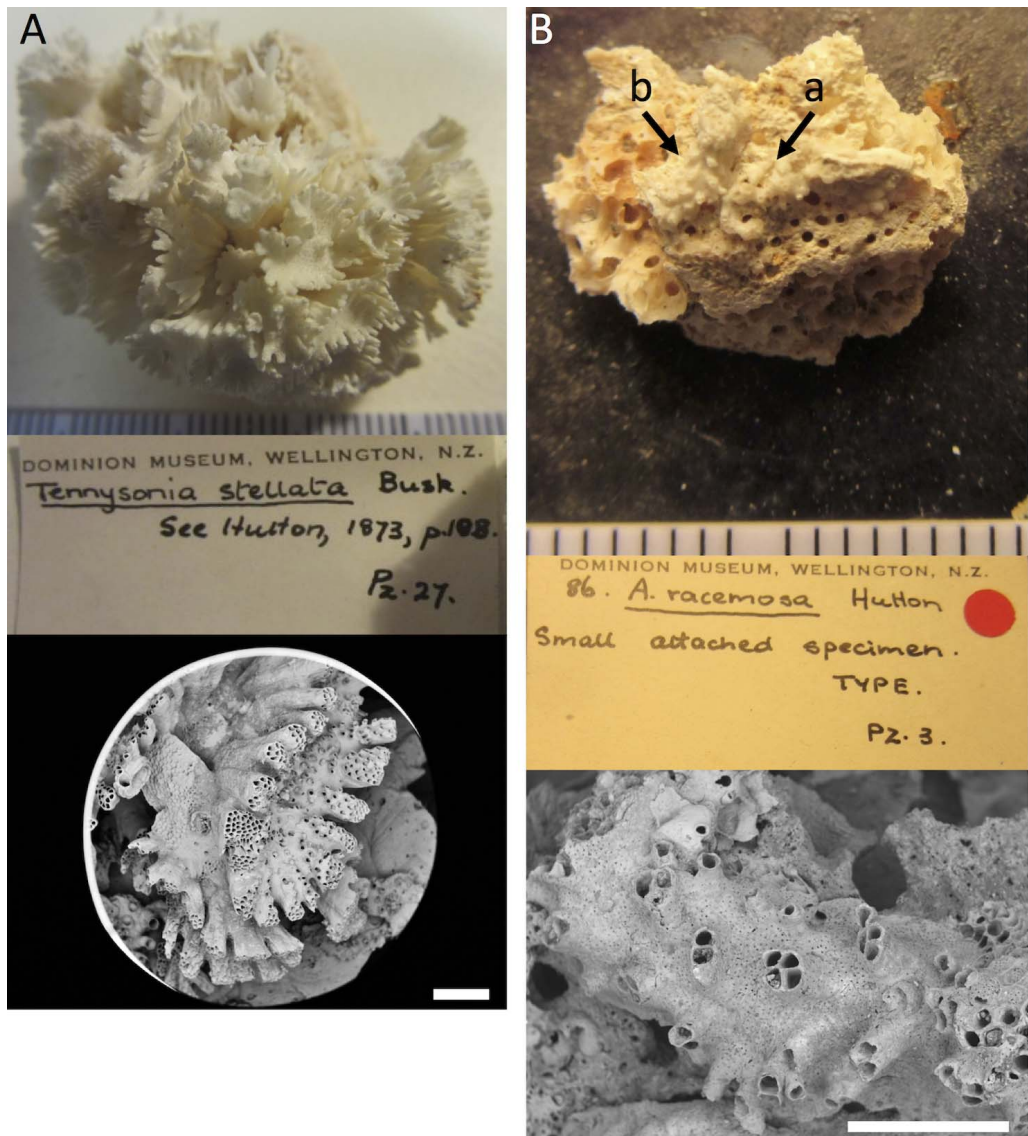


Figure 10. Type specimens of A. *Tennysonia stellata*, PZ.000027, National Museum of New Zealand; B. *Alecto racemosa* (arrow b), PZ.000005, National Museum of New Zealand. Scale bars are in mm. Because these specimens were complex, we have included SEMs, the scale bar for them is one mm.

***'Hastingsia'?* racemosa (Hutton, 1873)**

Alecto racemosa Hutton, 1873, p. 103.

Alecto racemosa Hutton, 1873: Hutton 1880, p. 198.

Stomatopora racemosa (Hutton, 1873): Hutton 1891, p. 102.

Description: "Large, branched; cells in clusters for from two to ten together, irregularly

placed.” (Hutton 1873 p. 103)

Material: Holotype: NMNZ PZ.000003, one of two small infertile colonies attached to an eroded shell (Fig 10B). One colony appears to be an *Annectocyma*, but the larger colony corresponds to *A. racemosa*, having, as in Hutton’s (1873, p. 103) description “cells in clusters of from two to ten together, irregularly placed”. The label accompanying the card to which the specimen is glued has a red spot and specifically says: TYPE. It is not clear when the type designation was assigned. In the NMNZ specimen register there is a handwritten note quoting remarks made elsewhere by G.H. Uttley (undated, but evidently 1954, based on reproduced dated notes above it on the same page): “TYPE. ‘Small attached specimen. This contains a cyclostomatous polyzoa which answers to Hutton’s very brief and inadequate description (1873, p. 103). I have not seen it before. It should be named *Stomatopora racemosa* Hutton, 1873.’ Slide 86. Dr Uttley.”

The exact genus for this specimen is open for discussion; P.D. Taylor suggests ‘*Hastingsia*’. The Antarctic type species of *Hastingsia* is distinctive, but at least one New Zealand species that resembles *Hastingsia* in colonial (but not zooidal) morphology (i.e., ‘*Hastingsia whitteni*’) is genetically congruent with *Diaperoecia* (Taylor et al. 2015).

Family Tubuliporidae Busk, 1859

***Tubulipora glomerata* Hutton, 1873**

Tubulipora glomerata Hutton, 1873, p. 103.

Tubulipora fungia Couch, 1844, p. 107; Hutton 1877, p. 361.

Tubulipora glomerata Hutton, 1873; Hutton 1880, p. 198; Hutton 1891, p. 107; Hutton 1904, p. 199.

Description: “Encrusting, irregular, wart-shaped, thick; tubes crowded, irregularly placed.” (Hutton, 1873, p. 103)

Material: NHMUK has several specimens of *Tubulipora fungia* Couch (e.g. 1875.5.29.40), all from the north Atlantic (Labrador, UK, Norway, Faroes).

Comments: It is unlikely that the material from New Zealand was *T. fungia*; we have found no Pacific specimens. With no reference to *T. glomerata* since 1904, a minimal description, no figure, and no type (possibly no specimens at all), its status is *species inquirenda*.

***Tubulipora? disposita* (Hutton, 1873)**

Alecto disposita Hutton, 1873, p. 103.

Alecto disposita Hutton, 1873; Hutton 1880, p. 198.

Idmonea serpens Linnaeus; Hutton 1891, p. 102.

Description: “Slightly branched, irregular; cells prominent, arranged in parallel rows; margin defined.” (Hutton 1873 p. 103)

Material: none found

Comments: In synonymising *A. disposita* with “*Idmonea serpens*” it seems apparent that

Hutton's species may have belonged to *Tubulipora*. *Idmonea serpens* Linnaeus has long been recognised as a junior subjective synonymy of now-called *Tubulipora liliacea* (Pallas) (Harmer 1899; Hayward and Ryland 1985), but no material in this Atlantic species has been found from New Zealand. With no material, brief description, and no further references, the species' status is *inquirenda*.

5. Conclusions

Captain F.W. Hutton was a true natural scientist, publishing widely in geology, evolution, and cataloguing many plant and animal taxa in his adopted home of New Zealand. Despite not specialising in the study of Bryozoa, and only mentioning them in five of his 620 publications, he was able to identify and recognise many as new. These, and the associated specimens, persist as a legacy to this dedicated naturalist.

