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IN MEMORIAM
Patricia Mather (née Kott)
(1925–2012)



Dr Patricia Mather at her desk in the old Queensland Museum in Fortitude Valley in February 1981.

Patricia Mather AO, PhD, DSc, DSc (hon. causa), FAI Biol, FMLS, passed away at the age of 86, on the evening of 4 January 2012 following a period of illness.

Charming, passionate, fierce, tenacious, obstinate, argumentative, persistent, productive, industrious, focussed, reliable, loyal, devoted (to a cause, and to her family), and a wonderful hostess – these are just some of the epithets that have been applied when mentioning the name ‘Patricia Mather’.

Born in Perth, Western Australia, on 12 December 1925, Patricia was the eldest of four daughters to Max Kott, lawyer, and Lillian May, née Lucas. She attended St Hilda’s Church of England Girl’s School, Mosman, where her indomitable spirit led her to excel in all facets of school life – not only did she have a sharp intellect, but she was also a fine sportswoman. By all accounts, she had a very happy childhood, and despite living most of her life in Brisbane, Queensland, it was clear to



Patricia in the field in 1949, at the beginning of her career in marine biology (Courtesy of Patricia Mather).

those who knew her, that Perth always held a special place in her heart.

She entered the University of Western Australia in 1943, graduating with First Class Honours in 1948, for a thesis on the taxonomy of two families of Polychaeta (Nereidae and Eunicidae), which was the basis for her first scientific paper in 1951. As an undergraduate she undertook holiday jobs with her fellow student Ron Kenny, sorting plankton for Keith Sheard at the CSIR (later to become CSIRO) Fisheries Division labs. This background, along with the recommendation of her thesis examiner, the renowned Professor W. Dakin (of *Australian Seashores* fame), led her to be offered a research position as plankton officer in the Fisheries Division of CSIR in Cronulla, NSW. Thus, shortly after her 23rd birthday, on New Years Day, 1948, she arrived in eastern Australia to begin a professional career that would continue until her death, 64 years later.

Building on the earlier milestone works on plankton by Dakin & Colefax, and on pelagic tunicates by Harold Thompson, Patricia's major contribution from this time was the station lists that documented the New South Wales coastal zooplankton up to the mid 1950s. She also

developed a spinning device (still in use) to divide plankton-net catches into reliable sub-samples. It was Harold Thompson, then chief of the Division, who suggested that she might like to begin taxonomic studies of the Ascidiacea 'in her spare time'. This would become her life's work.

At the end of 1949, Patricia won a CSIRO overseas studentship to spend a term at University College (London University) undertaking a course on experimental biology of invertebrates (with G.P. Wells), and several months studying the ascidian collections in what was then the British Museum (Natural History). This was followed by 20 months at the prestigious Laboratory of the Marine Biological Association of the United Kingdom at Plymouth, where she did pioneering work on spontaneous contractions of solitary ascidians, as well as taxonomic studies on English Channel ascidians. This was a very happy period for her, and she regaled many a social occasion throughout her life with stories of her escapades. Although returning to Australia in late 1951 to resume her position as plankton officer in Cronulla, she became increasingly consumed by her fascination with the Ascidiacea.

In 1955 she married Wharton B. Mather, a geneticist and lecturer in the Zoology Department of the University of Queensland, and this brought her CSIRO career to an end and heralded the move to Brisbane and a period dominated by family. During the next decade she alternated having children with periods of research on ascidians funded by small Science and Industry Endowment Fund grants (1955, 1957) and a Commonwealth Graduate Student Award (1961–62) that led to her PhD degree from the University of Queensland, but which terminated with the birth of her third son. By 1963, she had already established herself internationally as an authority on ascidians, and despite her still young family, Patricia returned to full time work, as a Research Fellow in the University of Queensland funded by Personal Service Contracts (1965–1968) from the United States National Museum of Natural History (Smithsonian Institution) to work on the American national collections. From this she was to produce an important monograph on Antarctic ascidians, a major work for which Patricia received a Doctorate of Science from the University of Western Australia (1970). With these contracts finished, in 1969 she obtained the first of many subsequent grants from the Australian Research Grants Committee. At this time, 'soft money' from research grants and consultancies was relatively uncommon, and such funding for so long (1963–1973) was a testament to Patricia's research productivity. More importantly it made it possible to employ a loyal daily housekeeper who helped run the household, the children, and the two Labrador dogs.

