



Checklist of vascular plants recorded from Chatham Islands



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Cover: Chatham Island forget-me-not. Photo: Peter de Lange.

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Executive summary

This checklist is an update and revision of the previous indigenous vascular plant checklist of the Chatham Island archipelago (de Lange et al. 1999a). In line with the stated intention of providing a full annotated vascular flora for the islands (de Lange et al. 1999a), this checklist incorporates the first full listing of those indigenous and naturalised vascular species that have been collected from the islands since Mueller (1864).

The Chatham Island archipelago has a vascular flora of 875 taxa (including hybrid combinations) and 27 informally recognised entities—a total of 902. Forty-one taxa (including three hybrid combinations) are endemic, 400 indigenous, and 434 are considered naturalised. Twenty-one of the naturalised taxa are indigenous to the main islands of New Zealand but naturalised on the Chatham Islands. Of the 27 informally recognised entities, 13 are potentially endemic to the islands, 11 are indigenous to the islands and three are naturalised. Two hybrid combinations, involving the Chatham Island endemics *Coprosma chathamica* and *C. propinqua* var. *martinii* and the naturalised New Zealand species *C. robusta*, are known from Chatham Island. There are two endemic, monotypic genera, the Chatham Island sow thistle (*Embergeria* Boulos) and Chatham Island forget-me-not (*Myosotidium* Hook.f.).

Of the 411 non-endemic indigenous taxa and informal entities, 117 (29%) are known on the Chatham Islands from fewer than five gatherings each—these taxa do appear to be genuinely uncommon on the islands. Whether this is evidence of recent dispersal from New Zealand (see comments by Shepherd et al. 2009 on New Zealand – Chatham Islands occurrences of *Asplenium hookerianum*) or a decline in abundance through ongoing habitat deterioration is worthy of further study.

A further 50 literature records of taxa recorded from the islands by botanists are rejected from this listing on the basis that they are not supported by herbarium vouchers.

The inclusion of plants naturalised to the Chatham Islands in this checklist provides for the first time an immediate resource of verifiable plant records that can be used to determine naturalised plant management priorities, and assist with predicting potential weeds. This listing will also help identify those naturalised plant families, genera and species which are as yet absent from the islands and which have had a harmful impact on the natural ecosystems, agricultural and urban landscape or waterways in New Zealand proper. This is important because by identifying these gaps informed decisions can then be made by the relevant administering bodies about what measures need to be taken to prevent these exotic plants reaching the islands.

Introduction

The Chatham Islands have long been recognised as having a special flora, so much so that when the first gatherings of plant specimens made from there by Ernst Dieffenbach in 1840 reached the eminent English Botanist Joseph Hooker (1817–1911) he made it known that he regarded the Chatham Islands Flora as his domain and up to him to document first (Connor 1998). This view came to the attention of the remarkable Australian botanist Ferdinand Mueller (1825–1896), who at the time was feeling disaffected by comments made about his botanical research by Hooker and his colleague George Bentham, lead (and often considered sole) author of the Flora of Australia. While accounts vary, it seems that Mueller elected to “do” the Chatham Flora first, an action that for its time bordered on heresy, and so began a largely clandestine “gentlemen’s” war fought over the islands flora by men who never set foot there, or even it seems particularly cared for the place (Connor 1998). Mueller gets the credit for winning the first round with the publication of his Chatham Islands Flora (Mueller 1864), an act that then set in motion a fascinating history of competitive botanical exploration and, as a sideline, some rather entertaining Darwinian and theological squabbles (Connor 1998). This stoush was only laid to rest when Leonard Cockayne became the first professional botanist to visit the islands, in the process not only describing a range of new endemic plants but also offering what is still the best and most comprehensive published overview of the vegetation associations of the islands (Cockayne 1902).

Today the Chatham’s are world renowned for their indigenous flora and fauna. The spectacular Chatham Island forget-me-not (*Myosotidium hortensium*) is widely regarded the world over as the plant that epitomises the Chatham Islands, in part because it combines beauty with rarity and threat helped by the fact that it has proved so very amenable to cultivation. Equally few people will not have heard of the remarkable snatch from the very brink of extinction of the endemic Chatham Island robin (*Petroica traversi*) (Butler & Merton 1992). Indeed, publications dealing with the islands’ unusual biota, spectacular geology and distinctive island culture are now both numerous and hugely popular (e.g., Richards 1952; King 1996; de Lange et al. 1999a; Walls et al. 2003; Aikman & Miskelly 2004; Campbell & Hutching 2007; Miskelly 2008a; Heenan et al. 2010). Today the islands are an increasingly popular destination for ecotourists keen on seeing the geology, flora and fauna of the islands, as well as experiencing the islands’ distinctive peoples and cultures.

This publication adds to that wealth of literature by significantly updating and improving the earlier Chatham Island indigenous vascular Flora (de Lange et al. 1999a). This revision is also the first to list both indigenous and naturalised plants from the islands, thereby providing the first crucial step toward the intended preparation of a full vascular flora treatment of the archipelago, the first to be attempted since Mueller’s landmark publication of 1864 (see de Lange et al. 2007).