In particular: eighteen New Zealand species listed here are well-known, well-used species with valid names and well-defined characters. Some of them are extremely common and important ecosystem engineers (e.g., *Cinctipora elegans*, *Hippomenella vellicata*, *Celleporaria agglutinans*). Along the way, we have encountered confusion regarding the type specimens, which we have tried to resolve. Three of Hutton's species are suitable for *nomen dubium* or *inquirenda* status: we have been unable to find specimens in collections, there are no figures, and the names are no longer in use. There are also species which would repay a more detailed investigation (here given as *species inquirenda*). We hope that this catalogue inspires taxonomists to take on some of the challenges posed by the bryozoans of Captain F. W. Hutton.

6. Acknowledgements

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Appendix Table: All bryozoans from Hutton's publications

Ordered by higher taxon and then alphabetically; inq. = *species inquirenda*. Clues to actual or likely identity (column 5) are found in: Hutton's later works (1891, 1904); the known or likely provenance of specimens (Otago and Wellington); published synonymies (Brown 1952; Gordon 1984, 1986, 1989; Gordon and Parker 1991; Gordon and Spencer Jones 2013), and examination of Hutton specimens in the Otago Museum and NMNZ (Te Papa Tongarewa). In some instances (e.g. *Halophila johnstonii*, *Catenicella perforata*), Hutton cited Busk's (1852) attributions of species to New Zealand that are not actually known in the fauna (ditto for Hamilton 1898); Hutton did not see specimens of all the species recorded in his lists.

Hutton Citation	Hutton Species Attribution	Basis of Hutton Record	Hutton's Comparative Geographical Attribution	Likely Current Identity
ENTOPROCTA				
Hutton 1904, p. 293	<i>Pedicellinopsis gracilis</i> Sars	Hilgendorf, Trans New Zealand Inst xxx: 218		<i>Barentsia matsushimana</i> or <i>Barentsia</i> sp.
PHYLACTOLAEMATA				
Hutton 1873, p. 104; Hutton 1880, p. 179; Hutton 1904, p. 293	<i>Plumatella aplinii</i> MacGillivray	MacGillivray, Trans Roy Soc Vic 1860:204	Homebush Creek, Malvern Hills, under stones, Australia	<i>Plumatella bushnelli?</i>
Hutton 1904, p. 293	<i>Plumatella repens</i> Allman	Hamilton, Trans New Zealand Inst xii: 302		<i>Plumatella repens</i>
CYCLOSTOMATA				
Hutton 1873, p. 103; Hutton 1880, p. 198	<i>Alecto disposita</i>	sp. nov. Hutton 1873		<i>Tubulipora?</i> <i>disposita</i> inq.
Hutton 1873, p. 103; Hutton 1880, p. 198	<i>Alecto racemosa</i>	sp. nov. Hutton 1873		' <i>Hastingsia?</i> ' <i>racemosa</i>
Hutton 1873, p. 103; Hutton 1880, p. 198; Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Cinctipora elegans</i>	gen. nov., sp. nov. Hutton 1873		<i>Cinctipora elegans</i>
Hutton 1873, p. 101	<i>Crisia aculeata</i> Hassall	Johnston, Brit Zooph: 285	Lyll Bay, Europe	<i>Crisia setosa</i>
Hutton 1891, p. 106	<i>Crisia denticulata</i> var. <i>patagonica</i> d'Orbigny	Busk, Cat Mar Polyz BM iii: 8		<i>Crisia margaritacea?</i>
Hutton 1873, p. 100	<i>Crisia eburnea</i> Linnaeus	Johnston, Brit Zooph: 283	Europe, California	<i>Crisia</i> sp.
Hutton 1876, p. 360; Hutton 1880, p. 195; Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Crisia edwardsiana</i> d'Orbigny	Busk, Cat Cyclost Polyz BM 1875: 5	Lyll Bay, Australia, S America	<i>Bicrisia edwardsiana</i>
Hutton 1880, p. 195; Hutton 1904, p. 298	<i>Crisia patagonica</i> or <i>Crisia denticulata</i> var. <i>patagonica</i> d'Orbigny	Voy Amer Merid, Polyiers: 7	Lyll Bay, S America	<i>Crisia margaritacea?</i>

Hutton 1890, p. 107; Hutton 1904, p. 298	<i>Crisina hochstetteriana</i> Stoliczka	Stoliczka, Voy Novara: 113		<i>Idmidronea?</i> sp. 1
Hutton 1880, p. 199; Hutton 1890, p. 107; Hutton 1904, p. 299	<i>Defranceia dentata</i> also spelled <i>Defranceia</i>	sp. nov. Hutton 1880	Stewart Island	<i>Telopora dentata</i>
Hutton 1890, p. 107; Hutton 1904, p. 299	<i>Diastopora patina</i> (Lamarck)	Gray in Dieff NZ ii: 295		<i>Plagioecia</i> sp.
Hutton 1890, p. 107; Hutton 1904, p. 299	<i>Diastopora perangulata</i> Waters	Waters, Quart Jnl Geol Soc 43: 343		<i>Plagioecia?</i> sp.
Hutton 1904, p. 299	<i>Diastopora sarniensis</i> Norman	Norman, Ann Mag Nat Hist 3 xiii: 89		<i>Plagioecia sarnienis</i>
Hutton 1904, p. 299	<i>Diastopora suborbicularis</i> Hincks	Hincks, Brit Mar Pol: 464		<i>Microeciella</i> cf. <i>ridleyi</i>
Hutton 1880, p. 199	<i>Discoporella ciliata</i> Busk	Busk, Cat Mar Polyz BM iii: 31	Cape of Good Hope	<i>Discoporella pristis</i>
Hutton 1878, p. 25	<i>Discoporella fimbriatae</i> Busk	Busk, Cat Mar Polyz BM iii: 32	Gulf St Vincent, South Australia; S America	<i>Discoporella pristis</i>
Hutton 1873, p. 104; Hutton 1877, p. 361	<i>Discoporella hispida</i> Johnson	Johnson, Brit Zooph: 268		<i>Discoporella pristis</i>
Hutton 1877, p. 361; Hutton 1878, p. 25; Hutton 1880, p. 199	<i>Discoporella novae-zealandiae</i> Busk	Cat Mar Polyz BM iii: 32	Gulf St Vincent, South Australia	<i>Discoporella novae-hollandiae</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Entalophora intricaria</i> Busk	Cat Mar Polyz BM iii: 22		<i>Diaperoecia</i> sp. 1
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Entalophora purpurascens</i>	sp. nov. Hutton 1876		<i>Diaperoecia purpurascens</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Entalophora raripora</i> d'Orbigny	Stoliczka, Voy Novara: 102		<i>Diaperoecia</i> sp. 2
Hutton 1891, p. 107	<i>Fascicularia tubipora</i> Busk	Busk, Crag Pol: 130; Waters, Quart Jnl Geol Soc 43: 344		<i>Fasciculipora fruticosa?</i>
Hutton 1891, p. 107	<i>Heteropora pelliculata</i> Waters	Waters, Jnl Roy Micr Soc ii: 390		' <i>Heteropora</i> ' <i>neozelanica</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Hornera foliacea</i> MacGillivray	Busk, Cat Mar Polyz BM iii: 19;		<i>Hornera foliacea</i>
Hutton 1904, p. 299	<i>Hornera frondiculata</i> Lamouroux	Hamilton, Trans New Zealand Inst xxx: 197		<i>Hornera foliacea</i>
Hutton 1873, p. 101; Hutton 1877, p. 360	<i>Hornera gouldiana</i> Busk	Busk, Crag Poly: 95	Chatham Is, Australia?	<i>Hornera foliacea</i>
Hutton 1873, p. 101; Hutton 1876, p. 360	<i>Hornera squamosa</i>	sp. nov. Hutton 1873	Chatham Islands only	<i>Hornera foliacea</i>