However, in 1973, with her three children now schoolboys, Patricia started to look for more career stability, and where better for a taxonomist, than at the local Queensland Museum. The problem was that the only available vacancy was for a Curator of Mollusca. The Director of the time, the young palaeontologist, Alan Bartholomai, recalls

Patricia's confident response to the news, 'Molluscs? No problem, I can do molluscs'. Despite some understandable misgivings, the Museum didn't want to lose someone of Patricia's stature and experience, especially at a time when they were growing rapidly, and for the first time in their history establishing a stable of first-class taxonomists across a range of disciplines. Two years later the position of Curator of Higher Invertebrates was created especially for Patricia, and she was finally given *carte blanche* to pursue her full-time study of ascidians. She wasted no time in turning a modest holding of ascidians into the most significant collection of Australian and Indo-West Pacific species in the world. Under her stewardship the collection, grew to over 10,000 specimens encompassing more than 800 species, representing all the families and genera known from intertidal and shallow, sub-tidal habitats, including coral reefs (especially her beloved Heron Island!). Always a hard task-master, she was not easy to work for, and for many years there was to be a steady succession of technical assistants coming and going. One memorable story concerned a handsome, tall, young man, of whom Patricia seemed particularly pleased, except that he used to have frequent short periods of sick leave. One morning Pat stormed into work holding a shop-catalogue in which appeared numerous pictures of her moon-lighting assistant as a male-model! Patricia loudly proclaimed, 'that's it, from now on I am only going to employ ugly technicians!' Never-the-less she was genuinely fond of many of her assistants, and was to count some as long-time friends.

During her years at the Museum she worked hard and published prolifically. She continued to raise her international profile by working visits to leading museums and marine laboratories in Europe and the US, including spending several months over two successive years as a visiting research fellow in the University of the South Pacific. These were also the years of productive collaboration with Professor Cliff Hawkins of the University of

Queensland (who was investigating the inorganic chemistry of the Ascidiacea); and with botanists and cell biologists of Sydney University studying the newly discovered *Prochloron*/ascidian symbioses. Patricia discovered some 20 of these associations, as well as describing the means by which the *Prochloron* is passed on to subsequent generations. She always published her research under her maiden name, Patricia Kott, reserving 'Mather' for ancillary publishing activities. Overall she produced over 130 published works across the broad spectrum of her interests, however undoubtedly the work she was most proud of was her major monograph on the 'Australian Ascidiacea' (published in four parts between 1985 and 2001).

She also formed a deep love of museums, and threw herself into many of the diverse range of activities demanded of a curator. She was always a strong advocate of the role of museums in documenting and interpreting the natural world, and the need for proper funding of taxonomic research in Australia. In her latter years she continued to lobby governments to establish a 'National Institute of Taxonomy', which she believed was a vital step in reversing the ever worsening 'taxonomic impediment' in Australia. She often repeated the simple truth that 'taxonomy is the integrative basis of biology', and bemoaned the fact that many museums appear to be eschewing the support of taxonomic research, and changing their emphases from science to user-pays consultancies and popular entertainment.

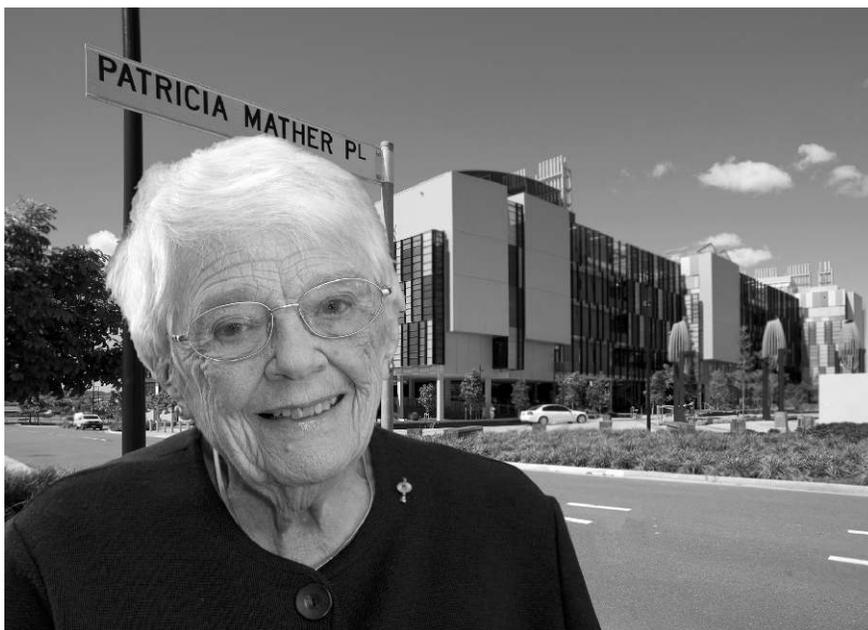
Patricia was fiercely loyal to the Queensland Museum and everything it represented or aspired to become – even at times when she perceived it might be heading in a direction she did not support. It was not in her nature to hold back on her opinions, and while certain senior managers might have shown the scars of battle, few ever questioned her passion or commitment to the Museum. Her vision was for a respected and venerable institution, built on the authority that arises out of a strong record of evidence-based research on world class

collections – a vision that continues to drive us all. Pat was also passionate in her efforts to communicate knowledge from scientific research to influence politicians and decision-makers towards the protection of our natural resources. Indeed, during the 1970s, in her roles as Secretary and President of the Great Barrier Reef Committee, Pat played a significant part in the 'Save the Barrier Reef' conservation campaign that was to forever prevent oil drilling in Great Barrier Reef waters. She also played a vital role in drafting the initial Bill for an Act for the Great Barrier Reef that would eventually lead to the creation of the GBR Management Authority.