The Chatham Islands

Location

The Chatham Islands archipelago is located about 860 kilometres east of Christchurch, New Zealand, at about latitude 44°S (Figure 1). Collectively the 40 islands, islets and rock stacks occupy a land area of about 97,000 hectares. The two largest islands, Chatham (Rekohu/Wharekauri) Island (90,000 ha) and Pitt (Rangiauria) Island (6,190 ha) are the only islands permanently inhabited by people, but all the islands, islets and rock stacks except, possibly, the remote Forty Fours, Western Reef, The Pyramid, the Murumuru Rock Stacks, and the Castle show signs of past human modification, either from past, temporary, or permanent settlement, or through varying levels of vegetation modification as evidenced by composition and structure of the flora.

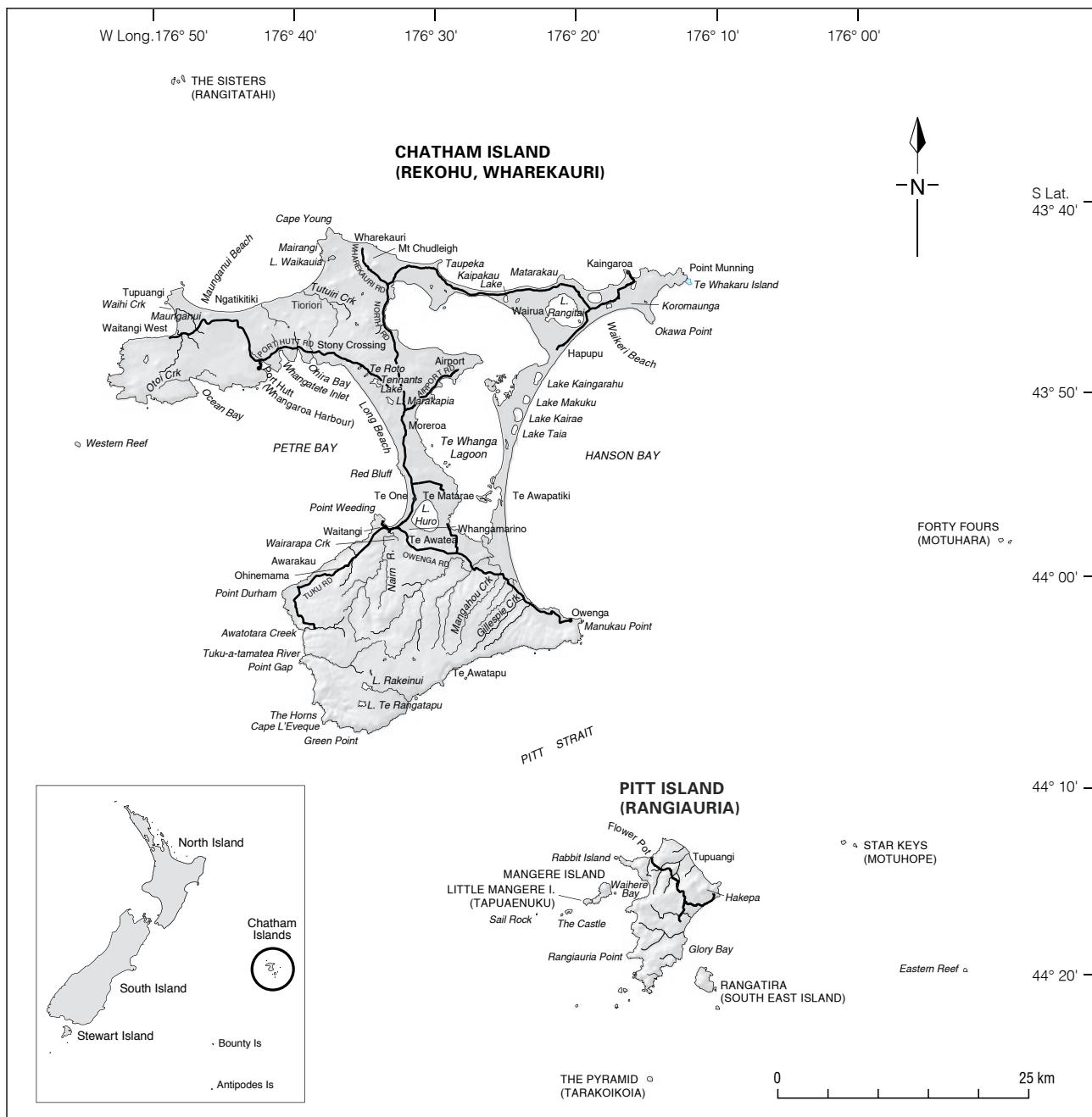


Figure 1: The location and spatial extent of the Chatham Islands

Botanical exploration—a short history



Figure 2. Ferdinand von Mueller—author of the first Chatham Island flora. Photo: Royal Botanic Gardens, Melbourne.



Figure 3. A Travers herbarium specimen of parsely fern (*Botrychium australe*).
Photo: © Royal Botanic Gardens, Melbourne.

The first attempt to treat the Chatham islands vascular flora was that by Ferdinand Mueller (Mueller 1864) (Fig. 2) who, working from his base in Melbourne, Australia and solely using plant specimens (Fig. 3) gathered for him from the islands in 1863 by Henry Hammersley Travers, listed 87 species in 67 genera, and described eight endemics (Connor 1998). Mueller also listed 8 naturalised species, to which Travers (1868) added a further two species, mustard (*Sinapis arvensis*) and white clover (*Trifolium repens*). Subsequent enumerations by Mueller (1873a), based on the second 1871 visit by H. H. Travers to the islands, listed 123 genera and 183 species. However, Mueller's second treatment was incomplete, listing only genera for the islands and not the species or lower ranks seen. Mueller's last contribution to the Chatham Islands flora came with his formal recognition of a new genus *Sporadanthus* (Mueller 1874) for the restiad rush-like plant he had originally described in 1873 as *Lepyrodia traversii* (Mueller 1873b).