Hutton 1873, p. 101; Hutton 1880, p. 197; Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Hornera striata</i> Milne Edwards	Stoliczka, Voy Novara: 107		<i>Hornera robusta?</i>
Hutton 1873, p. 102; Hutton 1880, p. 196	<i>Idmonea giebeliana</i> Stoliczka	Stoliczka, Voy Novara: 115		<i>Hastingsia giebeliana</i>
Hutton 1877, p. 361	<i>Idmonea marionensis</i> Busk	Busk, Cat Mar Polyz BM iii: 13	fossil, Orakei	<i>Exidmonea?</i> sp.
Hutton 1890, p. 106; Hutton 1904, p. 298	<i>Idmonea milneana</i> d'Orbigny	Stoliczka, Voy Novara: 114		<i>Nevianipora?</i> sp.
Hutton 1877, p. 360; Hutton 1880, p. 196; Hutton 1890, p. 106; Hutton 1904, p. 298	<i>Idmonea radians</i> (Lamarck)	Busk, Cat Mar Polyz BM iii: 11	NZ	<i>Crisina?</i> sp.
Hutton 1878, p. 25;	<i>Idmonea radians</i> (Lamarck)	Busk, Cat Mar Polyz BM iii: 11	Australia	<i>Mesonea radians</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Idmonea ramosa</i> (d'Orbigny)	Waters, Quart Jnl Geol Soc 43: 339		<i>Platonea</i> sp.
Hutton 1891, p. 107; Hutton 1904, p. 298	<i>Idmonea serpens</i> (Linnaeus)	Busk, Cat Mar Polyz BM iii:25		<i>Tubulipora?</i> sp.
Hutton 1904, p. 299	<i>Lichenopora clypeiformis</i> d'Orbigny	Hamilton, Trans New Zealand Inst xxx: 197		indeterminate
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Lichenopora holdsworthii</i> Busk	Busk, Cat Mar Polyz BM iii: 33		<i>Disporella novaehollandiae?</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Lichenopora neozelanica</i> [sic] Busk	Busk, Cat Mar Polyz BM iii: 32		<i>Disporella novaehollandiae</i>
Hutton 1904, p. 299	<i>Lichenopora pristis</i> MacGillivray	MacGillivray, Cat Vic Poly: 336		<i>Disporella pristis</i>
Hutton 1873,, p. 103	<i>Patinella verrucaria</i> Milne-Edwards	Gray in Dieff NZ ii: 295	NZ	<i>Disporella?</i> sp.
Hutton 1873, p. 102; Hutton 1877, p. 361	<i>Pustulipora delicatula</i> Busk	Busk, Crag Poly: 108	Australia	non-bryozoan
Hutton 1873, p. 102; Hutton 1880, p. 197	<i>Pustulipora haastiana</i> Stoliczka	Stoliczka, Voy Novara: 102	Common	<i>Diaperoecia purpurascens</i>
Hutton 1877, p. 361; Hutton 1880, p. 197	<i>Pustulipora parasitica</i> Busk	Busk, Cat Mar Polyz BM iii: 21	Bass Strait	<i>Diaperoecia parasitica</i>
Hutton 1873, p. 102; Hutton 1877, p. 361; Hutton 1880, p. 198	<i>Pustulipora porcellanica</i>	sp. nov. Hutton 1873	Lyll Bay	<i>Galeopsis porcellanicus</i>
Hutton 1878, p. 25	<i>Pustulipora porcellanica</i>	sp. nov. Hutton 1873	South Australia	<i>Galeopsis victoriensis?</i>

Hutton 1873, p. 102; Hutton 1877 p 361	<i>Pustulipora proboscidea</i> Milne-Edwards			<i>Diaperoecia purpurascens</i>
Hutton 1877 p 361; Hutton 1880, p. 198	<i>Pustulipora purpurascens</i>	sp. nov. Hutton 1876		<i>Diaperoecia purpurascens</i>
Hutton 1878, p. 25; Hutton 1880, p. 197	<i>Retihernera foliacea</i> MacGillivray	MacGillivray, Cat Vic Poly	Chatham Is; Gulf St Vincent, South Australia	<i>Hornera foliacea</i>
Hutton 1880, p. 197	<i>Retihernera gouldiana</i> Busk	Busk, Crag Polyz: 95	Chatham Is, Australia	<i>Hornera foliacea</i>
Hutton 1904, p. 299	<i>Stromatopora major</i> Johnston	Hamilton, Trans New Zealand Inst xxx: 197		<i>Annectocyma</i> sp.
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Stromatopora racemosa</i>	sp. nov. Hutton 1873		' <i>Hastingsia</i> '? <i>racemosa</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Supercystis digitata</i> d'Orbigny	Busk, Cat Mar Polyz BM iii: 37		<i>Telopora lobata</i> ?
Hutton 1873, p. 103; Hutton 1877, p. 361	<i>Tennysonia stellata</i>	non-Busk but no new name given		<i>Telopora dentata</i>
Hutton 1891, p. 107; Hutton 1904, p. 299	<i>Tubulipora biduplicata</i> Waters	Waters, Quart Jnl Geol Soc 43: 343		<i>Desmediaperoecia biduplicata</i>
Hutton 1878, p. 25; Hutton 1880, p. 197	<i>Tubulipora flabellaris</i> Johnston	Johnston, Brit Zooph: 274	Gulf St Vincent, South Australia	<i>Tubulipora</i> sp.
Hutton 1873, p. 103; Hutton 1877, p. 361; Hutton 1880, p. 198; Hutton 1891, p. 107; Hutton 1904, p. 199.	<i>Tubulipora glomerata</i>	sp. nov. Hutton 1873		<i>Tubulipora glomerata</i> inq.
CTENOSTOMATA				
Hutton 1891, p. 107; Hutton 1904, p. 294	<i>Amathia swainsoni</i>	sp. nov. Hutton 1873		<i>Amathia biseriata</i>
Hutton 1891, p. 107; Hutton 1904, p. 293	<i>Flustrella binderi</i> Harvey	Busk, QJMS i: 156		<i>Elzerina binderi</i>
CHEILOSTOMATA				
Hutton 1904, p. 298	<i>Adeonellopsis parvipunctata</i> [sic] MacGillivray	Hamilton, Trans New Zealand Inst xxx: 196		<i>Adeonellopsis gemina</i>
Hutton 1880, p. 184; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Aetea dilatata</i> Busk	Busk, Cat Pol BM i: 31	Torres Strait, Foveaux Strait	<i>Aetea dilatata</i>
Hutton 1891, p. 103	<i>Beania bilaminata</i> (Hincks)	Hincks, Ann Mag Nat Hist 5 vii: 44		<i>Beania bilaminata</i>
Hutton 1891, p. 103;	<i>Beania elongata</i> (Hincks)	Hincks, Ann Mag Nat Hist 5 xv: 244		<i>Beania elongata</i>