Required to officially retire in 1990 (ironically non-compulsory retirement was to be introduced into the Queensland Public Service only a short time later), she was immediately made an Honorary Research Associate and allowed to maintain her office. She continued to come to work as if nothing had happened for the next 21 years – it was often humourously remarked that she had a better record of attendance than most of the paid staff. Indeed Patricia lived for her work, first and foremost, and could not imagine a life without it. For much of this time she also continued to win grant money to keep a full time research assistant employed to assist her. Of the 396 species she described whilst at the Museum, 275 were described following her retirement! Also, rather typically, once she could no longer avoid it, she took the bull-by-the-horns and became proficient with basic personal computing and email. She had rebuked her younger colleagues vociferously for many years about always having their eyes glued to their monitors instead of their microscopes, but by then she was grateful for their ready help to get her out of trouble!

Some major accolades followed on closely after her retirement, including a Queensland Museum Medal (1991), the Australian Marine Science Association (AMSA) Jubilee Prize (1992), and an Officer in the Order of Australia (1992).

While Patricia enjoyed robust good health for most of her life, she had also been a heavy



A proud Dr Mather at the unveiling of 'Patricia Mather Place' at the new Queensland Biosciences Precinct at Boggo Road, Dutton Park in April 2011.

smoker. In her inimitable style, when she was in her early sixties she just simply stopped smoking. No fuss, just her iron will. Unfortunately, although it was some years later before it became evident, there had been significant damage to her lungs. As the years progressed she struggled more and more to breathe. In an attempt to keep her disease at bay, she actively took up walking all over the steep terrain of the suburb of Spring Hill where she lived, and would swim many lengths of her small pool, even on the coldest days in winter. Such was her nature. In late 2009 she succumbed to a very serious bout of double pneumonia, and hovered close to death for some weeks, however she had not finished her work at the Museum, and although it took many months, and she was no longer allowed to drive, eventually she was back in her beloved office. As a small concession to what she had gone through, she now only came four days a week, and a little later in the morning than she used to!

Always a great admirer of Charles Darwin, she once said that her view of biology was best summed up in Darwin's words from the last paragraph of the Origin of Species – 'there is grandeur in this view of life ... that from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved'.

Qualifications and awards

- Officer of the Order of Australia (1992)
- Bachelor of Science with first class honours (UWA, 1948)
- Doctor of Philosophy (UQld, 1962)
- Doctor of Science (UWA, 1970)
- Doctor of Science honoris causa (UQld, 1990)
- Elected Fellow of the Australian Institute of Biology (1989)
- Foreign Member of the Linnean Society London (2001)

- Elected Life Member of the Australian Coral Reef Society (1985)
- Winner of the Australian Marine Science Association Jubilee Prize (1992)
- Winner of the Queensland Museum Medal (1991)
- Winner of two Whitley Awards for the best book on science history ('Time for a Museum'. The History of the Queensland Museum, 1986), and as co-editor with the late Isobel Bennett, for the best natural history book ('The Coral Reef Handbook', 1993).

Contributions to science policy, infrastructure for research funding, and conservation biology

- Marine Research Allocations Advisory Committee (MST 1986–1987)
- Australian Research Council's Biological Panel (1988–1992)
- Australian Biological Resources Study Advisory Committee (1989–1994)
- Hon. Secretary (1966–74), and subsequently President, of the Great Barrier Reef Committee (1976–1977)
- Foundation member of the Great Barrier Reef Marine Park Authority Consultative Committee (1976–85)
- Organising committee and co-convenor of the Second International Coral Reef Symposium (1973)
- Councillor and a member of the Executive Committee Australian Conservation Foundation (1972–1973)
- Member of the Australian Academy of Science, Fauna Standing Committee (1973–1980), and its successor, the Australian Academy National Committee for Animal and Veterinary Science – Fauna Subcommittee (1981–1996), participating in the successful establishment of the Australian Biological Resources Study
- Member of the Board and Executive of the University of Queensland and Great Barrier Reef Committee Heron Island Research Station Board (1970–1980)
- Member of the Lizard Island Research Station Board of Consultants (1976–1979)
- A number of editorial roles such as the University of Queensland Research Committee's 'Research' (1969, 1971), the Queensland Museum 'National Estate in the Moreton-Wide-Bay Burnett' (1975, 1976), the Queensland Museum's 'The Small Museum' (1979, 1984), and more recently, the subject editor for Ascidiacea at the online taxonomic journal *Zootaxa* (2001–2010).