At about the same time that Mueller was actively working on the Chatham Islands, Wellington-based government botanist John Buchanan (see Adams 2002), working from a set of the same 1871 Travers gatherings provided to Mueller, recorded 109 dicotyledonous and 49 monocotyledonous species, and 47 ferns and lycophytes for the Chathams (Buchanan 1875). Buchanan also recognised as new and described the endemic *Veronica chathamica* (referred to in this checklist as *Hebe chathamica*), and reduced, incorrectly as it transpires, one of Mueller's novelties (*Senecio radiolatus*) to varietal rank within *S. lautus*. Kirk (1873) working also with the same Travers gatherings provided the first comprehensive listing of the naturalised plants for the Chatham Islands, recording 29 species, one of which, the plume grass *Dichelachne crinita*, is now regarded as indigenous (see Edgar & Connor 2000). Significantly neither Buchanan nor Kirk visited the islands, although in the case of Kirk, there are Chatham specimens in his herbarium bearing his handwritten labels which suggest that he did go there. These we take as evidence of Kirk's unconventional habit of relabeling specimens collected by others in his own hand with the collector often attributed to himself (see comments on Kirk's herbarium labeling systems in de Lange 2007a).

While Buchanan and Kirk's papers were as comprehensive as they could be from the evidence they had to hand, further investigation of the Chatham Islands vascular flora necessitated field experience. So it was that following several weeks' investigation of the vegetation of the main Chatham Island, Leonard Cockayne provided the first comprehensive overview of that island's vegetation "formations" and flora (Cockayne 1902). In that paper Cockayne increased the indigenous vascular flora of the island group to 217 taxa (166 species and varieties of flowering plants and 51 ferns and lycophytes), expanded the number of endemic vascular plant taxa from 9 to 31, and added a further 12 new indigenous plant records to the island group. Cockayne (1902) also rejected 12 taxa recorded by Buchanan offering opinions as to actual identities of the plants Buchanan had reported, and he was also the first to unequivocally state that Chatham Island *Rhopalostylis* was not *R. sapida*, instead, and rather insightfully (see Stalker 1998; de Lange 2007b) suggesting instead that the Chathams palm had more in common with *R. baueri*. Following

Cockayne's paper, there has not been any detailed treatment dealing exclusively with the islands' flora until the first version of this checklist (de Lange et al. 1999a). Prior to that, published information about the Chathams flora was relegated to mostly minor entries and comments under the relevant taxa entries in publications such as Kirk's Students flora (Kirk 1899), Cheeseman's Manual of the New Zealand Flora (Cheeseman 1906, 1925) and in the volumes of the New Zealand Flora series (see Allan 1961; Edgar & Connor 2000; Galloway 1985, 2007; Healy & Edgar 1980; Moore & Edgar 1970; Webb et al. 1988). Aspects and sometimes detailed accounts of the flora and vegetation of the smaller islands with the Chathams archipelago are also covered by Chappell (1987), de Lange & Sawyer (2008) and Taylor (1991).

Madden & Healy (1959) provided the first comprehensive account of the naturalised flora of the Chatham Islands. That work, listing 158 naturalised species, was based mainly on specimens gathered from the Chatham Islands by Madden, an agricultural scientist who visited the islands to assist with pasture development. In their paper, Madden & Healy provided an analysis of the likely origins of the weed flora, concluding that the majority of the weeds recorded had an agricultural origin. They also provided the first attempts at clarifying the status of several plants indigenous to New Zealand proper and which either had seemingly anomalous, restricted Chatham distributions, or an apparently "weedy" tendency there. They broke these plants down into three categories: (1) those that had been deliberately naturalised on the islands by the inhabitants for food or medicinal purposes, e.g., raupo (*Typha orientalis* C.Presl), (2) those that apparently came as an accidental impurity in grass seed or associated with livestock, e.g., *Juncus pallidus*, and lastly (3) plants that had escaped from gardens, citing as an example, tree fuchsia (*Fuchsia excorticata*) which they claimed owed its presence on Chatham Island to a deliberate planting made by a "nostalgic housewife". Following this seminal paper, another (Northcroft 1975) was published posthumously by A.J. Healy some 51 years after the author, E.F. Northcroft, had visited the islands as a member of the 1924 Otago Institute expedition to the Chathams. While on the island, Northcroft studied the naturalised flora but his work and listing had been overlooked because it was unpublished. It was only rediscovered when Northcroft's list was found in a collection of miscellaneous papers and reprints that had belonged to W.R.B. Oliver, a past Director of what is now the Museum of New Zealand, *Te Papa Tongarewa*. This listing was then published as an annotated checklist by A.J. Healy (Northcroft 1975). Northcroft's list provided documentation of a further 53 taxa (i.e., additional to those recorded by Madden & Healy 1959) he considered naturalised to the islands in 1924. Unfortunately, no herbarium specimens supporting Northcroft's claims have ever been found. Nevertheless, of the 53 recorded by Northcroft, only 16 remain to be confirmed as present on the islands, while a further two records are likely based on misidentifications of other species widespread on the islands today.

More recently, Given (1996), in a general account of the Chatham Islands flora, stated that the vascular flora comprised about 325 indigenous vascular plants, 215 naturalised exotics and 40 or so endemics. Unfortunately, the list from which these figures were derived was not provided and we have been unable to locate it. Nevertheless, Given considered that while many of the weeds had previously arrived in agricultural machinery, building materials and other imports, many were now establishing from gardens. Some he felt had the potential to become invasive.