Hutton 1891, p. 103;	<i>Beania inermis</i> (Busk)	Busk, Cat Mar Polyz BM i: 54		<i>Beania</i> n. sp. 1
Hutton 1891, p. 103;	<i>Beania magellanica</i> (Busk)	Busk, Cat Mar Polyz BM i :54		<i>Beania magellanica</i> + <i>serrata</i>
Hutton 1873, p. 91; Hutton 1880, p. 185	<i>Beania swainsoni</i>	sp. nov. Hutton 1873	Coll of W Swainson	<i>Amathia biseriata</i>
Hutton 1873, p. 92; Hutton 1880, p. 186; Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Bicellaria tuba</i> Busk	Busk, Cat Mar Polyz BM i: 42	Lyll Bay, Bass Strait 45 fathoms	<i>Cornucopina</i> sp.
Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Bugula avicularia</i> (Linnaeus)	Busk, Cat Mar Polyz BM i: 45		<i>Bugula stolonifera?</i>
Hutton 1873, p. 93; Hutton 1880, p. 186; Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Bugula dentata</i> (Lamouroux)	Busk, Cat Mar Polyz BM i: 46	NZ, Australia, South Australia, S Africa	<i>Virididentula dentata</i>
Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Bugula johnstoniae</i> (Gray)	Gray in Dieffenbach NZ ii: 292		<i>Bugula</i> sp.
Hutton 1873, p. 92; Hutton 1880, p. 186; Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Bugula neritina</i> (Linnaeus)	Busk, Cat Mar Polyz BM i: 44	Lyll Bay, Australia, Red Sea, Auckland Islands, Rio de Janeiro	<i>Bugula neritina</i>
Hutton 1873, p. 93; Hutton 1877, p. 359; Hutton 1880, p. 186; Hutton 1904, p. 295	<i>Bugula prismatica</i> Gray	Gray in Dieffenbach NZ ii: 292	Motatau Canterbury, Ocean Beach Dunedin, NZ	<i>Bugula prismatica</i>
Hutton 1873, p. 91; Hutton 1880, p. 185; Hutton 1904, p. 295	<i>Caberea boryi</i> Audouin	Hamilton, Trans New Zealand Inst xxx: 194	Lyll Bay, England, S Africa, S America, Cumberland Is.	<i>Caberea zelandica</i>
Hutton 1873, p. 92; Hutton 1880, p. 185	<i>Caberea lata</i> Busk	Busk, Cat Mar Polyz BM i: 39	Australia	<i>Amastigia?</i> sp.
Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Caberea lyalli</i> Busk	Busk, Challenger Rpts xxx: 29		<i>Caberea zelandica</i>
Hutton 1891, p. 103; Hutton 1904, p. 295	<i>Caberea rostrata</i> Busk	Busk, Challenger Rpts xxx: 28		<i>Caberea rostrata</i>
Hutton 1878, p. 23	<i>Caberea rudis</i> Busk	Busk, Cat Mar Polyz BM i:38	Gulf St Vincent, South Australia	<i>Caberea dichotoma</i>
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Caberea texta</i> (Lamarck)	Hincks, Ann Mag Nat Hist 5 viii: 50		<i>Amastigia?</i> sp.
Hutton 1877, p. 360; Hutton 1880, p. 189; Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Calwellia bicornis</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858 i: 91	NZ	<i>Calwellia bicornis</i>

Hutton 1873, p. 94; Hutton 1880, p. 187	<i>Carbasea cyathiformis</i> MacGillivray	MacGillivray, Trans Phil Inst Vict 1859, p. 97	Lyall Bay, Australia	' <i>Carbasea</i> ' <i>indivisa</i>
Hutton 1873, p. 94; Hutton 1880, p. 187	<i>Carbasea episcopalis</i> Busk	Busk, Cat Mar Polyz BM ii: 52	Lyall Bay, Bass Strait 45 fathoms	<i>Euthyroides episcopalis</i>
Hutton 1873, p. 94; Hutton 1880, p. 187	<i>Carbasea indivisa</i> Busk	Busk, Cat Mar Polyz BM ii: 53	NZ	' <i>Carbasea</i> ' <i>indivisa</i>
Hutton 1904, p. 295	<i>Carbasea moseleyi</i> Busk	Busk, Challenger Rpts x: 56		<i>Onchoporoides moseleyi</i>
Hutton 1873, p. 93; Hutton 1880, p. 187	<i>Carbasea pisciformis</i> Busk	Busk, Cat Mar Polyz BM ii: 50	NZ, Cook Strait, South Australia	indeterminate
Hutton 1880, p. 181; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Catenicella cornuta</i> Busk	Busk, Cat Mar Polyz BM i: 11	NZ, Bass Strait	<i>Cornuticella cornuta</i>
Hutton 1873,, p. 89	<i>Catenicella alata</i> Wyville Thomson	Hamilton, Trans New Zealand Inst xxx: 199	Lyall Bay	<i>Pterocella scutella</i>
Hutton 1873, p. 88; Hutton 1880, p. 180	<i>Catenicella aurita</i> Busk	Busk, Cat Mar Polyz BM i: 8	Cook Strait (Lyall Bay), Campbell Island, Bass Strait	<i>Claviporella aurita</i>
Hutton 1877, p. 359; Hutton 1880, p. 182; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Catenicella carinata</i> Busk	Busk, Cat Mar Polyz BM i: 12	NZ, Bass Strait	<i>Pterocella scutella</i>
Hutton 1873, p. 88; Hutton 1880, p. 180; Hutton 1891, p. 102; Hutton 1904, p. 294	<i>Catenicella cribraria</i> Busk	Busk, Cat Mar Polyz BM i: 9	Lyall Bay, Bass Strait 45 fathoms	<i>Paracribricellina cribraria</i>
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Catenicella crystallina</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858		<i>Scalicella crystallina</i>
Hutton 1873, p. 89; Hutton 1880, p. 181; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Catenicella elegans</i> Busk	Busk, Cat Mar Polyz BM i: 10	Port Cooper, Banks Peninsula, Bass Straits 47 fth, South Africa, Port Dalrymple	<i>Catenicella elegans</i>
Hutton 1877, p. 358; Hutton 1880, p. 181	<i>Catenicella geminata</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858: 147	NZ, Australia	<i>Claviporella aurita</i>
Hutton 1873, p. 88; Hutton 1880, p. 180; Hutton 1891, p. 102; Hutton 1904, p. 294	<i>Catenicella hastata</i> Busk	Busk, Cat Mar Polyz BM i: 7	Lyall Bay, Bass Strait 45 fathoms	<i>Costaticella bicuspis</i>
Hutton 1873, p. 89; Hutton 1880, p. 180; Hutton 1891, p. 102	<i>Catenicella margaritacea</i> Busk	Busk, Cat Mar Polyz BM i: 9	Lyall Bay, Swan Island, Australia	<i>Orthoscuticella margaritacea</i>

Hutton 1878, p. 24	<i>Cellepora tubigera</i> Busk	Busk, Crag Poly: 64		<i>Celleporaria cristata</i>
Hutton 1873, p. 89; Hutton 1880, p. 182; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Cellularia cuspidata</i> Busk	Busk, Cat Mar Polyz BM i: 19	Lyall Bay, Australia	<i>Bugulopsis monotrypa</i>
Hutton 1880, p. 182	<i>Cellularia monotrypa</i> Busk	Busk, Rattlesnake: 368	NZ, Bass Strait	<i>Bugulopsis monotrypa</i>
Hutton 1904, p. 297	<i>Chorizopora brongniartii</i> Audouin	Hamilton, Trans New Zealand Inst xxx: 195		<i>Chorizopora sp.</i>
Hutton 1904, p. 294	<i>Claviporella aurita</i> Busk	Busk, Cat Mar Polyz BM i: 8		<i>Claviporella aurita</i>
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Claviporella geminata</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858		<i>Claviporella aurita</i>
Hutton 1904, p. 296	<i>Cribrilina figularis</i> Johnston	Hamilton, Trans New Zealand Inst xxx: 196		<i>Valdemunitella huttoni</i>
Hutton 1891, p. 106; Hutton 1904, p. 296	<i>Cribrilina monoceros</i> Busk	Busk, Challenger Rpts xxx: 133		<i>Arachnopusia unicornis</i>
Hutton 1904, p. 296	<i>Cribrilina radiata</i> Moll	Busk, Challenger Rpts x :131		<i>Cribrilaria sp.</i>
Hutton 1904, p. 295	<i>Diachoris bilaminata</i> Hincks	Hincks, Ann Mag Nat Hist 5 vii: 44		<i>Beania bilaminata</i>
Hutton 1873, p. 94; Hutton 1880, p. 188	<i>Diachoris buskiana</i>	sp. nov. Hutton 1873	Lyall Bay	<i>Antarctothoa buskiana</i>
Hutton 1904, p. 295	<i>Diachoris elongata</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 244		<i>Beania elongata</i>
Hutton 1873, p. 94; Hutton 1880, p. 188; Hutton 1904, p. 295	<i>Diachoris inermis</i> Busk	Busk, Cat Mar Polyz BM i: 54	NZ, Straits of Magellan	<i>Beania n. sp. 1</i>
Hutton 1904, p. 295	<i>Diachoris intermedia</i> Hincks	Hincks, Ann Mag Nat Hist 5 viii: 74		<i>Beania intermedia</i>
Hutton 1873, p. 94; Hutton 1880, p. 188; Hutton 1904, p. 295	<i>Diachoris magellanica</i> Busk	Busk, Cat Mar Polyz BM i: 54	NZ, Straits of Magellan	<i>Beania magellanica</i>