Taxonomic milestones

- 98 papers on taxonomy, biogeography, or ecology of marine invertebrate, mostly ascidians, and especially the 1,424 pages of the Australian Ascidiacea (Parts 1–4), published in the *Memoirs of the Queensland Museum*.
- Discovered more than three-quarters (585) of the 726 species of ascidians now known from Australia (about 25% of the estimated world diversity), with 462 species being newly described by her.
- Described 15 new genera and 5 new families.
- Developed a collection of specimens of ascidians from almost nothing, when she started, to more than ten thousand specimens and over 800 species – without doubt one of the most comprehensive and best curated ascidian collections in the world.

Her self-confessed most significant achievements

- The Great Barrier Reef Committee's significant contribution to the proceedings of the Royal Commissions on Oil Drilling in the Great Barrier Reef, ensuring that objective evidence on the Reef's structure and biology was put before the Commissions
- Drafting the initial Bill for an Act for the Great Barrier Reef, which subsequently formed the basis for legislation leading to the existence of the Great Barrier Reef Marine Park Authority.

- Serving on the Ministerial Biodiversity Advisory Committee to the Federal Minister of the Environment on science policy in Australia.
- Having a street named 'Patricia Mather Place', in the Biosciences Precinct at Dutton Park, alongside two other Queensland science luminaries, Dr Joe Baker and Dr Peter Doherty.

'What am I most proud of? I have described 500 of the 700 species of ascidians now known from Australia – I suppose I'm quite proud of that. And I'm really proud of my three sons.'

NAMES CREATED TO HONOUR PATRICIA MATHER (NEÉ KOTT)

Tunicata

- Pycnoclavella kottae* (Millar, 1960)
Phallusia kottae (Monniot & Monniot, 1996)
Styela kottae Monniot & Monniot, 1991
Octacnemus kottae Sanamyan & Sanamyan, 2002
Aplidium kottae Brunetti, 2007

Crustacea

- Periclimenaeus kottae* Bruce, 2005
Periclimenaeus matherae Bruce, 2005

Arachnida

- Encyocrypta kottae* Raven & Churchill, 1991
Eupograptia kottae Raven, 2009

Chemical

- Kottamide E, a novel alkaloid isolated from *Pycnoclavella kottae*.

Author Citations for Honorifics

- Millar, R.H. 1960. Ascidacea. *Discovery Report*, 30: 159. Cambridge.
- Monniot, C & Monniot, F. 1991. Tunicata: peuplements d'ascidies profondes en Nouvelle-Caledonie. Diversite des strategies adaptatives. *Memoires du Museum National d'Histoire Naturelle Serie A Zoologie* 151: 357-448.
- Monniot, C & Monniot, F. 1996. New collections of ascidians from the western Pacific and south-eastern Asia. *Micronesica* 29(2): 133-279.
- Sanamyan, K.E. & Sanamyan, N.P. 2002. Deep-water ascidians from the south-western Atlantic (RV Dmitry Mendeleev, cruise 43 and Academic

Kurchatov, cruise 11). *Journal of Natural History* 36(3): 305-359.

- Appleton, D.R. & Copp, B.R. 2003. Kottamide E, the first example of a natural product bearing the amino acid 4-amino-1, 2-dithiolane-4-carboxylic acid (Adt). *Tetrahedron Letters* 44(50): 8963-8965.
- Bruce, A.J. 2005. New species of *Periclimenaeus* Borradaile (Crustacea: Decapoda: Pontoniinae) from Ashmore Reef, north Western Australia, with remarks on *P. pachydentatus* Bruce, 1969. *Records of the Western Australian Museum* 22(4): 325-342.
- Brunetti, R. 2007. Nomenclatural Acts: homonymy in the Ascidacea (Tunicata) and proposed nomina nova. *Zootaxa* 1613: 67-68.
- Raven, R.J. 2009. Revisions of Australian ground-hunting spiders: IV. The spider subfamily Diaprogaptinae subfam. nov. (Araneomorphae: Miturgidae). *Zootaxa* 2035: 1-40.
- Raven, R.J. & Churchill, T.B. 1991. A revision of the mygalomorph spider genus *Encyocrypta* Simon in New Caledonia (Araneae Barychelidae). *Memoires du Museum National d'Histoire Naturelle Serie A Zoologie* 149: 31-86.