The accounts of Madden & Healy (1959), Northcroft (1975) and Given (1996) are noteworthy because otherwise all of the other literature we have seen dealing with the plants of the Chatham Islands, has tended to deal almost exclusively with the indigenous flora of the islands (Richards 1952; Druce & Kelly 1973; Given & Williams 1984; de Lange et al. 1999a; Molloy 2002). These accounts of indigenous species have, therefore, presented a false impression of the islands' environmental condition and, as such, provide no baseline from which future biosecurity measures and weed control effort could be developed.

Methods

Using the same methodology employed by de Lange et al. (1999a), we have based this listing on our own gatherings and those Chatham Island herbarium specimens held by the following New Zealand herbaria: Auckland Museum (AK¹) (which now includes the former University of Auckland (AKU) herbarium), University of Canterbury (CANU), Allan Herbarium (CHR), National Forestry Herbarium (NZFRI), University of Waikato (WAIK), Museum of New Zealand – Te Papa Tongarewa (WELT), and Victoria University of Wellington (WELTU). We have also examined Chatham Island specimens held within the von Mueller collection housed in the Melbourne Herbarium (MEL), Australia and specimens held by the Natural History Museum of the British Museum (BM), Kew Gardens (K) and Munich, Germany (M). In all cases, to ensure quality control and remove any possible doubts over plant identity, we have physically examined specimens or clear images of these.

From this search and collation of specimens, a total of 902 taxa and informally recognised entities were accepted on the basis of the existence of an indisputable herbarium specimen seen by the authors (Appendix 1). In this listing, for all accepted entities, a representative herbarium specimen is cited. Records of plants naturalised to the New Zealand Botanical Region (as defined by Allan 1961) are marked with a “*” whilst those indigenous to the main islands of New Zealand but not the Chatham Islands, and which have established on the Chathams are marked with a ‘†’. Although Madden & Healy (1959) correctly pointed out that, as these plants are naturalised to the Chathams, they should be regarded as exotic, we feel it is still useful to distinguish them from exotic taxa naturalised to the New Zealand subcontinent (of which the Chathams are undeniably part) from elsewhere in the world. This we feel is particularly important as some of these taxa have gone on to (uniquely) hybridise with their close Chatham relatives, and also because for some of them, e.g., *Sophora chathamica*, making an exact call on their naturalised status within limits of available evidence is difficult. Without recourse to other more complex technologies, such as DNA fingerprinting, we have had to rely on our own judgment. We accept, therefore, that in some instances where we have made a decision on indigenous versus naturalised status, further research may well prove us wrong.

In addition to the authenticated records accepted in the main listing, we list a further 50 taxa (Appendix 2) whose presence on the Chatham Islands has been recorded in past literature and for which we have not seen substantiating specimens. We also provide a list of those taxa recorded by past workers and which we have been able to equate to taxa either by linkage through synonymy or on the basis of probable confusion with plants we have recorded from the Chatham Islands in this listing (Appendix 3).

All taxa in this list are arranged according to the classification of the Angiosperm Phylogeny Group (APG III, 2009). For a simplified discussion of how this classification applies to the New Zealand Vascular Flora see de Lange & Rolfe (2010).

Lastly, like all plant listings, this checklist is merely a statement of what has been collected from the Chatham Islands that the authors have seen. We are certain that we have not yet captured the full vascular plant diversity of the islands. As such the authors are keen to see any plant specimens or clear images that confirm doubtful listings (see those listed), substantiate literature records, or are new to the islands. Please note that it is an offence under the Native Plants Protection Act of 1934 to collect plants without approval from the landowner, and that all indigenous plants are protected on land vested as reserve by

1. Herbarium acronyms follow those recommended by Holmgren et al. (1990).

the crown and cannot be collected without the necessary permits. Furthermore, as most of the Chatham Islands are in private ownership, permission from the landowner(s) must be obtained before any material is collected. We strongly advise that in situations of doubt it is better to take a clear photograph of the plant in question, or discuss the find with the Department of Conservation staff based at Te One, Chatham Islands² or the Wellington Hawke's Bay Conservancy³, rather than collect a specimen.

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Discussion

The Chathams vascular flora

Chatham Flora origins

Until recently it was widely believed that the Chatham Islands endemic flora had a close association with Northern and Southern New Zealand (see summary in Cameron et al. 2006), and, in one particular case, *Coprosma chathamica*, a close relationship with the Norfolk Island endemic *C. pilosa* (see Webb & Simpson 2001). This association was based solely on perceived morphological similarities between plants and had not been thoroughly tested using the range of modern tools now available to biogeographers.

Using multiple DNA sequence data and three different molecular clock models, Heenan et al. (2010) examined 19 of the then recognised 37 Chatham Island endemics, and four unnamed, potentially distinct and endemic flowering plants, looking at their phylogenetic relationships to New Zealand congeners. They also dated the divergence times of the 19 Chatham Island endemics. The authors concluded that the 19 endemics mostly diverged from their common and widespread New Zealand ancestors <2.4 million years ago.