Hutton 1878, p. 24	<i>Cellepora tubigera</i> Busk	Busk, Crag Poly: 64		<i>Celleporaria cristata</i>
Hutton 1873, p. 89; Hutton 1880, p. 182; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Cellularia cuspidata</i> Busk	Busk, Cat Mar Polyz BM i: 19	Lyall Bay, Australia	<i>Bugulopsis monotrypa</i>
Hutton 1880, p. 182	<i>Cellularia monotrypa</i> Busk	Busk, Rattlesnake: 368	NZ, Bass Strait	<i>Bugulopsis monotrypa</i>
Hutton 1904, p. 297	<i>Chorizopora brongniartii</i> Audouin	Hamilton, Trans New Zealand Inst xxx: 195		<i>Chorizopora sp.</i>
Hutton 1904, p. 294	<i>Claviporella aurita</i> Busk	Busk, Cat Mar Polyz BM i: 8		<i>Claviporella aurita</i>
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Claviporella geminata</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858		<i>Claviporella aurita</i>
Hutton 1904, p. 296	<i>Cribrilina figularis</i> Johnston	Hamilton, Trans New Zealand Inst xxx: 196		<i>Valdemunitella huttoni</i>
Hutton 1891, p. 106; Hutton 1904, p. 296	<i>Cribrilina monoceros</i> Busk	Busk, Challenger Rpts xxx: 133		<i>Arachnopusia unicornis</i>
Hutton 1904, p. 296	<i>Cribrilina radiata</i> Moll	Busk, Challenger Rpts x :131		<i>Cribrilaria sp.</i>
Hutton 1904, p. 295	<i>Diachoris bilaminata</i> Hincks	Hincks, Ann Mag Nat Hist 5 vii: 44		<i>Beania bilaminata</i>
Hutton 1873, p. 94; Hutton 1880, p. 188	<i>Diachoris buskiana</i>	sp. nov. Hutton 1873	Lyall Bay	<i>Antarctothoa buskiana</i>
Hutton 1904, p. 295	<i>Diachoris elongata</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 244		<i>Beania elongata</i>
Hutton 1873, p. 94; Hutton 1880, p. 188; Hutton 1904, p. 295	<i>Diachoris inermis</i> Busk	Busk, Cat Mar Polyz BM i: 54	NZ, Straits of Magellan	<i>Beania n. sp. 1</i>
Hutton 1904, p. 295	<i>Diachoris intermedia</i> Hincks	Hincks, Ann Mag Nat Hist 5 viii: 74		<i>Beania intermedia</i>
Hutton 1873, p. 94; Hutton 1880, p. 188; Hutton 1904, p. 295	<i>Diachoris magellanica</i> Busk	Busk, Cat Mar Polyz BM i: 54	NZ, Straits of Magellan	<i>Beania magellanica</i>

Hutton 1873, p. 93; Hutton 1880, p. 187	<i>Flustra papyracea</i> Ellis	Busk, Cat Mar Polyz BM i: 48	Lyalls Bay, Britain	<i>Beania bilaminata</i>
Hutton 1873, p. 92; Hutton 1880, p. 186	<i>Halophila johnstoniae</i> Gray	Gray in Dieffenbach NZ ii: 292	Lyall Bay, Bass Strait	<i>Bugula sp.</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Haswellia auriculata</i> (Busk)	Busk, Challenger Rpts xxx:173		<i>Galeopsis porcellanicus</i>
Hutton 1873, p. 100; Hutton 1880, p. 195	<i>Hemeschara fairchildi</i>	sp. nov. Hutton 1873	Cook Strait, Campbell's Island	<i>Parasmittina delicatula</i>
Hutton 1904, p. 294	<i>Hippothoa divaricata</i> Lamouroux	Hamilton, Trans New Zealand Inst xxx: 196		<i>Hippothoa pacifica</i>
Hutton 1891, p. 106; Hutton 1904, p. 294	<i>Hippothoa flagellum</i> Manzoni	Manzoni, Bry Plioc Italy iv: 6		<i>Hippothoa flagellum</i>
Hutton 1873, p. 96; Hutton 1880, p. 191	<i>Lepralia angela</i>	sp. nov. Hutton 1873		<i>Escharoides angela</i>
Hutton 1873, p. 98; Hutton 1880, p. 192	<i>Lepralia areolata</i> Busk	Busk, Cat Mar Polyz BM ii: 82	Straits of Magellan, 10-20 fath	indeterminate
Hutton 1873, p. 97; Hutton 1880, p. 192	<i>Lepralia cancer</i>	sp. nov. Hutton 1873	Lyall Bay	<i>Antarctothoa cancer</i>
Hutton 1878, p. 23	<i>Lepralia candida</i> MacGillivray	MacGillivray, Trans Phil Soc Vlc iv: 98	Gulf St Vincent, South Australia	<i>Arachnopusia unicornis</i>
Hutton 1873, p. 96; Hutton 1880, p. 191	<i>Lepralia ciliata</i> Linnaeus	Busk, Cat Mar Polyz BM ii: 75; Johnston Brit Zooph: 279	Britain, Mediterranean, America, Australia	<i>Microporella agonistes?</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia cincta</i> Hincks	Hincks, Am Mag Nat Hist 5 xv: 254		<i>Bitectipora cincta</i>
Hutton 1878, p. 23	<i>Lepralia elegans</i> MacGillivray	MacGillivray, Trans Phil Soc Vlc iv: 166	Gulf St Vincent, South Australia	<i>Adeonellopsis sulcata</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia flexuosa</i>	sp. nov. Hutton 1873		<i>Hippomonavella flexuosa</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia foraminigera</i> Hincks	Hincks, Am Mag Nat Hist 5 vi: 109		<i>Eurystomella foraminigera</i>
Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia grandis</i>	sp. nov. Hutton 1873	common on dead shells	<i>Macropora grandis</i>
Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia hyalina</i> Busk	Busk, Cat Mar Polyz BM ii: 84	Britain, California, Greenland, Cape of Good Hope, Falkland Is, not NZ	<i>Antarctothoa spp.</i>
Hutton 1891, p. 106	<i>Lepralia hyalina var cornuta</i> Busk	Busk, Cat Mar Polyz BM ii: 84		<i>Antarctothoa cancer</i>