LIST OF ASCIDIAN TAXA (TUNICATA) DESCRIBED BY PATRICIA KOTT

Families (6)

- Stomozoidae Kott, 1957
 Plurellidae Kott, 1973
 Pycnoclavellidae Kott, 1990
 Protopolyclinidae Kott, 1992
 Ritterellidae Kott, 1992
 Vitrumidae Kott, 2009

Genera (16)

- Stomozoa* Kott, 1957
Adagnesia Kott, 1963
Minostyela Kott, 1969
Protoholozoa Kott, 1969
Monoandrocarpa Kott, 1972
Plurella Kott, 1973
Atriolum Kott, 1983
Microgastra Kott, 1985
Asajirus Kott, 1989
Brevicollus Kott, 1990

Euclavella Kott, 1990
Neodistoma Kott, 1990
Polydistoma Kott, 1990
Anadistoma Kott, 1992
Condominium Kott, 1992
Claudenus Kott, 1998
Clitella Kott, 2001
Salix Kott, 2005
Vitrum Kott, 2009

Species (504)

Ascidia prolata Kott, 1985
Corella halli Kott, 1951
Ascidia thompsoni Kott, 1952
Cnemidocarpa longata (Kott, 1952)
Ecteinascidia flora Kott, 1952
Lissoclinum cupuliferum Kott, 1952
Microcosmus stoloniferus Kott, 1952
Molgula batemani Kott, 1952
Perophora multistigmata Kott, 1952
Polyandrocarpa australiensis Kott, 1952
Polyandrocarpa triggensis Kott, 1952
Polycarpa capricornia Kott, 1952
Polycitor searli Kott, 1952
Pyura leeuwinia Kott, 1952
Pyura parvispinatus Kott, 1952
Pyura plicata Kott, 1952
Agnesia complicata Kott, 1954
Aplidium antarcticum Kott, 1954
Aplidium punctans (Kott, 1954)
Ascidia plicata Kott, 1954
Cnemidocarpa lobata (Kott, 1954)
Cystodytes tasmanensis Kott, 1954
Leptoclinides kerguelenensis Kott, 1954
Leptoclinides multilobatus Kott, 1954
Molgula kerguelenensis Kott, 1954
Molgula macquariensis Kott, 1954
Molgula spiralis Kott, 1954
Molguloides tenuis Kott, 1954
Pareugyrioides macquariensis Kott, 1954
Polycitor columna Kott, 1954

Sycozoa tasmanoides Kott, 1954
Synoicum circumvolutum Kott, 1954
Pyura littoralis (Kott, 1956)
Clavelina baudinensis Kott, 1957
Clavelina dagysa Kott, 1957
Distaplia viridis Kott, 1957
Eudistoma arenosum Kott, 1957
Eudistoma globosum Kott, 1957
Eudistoma murrayi (Kott, 1957)
Euherdmania australis Kott, 1957
Monniotus australis (Kott, 1957)
Polycitor longitube Kott, 1957
Polycitor subarborensis Kott, 1957
Polycitor translucida Kott, 1957
Polycitor translucidus Kott, 1957
Pseudodistoma australe Kott, 1957
Pycnoclavella diminuta (Kott, 1957)
Ritterella dispar Kott, 1957
Sigillina fantasiana (Kott, 1957)
Stomozoa murrayi Kott, 1957
Trididemnum aspiculatum Kott, 1957
Didemnum rotnesti Kott, 1962
Leptoclinides coelenteratus (Kott, 1962)
Leptoclinides imperfectus (Kott, 1962)
Polysyncraton circulum Kott, 1962
Polysyncraton discoides Kott, 1962
Polysyncraton orbiculum Kott, 1962
Trididemnum pseudodiplosoma (Kott, 1962)
Trididemnum spiculatum Kott, 1962
Adagesia opaca Kott, 1963
Aplidium amorphatum Kott, 1963
Aplidium australiense Kott, 1963
Aplidium brevilarvacium Kott, 1963
Aplidium coniferum Kott, 1963
Aplidium jacksoni Kott, 1963
Aplidium opacum Kott, 1963
Aplidium parvum Kott, 1963
Aplidium rubricollum Kott, 1963
Aplidium triggsense Kott, 1963
Placentela areolata Kott, 1963
Polyclinum marsupiale Kott, 1963