However, four species (Chatham Island sow thistle (*Embergeria grandifolia*), Chatham Island forget-me-not (*Myosotidium hortensium*), mahoe (*Melicytus chathamicus*) and Chatham Island bamboo rush (*Sporadanthus traversii*)) diverged much earlier, with molecular clock dates recovered for these species of >3.54 million years. Of all the endemics analysed, only bamboo rush had a clear relationship to northern New Zealand where its sister species *S. ferrugineus* is endemic (de Lange et al. 1999b); with exception of the Chatham Islands forget-me-not, the rest had origins scattered throughout New Zealand.

The origins and relationship of the Chatham Islands forget-me-not have been a matter of dispute ever since it was drawn to western scientists' attention by its formal description 164 years ago (Heenan & Schönberger 2009). It had been suggested that *Myosotidium* (Boraginaceae) was most closely related to *Cynoglossum* (see comments in Allan 1961). Heenan et al. (2010), however, showed that the closest ancestors to Chatham Islands forget-me-not are species of *Omphalodes* and *Lappula*. *Omphalodes*, in particular, was recovered as a close relative. This genus has two centres of distribution, Mexico and the Mediterranean, and of the species in the genus, the closest relative was *Omphalodes nitida* a Mediterranean species.

Concerning the other endemic genus, *Embergeria*, Heenan et al. (2010) found that it was closely related to *Kirkianella*, but that it was part of a group of genera including *Sonchus*, *Actites*, and *Dendroseris*.

Heenan et al. (2010) also suggested that part of the Chatham endemic flora has persisted in the area for longer than geologists can apparently confirm that emergent land has been continuously present. While it is possible that the endemics evolved in New Zealand first, and dispersed from there to the modern Chatham Islands, Heenan et al. (2010) favour a sequence of island hopping within the general Chatham Islands region that they suggest has been going on in the area for at least the last six million years when the first clear Cenozoic contender for emergent land in the Chatham Rise appeared, the Mangere Volcano.

Nevertheless, with the exception of the endemic plants, it is still true that some of the indigenous vascular taxa on the island show a strong connection to mostly northern New Zealand, and to a lesser extent southern New Zealand. Recent discoveries of plants hitherto regarded as northern North Island endemics, e.g., Poor Knights spleenwort (*Asplenium pauperequitum*) and the groundsel *Senecio marotiri* are good examples of the northern

New Zealand – Chatham connection. Southern New Zealand examples include the sedge *Carex flavidiformis*, strap fern (*Grammitis magellanica* subsp. *magellanica*) and *Hypolepis amaurorhacis*. These northern and southern New Zealand linkages to the Chatham Islands are even more evident when the lichen, liverwort, moss and seaweed flora is considered (P. J. de Lange unpubl. data, W. Nelson pers. comm.). While these smaller non-vascular “plants” are outside the scope of this checklist, it is a peculiar feature of the Chatham Islands that there one can easily see lichens, liverworts and mosses more typical of the subantarctic islands and alpine portions of southern New Zealand growing alongside species more typical of the far north of New Zealand, north-eastern Australia or the tropical islands of the South Pacific. It is thought that some of these disjunctions may reflect dispersal relating to past sea bird movements (see comments by Fife & de Lange 2009; Renner & de Lange 2009; Renner & de Lange *in press*). Based on an admittedly limited sampling of *Asplenium hookerianum* it would also seem that multiple long distance New Zealand – Chatham dispersals have occurred and, as would be expected, are ongoing (Shepherd et al. 2009).

Another biogeographic anomaly of the Chatham Islands is the presence of *Leucopogon parviflorus* there. This shrub is otherwise known only from eastern Australia, Tasmania and Lord Howe Island (Green 1994), where it is a very common species of coastal habitats. Outside Australia, Lord Howe and the Chatham Islands, this species had also been reported from North Cape, North Island, New Zealand (initially as *L. richei*, Cheeseman 1906, 1925; and then as *L. parviflorus* by Allan 1961). However, following critical investigation those plants are now treated as an endemic allied species *L. xerampelinus* (de Lange et al. 2003), leaving the Australia-Lord Howe-Chatham Islands *L. parviflorus* occurrence as a remarkably singular Australian – Chatham vascular plant disjunction within the New Zealand Botanical Region that warrants further study. As unusual as this disjunction is in the New Zealand indigenous vascular plant flora, one species within the Chatham Islands liverwort flora, *Kurzia dendroides*, also seems to share this disjunction (Glenny & de Lange 2009). Within the strand and coastal turf flora of the islands, an Australian – southern New Zealand – Chatham Island connections are also evident. Crystalwort (*Atriplex billardierei*), still abundant on the beaches of Chatham Island, is a species that once occurred locally on the shores of Southland and Stewart Island, as well as Tasmania and south-eastern Australia (de Lange et al. 2000). Similarly, a species of scurvy grass *Lepidium flexicaule*, found in northern Chatham Island coastal turfs is known also from this habitat in mostly New Zealand proper and western Tasmania. The Australian orache (*Atriplex australasica*), known from the main islands of New Zealand only from one indisputable South Island 1770 gathering made by Joseph Banks and Daniel Solander, is also abundant on the Chatham islands (de Lange 2007c). To see it otherwise one must now to go to south-eastern Australia.

Indigenous flora

This listing recognises 902 vascular plant taxa and informally recognised entities as present on the Chatham Islands (see Appendix 1). Of these, 465 are indigenous to the islands and 437 are regarded as naturalised. This naturalised figure includes 21 plants that are indigenous to the main islands of New Zealand and that have naturalised on the Chatham Islands either by accident, e.g., *Poa cita* (probably as a grass seed impurity), or through deliberate plantings that have subsequently escaped, e.g., *Clematis paniculata*. There are two novel hybrids involving Chatham endemic *Coprosma* and the naturalised *C. robusta*, and a further two hybrids of horticultural origin, *Brachyglottis compacta* × *B. greyi* and *Hebe* × *francisciana* ‘*Lobeloides*’ are now locally established on the islands.