Hutton 1873, p. 93; Hutton 1880, p. 187	<i>Flustra papyracea</i> Ellis	Busk, Cat Mar Polyz BM i: 48	Lyalls Bay, Britain	<i>Beania bilaminata</i>
Hutton 1873, p. 92; Hutton 1880, p. 186	<i>Halophila johnstoniae</i> Gray	Gray in Dieffenbach NZ ii: 292	Lyall Bay, Bass Strait	<i>Bugula</i> sp.
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Haswellia auriculata</i> (Busk)	Busk, Challenger Rpts xxx: 173		<i>Galeopsis porcellanicus</i>
Hutton 1873, p. 100; Hutton 1880, p. 195	<i>Hemeschara fairchildi</i>	sp. nov. Hutton 1873	Cook Strait, Campbell's Island	<i>Parasmittina delicatula</i>
Hutton 1904, p. 294	<i>Hippothoa divaricata</i> Lamouroux	Hamilton, Trans New Zealand Inst xxx: 196		<i>Hippothoa pacifica</i>
Hutton 1891, p. 106; Hutton 1904, p. 294	<i>Hippothoa flagellum</i> Manzoni	Manzoni, Bry Plioc Italy iv: 6		<i>Hippothoa flagellum</i>
Hutton 1873, p. 96; Hutton 1880, p. 191	<i>Lepralia angela</i>	sp. nov. Hutton 1873		<i>Escharoides angela</i>
Hutton 1873, p. 98; Hutton 1880, p. 192	<i>Lepralia areolata</i> Busk	Busk, Cat Mar Polyz BM ii: 82	Straits of Magellan, 10-20 fath	indeterminate
Hutton 1873, p. 97; Hutton 1880, p. 192	<i>Lepralia cancer</i>	sp. nov. Hutton 1873	Lyall Bay	<i>Antarctothoa cancer</i>
Hutton 1878, p. 23	<i>Lepralia candida</i> MacGillivray	MacGillivray, Trans Phil Soc Vlc iv: 98	Gulf St Vincent, South Australia	<i>Arachnopusia unicornis</i>
Hutton 1873, p. 96; Hutton 1880, p. 191	<i>Lepralia ciliata</i> Linnaeus	Busk, Cat Mar Polyz BM ii: 75; Johnston Brit Zooph: 279	Britain, Mediterranean, America, Australia	<i>Microporella agonistes?</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia cincta</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 254		<i>Bitectipora cincta</i>
Hutton 1878, p. 23	<i>Lepralia elegans</i> MacGillivray	MacGillivray, Trans Phil Soc Vlc iv: 166	Gulf St Vincent, South Australia	<i>Adeonellopsis sulcata</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia flexuosa</i>	sp. nov. Hutton 1873		<i>Hippomonavella flexuosa</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia foraminigera</i> Hincks	Hincks, Ann Mag Nat Hist 5 vi: 109		<i>Eurystomella foraminigera</i>
Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia grandis</i>	sp. nov. Hutton 1873	common on dead shells	<i>Macropora grandis</i>
Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia hyalina</i> Busk	Busk, Cat Mar Polyz BM ii: 84	Britain, California, Greenland, Cape of Good Hope, Falkland Is, not NZ	<i>Antarctothoa</i> spp.
Hutton 1891, p. 106	<i>Lepralia hyalina</i> var <i>cornuta</i> Busk	Busk, Cat Mar Polyz BM ii: 84		<i>Antarctothoa cancer</i>

Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia hyalina</i> var D	var. nov. Hutton 1872	Lyall Bay	<i>Antarctothoa delta</i>
Hutton 1873, p. 97; Hutton 1880, p. 191; Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia lyallii</i> Busk	Busk, Cat Mar Polyz BM ii :75	NZ	indeterminate
Hutton 1873, p. 98; Hutton 1880, p. 192	<i>Lepralia malusii</i> Busk	Busk, Cat Mar Polyz BM ii: 83	Britain, S America, Falkland Is	<i>Fenestulina disjuncta?</i>
Hutton 1873, p. 97; Hutton 1880, p. 191	<i>Lepralia nitida</i> Busk	Busk, Cat Mar Polyz BM ii: 76	Britain	<i>Valdemunitella huttoni</i>
Hutton 1904, p. 297	<i>Lepralia pallasiana</i> Moll	Hincks, Brit Mar Poly: 297		<i>Cryptosula pallasiana</i>
Hutton 1873, p. 97; Hutton 1880, p. 192	<i>Lepralia pellucida</i>	sp. nov. Hutton 1873	on Fuci	<i>Fenestulina pellucida</i> inq.
Hutton 1873, p. 98; Hutton 1880, p. 192	<i>Lepralia pertusa</i> Busk	Busk, Cat Mar Polyz BM ii: 80; Johnston Brit Zooph 311	Britain, Australia	<i>Bitectipora cincta</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia poissonii</i> (Audouin)	Hincks, Ann Mag Nat Hist 5 viii: 63		<i>Crepidacantha crinispina</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Lepralia rectilineata</i> Hincks	Ann Mag Nat Hist 5 xi: 110		<i>Hippomenella vellicata</i>
Hutton 1873, p. 96; Hutton 1880, p. 191	<i>Lepralia reticulata</i> MacGillivray	Busk, Cat Mar Polyz BM ii: 66	Britain	<i>Buffonellaria biavicularis</i>
Hutton 1878, p. 23	<i>Lepralia spicea</i>	sp. nov. Hutton 1877	Gulf St Vincent, South Australia	<i>Mucropetraliella ellerii</i>
Hutton 1878, p. 23	<i>Lepralia tatei</i>	sp. nov. Hutton 1877	Gulf St Vincent, South Australia	<i>Didymosella larvalis</i>
Hutton 1878, p. 24	<i>Lepralia baccata</i>	sp. nov. Hutton 1877	Gulf St Vincent, South Australia	<i>Adeonellopsis baccata</i>
Hutton 1878, p. 24	<i>Lepralia pocula</i>	sp. nov. Hutton 1877	Gulf St Vincent, South Australia	<i>Mychoplectra pocula</i>
Hutton 1873, p. 97; Hutton 1880, p. 192	<i>Lepralia urceolata</i>	sp. nov. Hutton 1873	on dead shells	<i>Macropora grandis</i>
Hutton 1873, p. 97; Hutton 1880, p. 191	<i>Lepralia variolosa</i> Busk	Busk, Cat Mar Polyz BM ii: 75	Lyall Bay, Britain	<i>Escharoides angela</i>
Hutton 1873, p. 98; Hutton 1880, p. 193	<i>Lepralia vellicata</i>	sp. nov. Hutton 1873		<i>Hippomenella vellicata</i>
Hutton 1873, p. 97; Hutton 1880, p. 192	<i>Lepralia ventricosa</i> Hassall	Busk, Cat Mar Polyz BM ii: 78	Lyall Bay, Britain	<i>Escharella spinosissima</i>
Hutton 1873, p. 101; Hutton 1880, p. 196	<i>Margaretta barbata</i> Lamarck	Lamarck, Anim. Sans Vert. ii: 178; <i>M. cereoides</i> Gray in Dieff NZ ii: 293	Lyall Bay, Cape of Good Hope	<i>Margaretta barbata</i>