In Memorium

- Pseudodiazona claviformis* (Kott, 1963)
Syonicum atopogaster Kott, 1963
Adagnesia antarctica Kott, 1969
Aplidium abyssum Kott, 1969
Caenagnesia schmitti Kott, 1969
Diplosoma antarcticum Kott, 1969
Hypsistozoa obscura Kott, 1969
Minostyela clavata Kott, 1969
Placentela translucida Kott, 1969
Protoholozoa pedunculata Kott, 1969
Pyura tunica Kott, 1969
Syonicum ramulosum Kott, 1969
Syonicum tentaculatum Kott, 1969
Molgula millari Kott, 1971
Aplidium elatum Kott, 1972
Claudenus antipodus (Kott, 1972)
Clavelina mirabilis Kott, 1972
Eugyra moretonensis Kott, 1972
Hypodistoma mirabile (Kott, 1972)
Leptoclinides fungiformis Kott, 1972
Metandrocarpa indica Kott, 1972
Molgula diversa Kott, 1972
Molgula ellistoni Kott, 1972
Molgula rima Kott, 1972
Molgula sphaera Kott, 1972
Pareugyrioides exigua (Kott, 1972)
Placentela ellistoni Kott, 1972
Polyandrocarpa simulans Kott, 1972
Polycitor obeliscus Kott, 1972
Pycnoclavella arenosa Kott, 1972
Pyura scoresbiensis Kott, 1972
Pyura tendata Kott, 1972
Stolonica truncata Kott, 1972
Symplegma arenosa Kott, 1972
Aplidium directum Kott, 1973
Monoandrocarpa plana Kott, 1973
Plurella elongata Kott, 1973
Aplidium pronum Kott, 1975
Leptoclinides volvus Kott, 1975
Microcosmus planus Kott, 1975
Clavelina pseudobaudinensis (Kott, 1976)
- Lissoclinum punctatum* Kott, 1977
Trididemnum clinides Kott, 1977
Trididemnum miniatum Kott, 1977
Diplosoma multipapillata Kott, 1980
Trididemnum nubilum Kott, 1980
Trididemnum paracyclops Kott, 1980
Trididemnum strigosum Kott, 1980
Eudistoma discederata Kott, 1981
Eudistoma vitiata Kott, 1981
Lissoclinum pacificense (Kott, 1981)
Didemnum etiolum Kott, 1982
Trididemnum paraclinides Kott, 1982
Atriolum robustum Kott, 1983
Trididemnum tegulum Kott, 1984
Adagnesia venusta Kott, 1985
Amphicarpa meridiana Kott, 1985
Amphicarpa nodula Kott, 1985
Ascidia decepta Kott, 1985
Ascidia nereia Kott, 1985
Ascidia occidentalis Kott, 1985
Ascidia parasamea Kott, 1985
Cnemidocarpa aculeata Kott, 1985
Cnemidocarpa completa Kott, 1985
Cnemidocarpa fissa Kott, 1985
Cnemidocarpa intestinata Kott, 1985
Cnemidocarpa tripartita Kott, 1985
Ctenyura tetraplexa Kott, 1985
Ctenyura tortuosa Kott, 1985
Ecteinascidia maxima Kott, 1985
Eugyra mammillata Kott, 1985
Eugyra millimetra Kott, 1985
Metandrocarpa agitata Kott, 1985
Metandrocarpa miniscula Kott, 1985
Microcosmus tuberculatus Kott, 1985
Molgula incidata Kott, 1985
Perophora clavata Kott, 1985
Perophora modificata Kott, 1985
Phallusia barbarica Kott, 1985
Phallusia millari Kott, 1985
Polyandrocarpa sparsa Kott, 1985
Polyandrocarpa wastonia Kott, 1985

- Polyandrocarpa watsonia* Kott, 1985
Polycarpa flava Kott, 1985
Polycarpa intonata Kott, 1985
Polycarpa nota Kott, 1985
Polycarpa papyra Kott, 1985
Polycarpa plenovata Kott, 1985
Polycarpa stirpes Kott, 1985
Polycarpa tinctorella Kott, 1985
Pyura abrasata Kott, 1985
Pyura confragosa Kott, 1985
Pyura crassacapitata Kott, 1985
Pyura isobella Kott, 1985
Pyura navicula Kott, 1985
Pyura scortea Kott, 1985
Pyura tasmanensis Kott, 1985
Pyura viarecta Kott, 1985
Stolonica aluta Kott, 1985
Botryllocarpa elongata Kott, 1990
Brevicollus tuberatus Kott, 1990
Clavelina nigra Kott, 1990
Clavelina oliva Kott, 1990
Clavelina robusta Kott, 1990
Distaplia cuscina Kott, 1990
Distaplia florida Kott, 1990
Distaplia muriella Kott, 1990
Distaplia pallida Kott, 1990
Distaplia prolifera Kott, 1990
Distaplia racemosa Kott, 1990
Distaplia regina Kott, 1990
Distaplia retinaculata Kott, 1990
Distaplia tokiokai Kott, 1990
Distaplia violetta Kott, 1990
Eucoelium orientalis (Kott, 1990)
Eudistoma anaematum Kott, 1990
Eudistoma aureum Kott, 1990
Eudistoma bulbatum Kott, 1990
Eudistoma carnosum Kott, 1990
Eudistoma constrictum Kott, 1990
Eudistoma eboreum Kott, 1990
Eudistoma gracilum Kott, 1990
Eudistoma incubitum Kott, 1990
Eudistoma maculosum Kott, 1990
Eudistoma malum Kott, 1990
Eudistoma microlarvum Kott, 1990
Eudistoma pratulum Kott, 1990
Eudistoma purpureum Kott, 1990
Eudistoma reginum Kott, 1990
Eudistoma sabulosum Kott, 1990
Eudistoma superlatum Kott, 1990
Eudistoma tigrum Kott, 1990
Eudistoma tumidum Kott, 1990
Eusynstyela grandis Kott, 1990
Neodistoma mammillatum Kott, 1990
Perophora sabulosa Kott, 1990
Polycarpa directa Kott, 1990
Polycarpa kapala Kott, 1990
Polycitor annulus Kott, 1990
Polycitor calamus Kott, 1990
Polycitor cerasus Kott, 1990
Polycitor emergens Kott, 1990
Polycitor nubilus Kott, 1990
Polydistoma fungiforme Kott, 1990
Polyzoa exigua Kott, 1990
Polyzoa nodosa Kott, 1990
Pycnoclavella aurantia Kott, 1990
Pycnoclavella elongata Kott, 1990
Pycnoclavella tabella Kott, 1990
Pyura rapaformis Kott, 1990
Sigillina grandissima Kott, 1990
Stomozoa australiensis Kott, 1990
Stomozoa bellissima Kott, 1990
Sycozoa brevicauda Kott, 1990
Sycozoa cavernosa Kott, 1990
Anadistoma attenuatum Kott, 1992
Aplidiopsis confluata Kott, 1992
Aplidiopsis mammillata Kott, 1992
Aplidiopsis sabulosa Kott, 1992
Aplidium acroporum Kott, 1992
Aplidium bacculum Kott, 1992
Aplidium clivosum Kott, 1992
Aplidium congregatum Kott, 1992
Aplidium distaplum Kott, 1992