In addition to the two well known endemic monotypic genera (*Embergeria* and *Myosotidium*), a further 38 plants are endemic at the species and subspecies level, as are three hybrid combinations (see Table 1). A further 13 entities of unassigned rank (see

Table 1) may also be endemic. However, these require further research to determine if they merit formal taxonomic description. With the provisional acceptance that these entities are taxonomically distinct, the Chatham Islands archipelago (999 km²) may have as many as 54 endemic taxa. This is a remarkable figure when one considers that Stewart Island at 1735 km² has 28 endemic vascular plants (Wilson 1987) and the next largest New Zealand Island, Great Barrier Island (285 km²) has only three (de Lange & Norton 2004).

Table 1. Plant taxa endemic to the Chatham Islands

ENDEMIC TAXA	
<i>Asplenium chathamense</i> Brownsey	<i>Hebe chathamica</i> (Buchanan) Cockayne et Allan
<i>Aciphylla dieffenbachii</i> (F.Muell.) Kirk	<i>Hebe dieffenbachii</i> (Benth.) Cockayne et Allan
<i>Aciphylla traversii</i> (F.Muell.) Hook.f.	<i>Leptecophylla robusta</i> (Hook.f.) C.M.Weiller
<i>Astelia chathamica</i> (Skottsb.) L.B.Moore	<i>Leptinella featherstonii</i> F.Muell.
<i>Brachyglottis huntii</i> (F.Muell.) B.Nord.	<i>Linum monogynum</i> var. <i>chathamicum</i> Cockayne
<i>Callitrichie petriei</i> subsp. <i>chathamensis</i> R.Mason	<i>Melicytus chathamicus</i> (F.Muell.) Garn.-Jones
<i>Carex chathamica</i> Petrie	<i>Myosotidium hortensium</i> (Decne.) Baill.
<i>Carex ventosa</i> C.B.Clarke	<i>Myoporum semotum</i> Heenan et de Lange
<i>Coprosma chathamica</i> Cockayne	<i>Myrsine coxii</i> Cockayne
<i>Coprosma propinquua</i> var. <i>martini</i> W.R.B.Oliv.	<i>Olearia chathamica</i> Kirk
<i>Corokia macrocarpa</i> Kirk	<i>Olearia semidentata</i> Decne.
<i>Astroderia turbaria</i> (Connor) N.P. Barker et H.P. Linder	<i>Olearia telmatica</i> Heenan et de Lange
<i>Disphyma papillatum</i> Chinnock	<i>Olearia traversiorum</i> (F.Muell.) Hook.f.
<i>Dracophyllum arboreum</i> Cockayne	<i>Poa chathamica</i> Petrie
<i>Embergeria grandifolia</i> (Kirk) Boulos	<i>Plagianthus regius</i> subsp. <i>chathamicus</i> (Cockayne) de Lange
<i>Festuca coxii</i> (Petrie) Hack.	<i>Pseudopanax chathamicus</i> Kirk
<i>Geranium traversii</i> Hook.f.	<i>Pterostylis silvicultrix</i> (F.Muell.) Molloy, D.L.Jones et M.A.Clem.
<i>Gentianella chathamica</i> (Cheeseman) T.N.Ho et S.W.Liu	<i>Senecio radiolatus</i> F.Muell. subsp. <i>radiolatus</i>
<i>Hebe barkeri</i> (Cockayne) Cockayne	<i>Sporadanthus traversii</i> (F.Muell.) F.Muell.
HYBRID COMBINATIONS OF ENDEMIC TAXA	
<i>Olearia chathamica</i> Kirk × <i>O. semidentata</i> Decne.	
<i>Hebe barkeri</i> (Cockayne) Cockayne × <i>H. dieffenbachii</i> (Benth.) Cockayne et Allan	
<i>Hebe chathamica</i> (Buchanan) Cockayne et Allan × <i>H. dieffenbachii</i> (Benth.) Cockayne et Allan	
POTENTIALLY ENDEMIC AWAITING FORMAL TAXONOMIC RECOGNITION	
<i>Apodasmia</i> aff. <i>similis</i>	<i>Polystichum</i> aff. <i>vestitum</i>
<i>Coprosma</i> aff. <i>propinquua</i> var. <i>martini</i>	<i>Pterostylis</i> aff. <i>montana</i>
<i>Craspedia</i> aff. <i>minor</i>	<i>Ranunculus</i> aff. <i>foliosus</i>
<i>Hydrocotyle</i> aff. <i>robusta</i>	<i>Ranunculus</i> aff. <i>royi</i>
<i>Lepidium</i> aff. <i>oleraceum</i> (a)	<i>Senecio</i> aff. <i>glomeratus</i>
<i>Lepidium</i> aff. <i>oleraceum</i> (d)	<i>Uncinia</i> aff. <i>uncinata</i>
<i>Nematoceras</i> aff. <i>sulcatum</i>	