Hutton 1891, p. 104; Hutton 1904, p. 295	<i>Membranipora spinosa</i> (Quoy and Gaimard)	Waters, Ann Mag Nat Hist 5 xx: 181		<i>Chaperia</i> spp.
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora acuta</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 249		<i>Retevirgula acuta</i>
Hutton 1873, p. 96; Hutton 1880, p. 190; Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora brunnea</i>	sp. nov. Hutton 1873	On <i>Turritella rosea</i>	' <i>Membranipora brunnea</i> Inq.
Hutton 1878, p. 23	<i>Membranipora? cincta</i>	sp. nov. Hutton 1877	Gulf St Vincent, South Australia	<i>Diploporella alata</i>
Hutton 1873, p. 96; Hutton 1880, p. 190	<i>Membranipora cyclops</i> Busk	Busk, Cat Mar Polyz BM ii: 61		<i>Odontionella cyclops</i>
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora hians</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 248		<i>Odontionella cyclops</i>
Hutton 1891, p. 104	<i>Membranipora hians</i> var. <i>occultata</i> Waters	Waters, Quart Jnl Geol Soc 43: 48		<i>Odontionella cyclops</i>
Hutton 1878, p. 23	<i>Membranipora lacroixi</i> Savigny	Busk, Cat Mar Polyz BM i: 60	Gulf St Vincent, South Australia	<i>Conopeum</i> sp.
Hutton 1873, p. 96; Hutton 1880, p. 190; Hutton 1891, p. 104; Hutton 1904, p. 295	<i>Membranipora lineata</i> (Linnaeus)	Busk, Cat Mar Polyz BM ii: 58	Europe, Greenland	<i>Corbulella corbula</i>
Hutton 1873, p. 96; Hutton 1880, p. 190	<i>Membranipora magnilabris</i> Busk	Busk, Cat Mar Polyz BM ii: 62	S Africa, Atlantic	<i>Steginoporella magnifica</i>
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora maorica</i> (Stoliczka)	Stoliczka, Voy Novara: 153		? <i>Cellaria</i> sp. [<i>Chaperia maorica</i> is Miocene]
Hutton 1873, p. 95; Hutton 1880, p. 190; Hutton 1891, p. 104; Hutton 1904, p. 295	<i>Membranipora membranacea</i> (Linnaeus)	Busk, Cat Mar Polyz BM ii: 56	Lyll Bay, Europe, Australia	<i>Membranipora membranacea</i>
Hutton 1873, p. 95; Hutton 1880, p. 190; Hutton 1891, p. 104; Hutton 1904, p. 295	<i>Membranipora pilosa</i> (Linnaeus)	Gray in Dieff NZ ii: 292; Johnston, Brit Zooph: 280; Busk Cat Mar Polyz BM ii: 56	Lyll Bay, Europe, Australia	<i>Electra scuticifera</i> and/or <i>E. oligopora</i>
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora pura</i> Hincks	Hincks, Ann Mag Nat Hist 5 vi:1 5		' <i>Membranipora pura</i> (= gen. nov.)
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora roborata</i> Hincks	Hincks, Ann Mag Nat Hist 5 viii: 69		<i>Menipea vectifera</i>

Hutton 1904, p. 296	<i>Membranipora serrata</i> MacGillivray	Hamilton, Trans New Zealand Inst xxx: 195		<i>Gregarinidra</i> sp. nov.
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora solidula</i> Hincks	Hincks, Brit Mar Polyz: 158; Waters, Quart Jnl Geol Soc 43: 46		<i>Corbulella</i> <i>fossa</i>
Hutton 1873, p. 96; Hutton 1880, p. 190	<i>Membranipora tessellata</i>	sp. nov. Hutton 1873	Common on dead shells	<i>Odontionella</i> <i>tessellata</i>
Hutton 1891, p. 104; Hutton 1890, p. 104; Hutton 1904, p. 295	<i>Membranipora trifolium</i> (Wood)	Busk, Crag Pol: 32		<i>Amphiblestrum</i> <i>blandum?</i>
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Membranipora valdemuniata</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv:248		<i>Valdemunitella</i> <i>valdemunita</i>
Hutton 1890, p. 105; Hutton 1904, p. 297	<i>Membraniporella nitida</i> (Johnston)	Johnston, Brit Zooph: 277		<i>Valdemunitella</i> <i>huttoni</i>
Hutton 1877, p. 359; Hutton 1880, p. 182; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Menipea buskii</i> Wyville Thomson	Wyville Thomson, Nat Hist Rev 1858: 151	NZ, South Australia	? <i>Tricellaria</i> <i>aculeata</i>
Hutton 1873, p. 90; Hutton 1880, p. 182; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Menipea cirrata</i> (Lamouroux)	Gray in Dieff NZ ii: 292; Busk Cat Mar Polyz BM i: 21	NZ, South Africa	indeterminate
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Menipea crystallina</i> (Gray)	Gray in Dieff: 293; Busk, Cat Mar Polyz BM i: 28		<i>Emma crystallina</i> and/or <i>E. triangula</i>
Hutton 1904, p. 294	<i>Menipea patagonica</i> Busk	Busk, Cat Mar Polyz BM i: 22		? <i>Bugulopsis</i> <i>monotrypa</i>
Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Menipea tricellata</i> (Busk)	Busk, Cat Mar Polyz BM i: 28		<i>Emma</i> <i>tricellata?</i>
Hutton 1891, p. 105; Hutton 1904, p. 296	<i>Micropora elongata</i> Hincks	Hincks, Ann Mag Nat Hist 5 ix: 86		<i>Micropora</i> sp.
Hutton 1891, p. 105; Hutton 1904, p. 296	<i>Micropora lepida</i> Hincks	Hincks, Ann Mag Nat Hist 5 viii: 59; Waters, QJG 43: 51		<i>Opaeophora</i> <i>lepida</i>
Hutton 1891, p. 105; Hutton 1904, p. 296	<i>Microporella ciliata</i> (Pallas)	Busk, Cat Mar Polyz BM ii: 73		<i>Microporella</i> <i>agonistes?</i>
Hutton 1904, p. 297	<i>Microporella coscinophora</i> var <i>mucronata</i> MacGillivray	Hamilton, Trans New Zealand Inst xxx: 195		<i>Adeonellopsis</i> <i>macewindui</i>

Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Microporella decorata</i> var. <i>angustipora</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 249		<i>Calloporina angustipora</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Microporella malusii</i> Audouin	Busk, Cat Mar Polyz BM ii: 83		<i>Fenestulina thyreophora?</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Microporella malusii</i> var. <i>disjuncta</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 249		<i>Fenestulina disjuncta</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Microporella pellucida</i>	sp. nov. Hutton 1873		<i>Fenestulina pellucida</i> Inq.
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Microporella yarraensis</i> Waters	Waters, Quart Jnl Geol Soc 37: 331		<i>Adeonellopsis gemina</i>
Hutton 1891, p. 104; Hutton 1904, p. 297	<i>Monoporella crustatina</i> or <i>crastatina</i> Waters	Waters, Quart Jnl Geol Soc 38:270		<i>Macropora grandis</i>
Hutton 1891, p. 104; Hutton 1904, p. 297	<i>Monoporella disjuncta</i> Manzoni	Manzoni, Bry Plioc Italy i: 5;		<i>Chaperia</i> spp.
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Mucronella bi-incisa</i> var <i>bicuspis</i> Hincks	Hincks, Ann Mag Nat Hist 5 xi: 110		<i>Mobunula bicuspis</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Mucronella diaphana</i> var <i>armata</i> Hincks	Hincks, Ann Mag Nat Hist 5 x: 98		<i>Exochella armata</i>
Hutton 1904, p. 297	<i>Mucronella peachii</i> var <i>octodentata</i> Hincks	Hincks, Brit Mar Poly: 361		<i>Escharella spinosissima</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Mucronella praestans</i> Hincks	Hincks, Ann Mag Nat Hist 5 x :99		<i>Escharoides angela</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Mucronella tricuspis</i> Hincks	Hincks, Ann Mag Nat Hist 5 viii: 66		<i>Exochella jullieni?</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Mucronella variolosa</i> (Johnston)	Johnston, Brit Zooph: 278		<i>Escharoides angela</i>
Hutton 1873, p. 93; Hutton 1880, p. 186	<i>Muscaria armata</i>	gen. nov., sp. nov. Hutton 1873	Motanau Canterbury	<i>Elzerina binderi</i>
Hutton 1873, p. 91; Hutton 1877, p. 359; Hutton 1880, p. 184	<i>Onchopora hirsuta</i> Lamouroux	Lamouroux, Hist de Polyp cor: 126	Lyll Bay	<i>Cellaria pilosa</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Porella malleolus</i> Hincks	Hincks, Ann Mag Nat Hist 5 xiii: 361		? <i>Smittina rosacea</i>
Hutton 1904, p. 296	<i>Retepora monilifera</i> forma <i>munita</i> Hincks	Hincks, Trans Roy Soc Vic xx: 108		indeterminate