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- Aplidium filiforme* Kott, 1992
Aplidium fluoescum Kott, 1992
Aplidium gastrolineatum Kott, 1992
Aplidium gelasinum Kott, 1992
Aplidium geminatum Kott, 1992
Aplidium incubatum Kott, 1992
Aplidium inflorescens Kott, 1992
Aplidium lenticulum Kott, 1992
Aplidium lodix Kott, 1992
Aplidium lunacratum Kott, 1992
Aplidium macrolobatum Kott, 1992
Aplidium magnilarvum Kott, 1992
Aplidium minisculum Kott, 1992
Aplidium multilineatum Kott, 1992
Aplidium ornatum Kott, 1992
Aplidium paralineatum Kott, 1992
Aplidium parastigmaticum Kott, 1992
Aplidium petrosus Kott, 1992
Aplidium robustum Kott, 1992
Aplidium rosarium Kott, 1992
Aplidium tabascum Kott, 1992
Cnemidocarpa amphora Kott, 1992
Cnemidocarpa tribranchiata Kott, 1992
Cystodytes ramosus Kott, 1992
Euherdmania translucida Kott, 1992
Monniotus radiatus Kott, 1992
Morchellium albidum Kott, 1992
Morchellium pannosum Kott, 1992
Polyandrocarpa colemani Kott, 1992
Polyclinum nudum Kott, 1992
Polyclinum orbitum Kott, 1992
Polyclinum tenuatum Kott, 1992
Polyclinum terranum Kott, 1992
Protoholozoa australiensis Kott, 1992
Pseudodistoma acuatum Kott, 1992
Pseudodistoma candens Kott, 1992
Pseudodistoma gracilum Kott, 1992
Pseudodistoma inflatum Kott, 1992
Pseudodistoma oriens Kott, 1992
Pseudodistoma pilatum Kott, 1992
Pseudodistoma pulvinum Kott, 1992
Ritterella compacta Kott, 1992
Ritterella cornuta Kott, 1992
Ritterella multistigmata Kott, 1992
Ritterella papillata Kott, 1992
Ritterella tokiokai Kott, 1992
Synoicum angustum Kott, 1992
Synoicum buccinum Kott, 1992
Synoicum castellatum Kott, 1992
Synoicum chrysanthemum Kott, 1992
Synoicum citrum Kott, 1992
Synoicum concavatum Kott, 1992
Synoicum erectum Kott, 1992
Synoicum longistriatum Kott, 1992
Synoicum obscurum Kott, 1992
Synoicum sacculum Kott, 1992
Synoicum suarenium Kott, 1992
Styela complexa Kott, 1995
Aplidium grisiatum Kott, 1998
Synoicum saxeum Kott, 1998
Atriolum bucinum Kott, 2001
Atriolum eversum Kott, 2001
Atriolum lilium Kott, 2001
Atriolum marinense Kott, 2001
Atriolum tubiporum Kott, 2001
Clitella nutricula Kott, 2001
Didemnum arancium Kott, 2001
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Didemnum inveteratum Kott, 2001
Didemnum jucundum Kott, 2001
Didemnum levitas Kott, 2001
Didemnum linatum Kott, 2001