Features of the indigenous flora

The vascular flora of the Chatham Islands has a number of features common to many island floras. Notably the flora has a large number of plants (220, 57%) whose propagules are suited to long distance dispersal. For example, ferns and lycophytes make up 25% of the indigenous vascular flora. Trees and shrubs which make up 24% of the total New Zealand flora (de Lange & Rolfe 2010) contribute just 8% to the Chatham Islands flora. While the overall contribution of the fern families and genera to the Chathams closely mirrors that of the adjacent fern flora of the main islands of New Zealand, the main Angiosperm indigenous contributors to the flora of New Zealand proper (see de Lange & Rolfe 2010) are under-represented in the Chatham archipelago. Of the potential contributing 141 plant families present in the indigenous vascular flora of the New Zealand Botanical Region (de Lange & Rolfe 2010), the Chatham Islands indigenous vascular flora has just over half (75 families or 52% of the total New Zealand indigenous vascular flora). Furthermore, of those plant families present on the Chatham Islands, only 10 contribute 10 or more species to the overall indigenous flora (Table 2), and these are all species that have small seeds or spores suited for long distance dispersal, i.e. they are mostly wind dispersed. The most important contributing indigenous plant genera (≥ 10 species) are, for the ferns, *Blechnum* (14 species), *Hymenophyllum* (11 species), and *Asplenium* (10 species), while of those Angiosperm plants present on the islands, only *Epilobium* with 15 and *Carex* with 12 indigenous species respectively makes any sizeable contribution to the Chatham Islands indigenous flora. While the propagules of *Epilobium* are well suited to wind dispersal, those of *Carex* are spread mostly from seed ingested by waterfowl (see comments by Thorsen et al. 2009). Their abundance, therefore, on the wetland-dominated landscape of the Chathams is hardly surprising, especially when one considers the past diversity of waterfowl that once inhabited the islands (Miskelly 2008b). Of the 67 indigenous plant families absent from the Chatham Islands (Table 3), those containing five or more taxa, and which are widespread throughout much of New Zealand, e.g., Alseuosmiaceae, Centrolepidaceae, Elaeocarpaceae, Fabaceae, Lauraceae, Loranthaceae, Nothofagaceae, Orobanchaceae, Podocarpaceae, and Stylidaceae are striking gaps in the Chathams flora. The absence of indigenous conifers and *Nothofagus* (Nothofagaceae) is of course, a well known feature of the Chathams (see comments by Cockayne 1902; de Lange et al. 2008), made all the more interesting because of the occurrence on the islands of some lichens that almost exclusively associate with *Nothofagus* in New Zealand proper (see de Lange et al. 2010). While these lichens have propagules well suited to long distance dispersal, *Nothofagus* does not, and so one assumes that the distance between the Chathams and those islands of New Zealand supporting *Nothofagus* was simply too great for them to reach there.

Table 2. Main contributing (≥ 10 species) indigenous plant families on the Chatham Islands

FAMILY	NUMBER OF TAXA
Cyperaceae	42
Orchidaceae	36
Asteraceae	27
Poaceae	26
Hymenophyllaceae	16
Onagraceae	15
Blechnaceae	14
Dennstaedtiaceae	11
Aspleniaceae	10
Juncaceae	10

Table 3. Indigenous New Zealand vascular plant families and genera absent from the Chatham Islands

FAMILY	INDIGENOUS GENERA IN NEW ZEALAND
Lycophtyes	
Isoetaceae	<i>Isoetes</i>
Ferns	
Davalliaceae	<i>Davallia</i>
Loxsomataceae	<i>Loxsoma</i>
Marattiaceae	<i>Ptisana</i>
Nephrolepidaceae	<i>Nephrolepis</i>
Salvinaceae	<i>Pilularia</i>
Gymnosperms	
Araucariaceae	<i>Agathis</i>
Cupressaceae	<i>Libocedrus</i>
Phyllocladaceae	<i>Phyllocladus</i>
Podocarpaceae	<i>Dacrycarpus, Dacrydium, Halocarpus, Lepidothamnus, Manoao, Podocarpous</i>
Prumnopityaceae	<i>Prumnopitys</i>
Angiosperms—Nymphaeales	
Hydatellaceae	<i>Trithuria</i>
Angiosperms—Chloranthales	
Chloranthaceae	<i>Ascarina</i>
Angiosperms—Magnoliids	
Atherospermataceae	<i>Laurelia</i>
Lauraceae	<i>Beilschmiedia, Cassytha, Litsea</i>
Monimiaceae	<i>Hedycarya</i>
Winteraceae	<i>Pseudowintera</i>
Angiosperms—Monocots I	
Alstroemeriaceae	<i>Luzuriaga</i>
Asparagaceae	<i>Arthropodium, Cordyline</i>
Burmanniaceae	<i>Thismia</i>
Colchiaceae	<i>Iphigenia</i>
Pandanaceae	<i>Freycinetia</i>
Xeronemataceae	<i>Xeronema</i>
Zosteraceae	<i>Zostera</i>
Angiosperms—Monocots II (Commelinids)	
Centrolepidaceae	<i>Centrolepis, Gaimardia</i>
Typhaceae	<i>Sparganium, Typha</i>
Angiosperms—Eudicots	
Proteaceae	<i>Knightia, Toronia</i>
Angiosperms—Core Eudicots	
Acanthaceae	<i>Avicennia</i>
Alseuosmiaceae	<i>Alseuosmia</i>
Apocynaceae	<i>Parsonisia</i>
Balanophoraceae	<i>Dactylanthus</i>