Hutton 1904, p. 296	<i>Retepora avicularis</i> MacGillivray	Hamilton, Trans New Zealand Inst xxx: 196		<i>Phidolopora avicularis</i>
Hutton 1873, p. 100; Hutton 1880, p. 195; Hutton 1891, p. 105	<i>Retepora cellulosa</i> Linnaeus	Busk, Cat Mar Polyz BM ii: 93	Chatham Is, Europe, Cape Horn, Australia	<i>Hippellozoon novaezealandiae</i>
Hutton 1878, p. 25;	<i>Retepora cellulosa</i> Linnaeus			<i>Triphylozoon munitum</i>
Hutton 1904, p. 296	<i>Retepora fissa</i> MacGillivray	Waters, Ann Mag Nat Hist 6: 18		? <i>Reteporella sp.</i>
Hutton 1904, p. 296	<i>Retepora novae- zealandiae</i> Waters	Waters, Jnl Linn Soc xxv: 270		<i>Hippellozoon novaezealandiae</i>
Hutton 1878, p. 25	<i>Retepora phoenica</i> Busk		Bass Strait	<i>Petralia undata</i>
Hutton 1904, p. 298	<i>Rhynchopora bispinosa</i> Johnston	Hincks, Brit Mar Poly: 385		<i>Rhynchozoon zealandicum</i>
Hutton 1873, p. 91; Hutton 1880, p. 184	<i>Salicornaria farciminoides</i> Johnston	Johnston, Hist Brit Zooph: 355	Europe, South Africa, Australia	<i>Cellaria immersa</i>
Hutton 1873, p. 91; Hutton 1880, p. 184	<i>Salicornaria malvinensis</i> Busk	Busk, Cat Mar Polyz BM ii: 18	S America, Falkland Is	<i>Cellaria immersa</i>
Hutton 1873, p. 91	<i>Salicornaria hirsuta</i>	sp. nov. Hutton 1873	Lyll Bay	<i>Cellaria pilosa</i>
Hutton 1891, p. 106; Hutton 1904, p. 297	<i>Schizoporella areolata</i> (Busk)	Busk, Cat Mar Polyz BM ii: 82		indeterminate
Hutton 1904, p. 298	<i>Schizoporella auriculata</i> Hassall	Hassall, Ann Mag Nat Hist i ix: 411		<i>Parkermavella punctigera</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Schizoporella biaperta</i> (Michelin)	Hincks, Brit Mar Poly: 255		<i>Buffonellaria regenerata</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Schizoporella biserialis</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 250		<i>Rogicka biserialis</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Schizoporella cinctipora</i> Hincks	Hincks, Ann Mag Nat Hist 5 xi: 109		<i>Schizosmittina cinctipora</i>
Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Schizoporella cinctipora</i> var. <i>personata</i> Waters	Waters, Quart Jnl Geol Soc 43: 67		indeterminate
Hutton 1891, p. 106	<i>Schizoporella circinata</i> (MacGillivray)	MacGillivray, Cat Vic Pol: 1887		<i>Phonicosia n. sp.</i>
Hutton 1904, p. 298	<i>Schizoporella conservata</i> Waters	Hincks, Ann Mag Nat Hist 5 x: 165		<i>Chiastosella watersi</i>

Hutton 1891, p. 106; Hutton 1904, p. 298	<i>Schizoporella cribrilifera</i> Hincks	Hincks, Ann Mag Nat Hist 5 xv: 250		<i>Celleporina cribrilifera</i>
Hutton 1891, p. 106; Hutton 1904, p. 297	<i>Schizoporella hyalina</i> (Linnaeus)	Busk, Cat Mar Polyz BM ii: 84		<i>Antarctothoa spp.</i>
Hutton 1891, p. 106; Hutton 1904, p. 297	<i>Schizoporella hyalina</i> var. <i>cornuta</i> Busk	Busk, Cat Mar Polyz BM ii: 84		<i>Antarctothoa cancer</i>
Hutton 1891, p. 106	<i>Schizoporella scintillans</i> Hincks	(sent by Miss Jelly)		<i>Stephanollona scintillans</i>
Hutton 1904, p. 298	<i>Schizoporella sinuosa</i> var <i>armata</i> Hincks	Hincks, Brit Mar Poly: 267		indeterminate
Hutton 1904, p. 298	<i>Schizoporella spectabilis</i> Hincks	Hincks, Ann Mag Nat Hist 6 vii: 292		<i>Fovoporella spectabilis</i>
Hutton 1891, p. 106; Hutton 1904, p. 297	<i>Schizoporella marsupifera</i> Busk	Busk, Challenger Rpts xxx:165		indeterminate
Hutton 1880, p. 183; Hutton 1891, p. 103; Hutton 1904, p. 294	<i>Scrupocellaria scrupea</i> Van Beneden	Busk, Cat Mar Polyz BM i: 24	NZ, Europe	<i>Scrupocaberea ornithorhyncus</i>
Hutton 1873, p. 90; Hutton 1880, p. 183	<i>Scrupocellaria scruposa</i> Linnaeus		Lyll Bay, Europe	<i>Scrupocaberea ornithorhyncus</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Smittia naperii</i> Waters	Waters, Ann Mag Nat Hist 6 iv: 17		<i>Exochella conjuncta</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Smittia reticulata</i> (J. McGillivray)	MacGillivray, Ann Mag Nat Hist 1 ix: 467		<i>Smittoidea maunganuiensis</i>
Hutton 1904, p. 297	<i>Smittia trispinosa</i> Johnston	Hincks, Brit Mar Poly: 353		<i>Parasmitiina aotea</i>
Hutton 1891, p. 105; Hutton 1904, p. 297	<i>Smittia unispinosa</i> Waters	Waters, Ann Mag Nat Hist 6 iv: 15		<i>Parasmittina delicatula</i>
Hutton 1891, p. 104	<i>Steganoporella magnalabris</i> (Busk)	Busk, Cat Mar Polyz BM ii: 62		<i>Steganoporella magnifica</i>
Hutton 1891, p. 104; Hutton 1904, p. 296	<i>Steganoporella neozelanica</i> (Busk)	Busk, Quart Jnl Micro Soc i: 155		<i>Steganoporella neozelanica</i>
Hutton 1891, p. 103; Hutton 1904, p. 296	<i>Tubucellaria hirsuta</i> (Lamouroux)	Busk, Challenger Rpts xxx: 100		<i>Margaretta barbata</i>
Hutton 1891, p. 104; Hutton 1904, p. 295	<i>Tubucellaria opuntioides</i> (Pallas)	Busk, Challenger Rpts xxiv: 7		<i>Margaretta barbata</i>
Hutton 1877, p. 360; Hutton 1880, p. 189	<i>Vincularia neo- zelandica</i> Busk	Busk, J Micr Sci ns I: 155	NZ	<i>Steganoporella neozelanica</i>

Hutton 1878, p. 25	<i>Vincularia maorica</i> (Stoliczka)	Stoliczka, Voy Novara: 153	Miocene of Auckland; St Vincent's Bay South Australia Australia	<i>Cellaria</i> <i>australis</i> [not <i>Chaperia</i> <i>maorica</i>]
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