- Didemnum lissoclinum* Kott, 2001
Didemnum macrosiphonium Kott, 2001
Didemnum mantile Kott, 2001
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Didemnum minisculum Kott, 2001
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Diplosoma velatum Kott, 2001
Leptoclinides aciculus Kott, 2001
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Lissoclinum caliginosum Kott, 2001
Lissoclinum concavum Kott, 2001
Lissoclinum conchylum Kott, 2001
Lissoclinum durable Kott, 2001
Lissoclinum levitum Kott, 2001
Lissoclinum limosum Kott, 2001
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Lissoclinum spongium Kott, 2001
Lissoclinum variabile Kott, 2001
Polysyncraton dentatum Kott, 2001
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Polysyncraton pedunculatum Kott, 2001
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Polysyncraton rubitapum Kott, 2001
Polysyncraton scobinum Kott, 2001
Polysyncraton scorteum Kott, 2001
Polysyncraton sideris Kott, 2001
Polysyncraton tasmanense Kott, 2001
Polysyncraton tegetum Kott, 2001
Polysyncraton tenuicutis Kott, 2001

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Trididemnum caelatum Kott, 2001
Trididemnum cristatum Kott, 2001
Trididemnum crystallinum Kott, 2001
Trididemnum lapidosum Kott, 2001
Trididemnum nobile Kott, 2001
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Trididemnum tectum Kott, 2001
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Clavelina amplexa Kott, 2002
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Distaplia cuspidis Kott, 2002
Herdmania fimbriae Kott, 2002
Herdmania mentula Kott, 2002
Leptoclinides complexus Kott, 2002
Botrylloides saccus Kott, 2003
Perophora longicaulis Kott, 2003
Polyclinum corbis Kott, 2003
Sigillina pulvinus Kott, 2003
Stolonica brevigastra Kott, 2003
Didemnum aratore Kott, 2004
Didemnum asterix Kott, 2004
Didemnum congregatum Kott, 2004
Didemnum coralliforme Kott, 2004
Didemnum diversum Kott, 2004
Didemnum domesticum Kott, 2004
Didemnum farrago Kott, 2004
Didemnum fibriae Kott, 2004
Didemnum lillipution Kott, 2004
Didemnum nambucciensis Kott, 2004
Didemnum rota Kott, 2004
Didemnum spumante Kott, 2004
Didemnum spumosum Kott, 2004
Didemnum tumulatum Kott, 2004
Didemnum usitatum Kott, 2004
Didemnum vesperi Kott, 2004
Didemnum vestum Kott, 2004
Diplosoma fecundum Kott, 2004
Distaplia turboensis Kott, 2004
Leptoclinides cucurbitus Kott, 2004
Leptoclinides decoratus Kott, 2004
Leptoclinides grandistellus Kott, 2004
Leptoclinides prunus Kott, 2004
Leptoclinides tuberculatus Kott, 2004
Lissoclinum coactum Kott, 2004
Lissoclinum diversum Kott, 2004
Lissoclinum laneum Kott, 2004
Lissoclinum scopulosum Kott, 2004
Lissoclinum stellatum Kott, 2004
Polysyncraton alinguum Kott, 2004
Polysyncraton aruum Kott, 2004
Polysyncraton catillum Kott, 2004
Polysyncraton galaxum Kott, 2004
Polysyncraton linere Kott, 2004
Polysyncraton longitubis Kott, 2004
Polysyncraton luteum Kott, 2004
Polysyncraton miniastrum Kott, 2004
Polysyncraton montanum Kott, 2004
Polysyncraton niveum Kott, 2004
Polysyncraton peristroma Kott, 2004
Polysyncraton pseudomagnetae Kott, 2004
Polysyncraton reticulum Kott, 2004
Polysyncraton rostrum Kott, 2004
Polysyncraton textus Kott, 2004
Polysyncraton turris Kott, 2004
Symplegma teruakii Kott, 2004
Trididemnum farrago Kott, 2004
Trididemnum pusillum Kott, 2004
Trididemnum reticulatum Kott, 2004
Didemnum cilicium Kott, 2005
Didemnum corium Kott, 2005
Didemnum leopardus Kott, 2005
Didemnum plebeium Kott, 2005
Leptoclinides frustus Kott, 2005
Leptoclinides minimus Kott, 2005
Leptoclinides pulvinus Kott, 2005
Lissoclinum agriculum Kott, 2005
Lissoclinum clavatum Kott, 2005
Lissoclinum karenae Kott, 2005
Polysyncraton polysystema Kott, 2005
Pycnoclavella filamentosa Kott, 2005

Pycnoclavella inflorescens Kott, 2005
Pycnoclavella narcissus Kott, 2005
Stolonica vermiculata Kott, 2005
Trididemnum mellitum Kott, 2005
Aplidium abditum Kott, 2006
Aplidium formosum Kott, 2006
Aplidium laticum Kott, 2006
Ascidia saccula Kott, 2006
Clavelina simplex Kott, 2006
Rhopalaea meridionalis Kott, 2006
Sigillina exigua Kott, 2006
Synoicum sphinctorum Kott, 2006
Synoicum syrtis Kott, 2006
Didemnum vesica Kott, 2007
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