FAMILY	INDIGENOUS GENERA IN NEW ZEALAND
Bignoniaceae	<i>Tecomanthe</i>
Calceolariaceae	<i>Jovellana</i>
Celastraceae	<i>Stackhousia</i>
Corynocarpaceae	<i>Corynocarpus</i> ¹
Cucurbitaceae	<i>Sicyos</i>
Cunoniaceae	<i>Ackama, Weinmannia</i>
Elaeocarpaceae	<i>Aristotelia, Elaeocarpus</i>
Elatinaceae	<i>Elatina</i>
Fabaceae	<i>Canavalia, Carmichaelia, Clianthus, Montigena, Sophora</i>
Gesneriaceae	<i>Rhabdothamnus</i>
Griseliniaeae	<i>Griselina</i>
Hyperiaceae	<i>Hypericum</i>
Loganiaceae	<i>Geniostoma, Mitrasacme</i>
Loranthaceae	<i>Alepis, Ileostylus, Peraxilla, Muellerina, Trilepidea, Tupeia</i>
Meliaceae	<i>Dysoxylum</i>
Menyanthaceae	<i>Liparophyllum</i>
Moraceae	<i>Streblus</i>
Nanodeaceae	<i>Mida</i>
Nothofagaceae	<i>Nothofagus</i>
Nyctaginaceae	<i>Pisonia</i>
Oleaceae	<i>Nestegis</i>
Orobanchaceae	<i>Euphrasia</i>
Paracryphiaceae	<i>Quintinia</i>
Passifloraceae	<i>Passiflora</i>
Pennantiaceae	<i>Pennantia</i>
Phyllanthaceae	<i>Poranthera</i>
Pittosporaceae	<i>Pittosporum</i>
Rousseaceae	<i>Carpodetus</i>
Rutaceae	<i>Leionema, Melicope</i>
Santalaceae	<i>Exocarpos</i>
Sapindaceae	<i>Alectryon, Dodonaea</i>
Sapotaceae	<i>Planchonella</i>
Strasburgiaceae	<i>Ixerba</i>
Styliadaceae	<i>Donatia, Forstera, Oreostylidium, Phyllachne</i>
Tetrachondraceae	<i>Tetrachonda</i>
Verbenaceae	<i>Teucrium, Vitex</i>
Viscaceae	<i>Korthalsella</i>

1. The sole New Zealand *Corynocarpus*, *C. laevigatus*, is represented on the Chathams as a naturalised species.

The remarkable absence of indigenous conifers from the islands is all the more peculiar because many of the New Zealand species have fruits well suited to bird dispersal, and the terrestrial Chatham avifauna is one derived from and still being augmented by New Zealand birds (Aikman & Miskelly 2004; Miskelly et al. 2006; de Lange 2007b; Miskelly 2008b). The late Ross Beever (*in litt.*) thought that the reason for the absence may relate

more to the lack of suitable mycorrhiza on the Chathams rather than conifer dispersal ability, offering the same explanation for the general ill thrift exhibited by exotic conifers (e.g., *Abies*, *Araucaria*, *Cupressus*, *Pinus*, *Pseudotsuga*) growing on the islands, few of which have begun to naturalise, and of those which have, naturalisation has happened only to a very minor extent.

The absence of *Nothofagus* may also explain the absence of those New Zealand Loranthaceae that are almost exclusively tied to *Nothofagus* (Norton & de Lange 1999). However, the absence of the two loranthaceous genera *Ileostylus* and *Tupeia* from the islands is harder to understand, particularly as these mistletoes have generalist host tendencies (Norton & de Lange 1999) that includes a spectrum of host genera common on the Chatham Islands (e.g., *Coprosma*, *Melicytus*, *Pseudopanax*), and are readily bird dispersed. Indeed, *Ileostylus* is also known from Norfolk Island (Green 1994) where it mostly parasitises *Coprosma pilosa* and *Pittosporum bracteolatum* (de Lange & Crowcroft 1999) proving that it is well suited to long distance dispersal. Considering mistletoes further, another remarkable anomaly in the Chatham Islands indigenous vascular flora is the absence of *Korthalsella* (Viscaceae), a genus that is characteristic of isolated Pacific island floras (see comments by Barlow 1996; Molvray 1997; Wagner et al. 1999, Nickrent et al. 2010), bird dispersed (Thorsen et al. 2009) and widely distributed through all the main islands of New Zealand.

The absence of indigenous representatives of the Fabaceae is unexplained, unless of course the Chatham Islands occurrences of kōwhai (*Sophora chathamica*), currently believed to stem from deliberate naturalisation by Māori, prove to be wholly indigenous (Heenan et al. 2001; cf. Shepherd et al. 2010). Fabaceae seed is long lived and well suited to long distance dispersal by water (see Guppy 1906). On the Chatham Islands, *Sophora* seed is a common component of the drift washed up along the beaches, and this seed is usually viable (Sykes & Godley 1968; Norton et al. 2002). So the apparent absence of at least that genus from the indigenous flora is unusual. While the current distribution of *S. chathamica* and *S. microphylla* favours the suggestion that *Sophora* was initially planted by Māori (see Heenan et al. 2001), the failure of DNA analysis to so far confirm that idea (Shepherd et al. 2010; L. Shepherd pers. comm.) may yet mean that the family is represented in the islands' indigenous vascular flora after all.

The other notable family absences (see Table 3) probably reflect chance rather than lack of dispersal opportunity, as the families are also characterised by genera that are commonly associated in New Zealand proper with a range of other taxa whose families are present on the Chathams. Further, as Heenan et al. (2010) demonstrated, the endemic flora of the islands has not been derived from particular parts of New Zealand, meaning that, potentially, any propagule suited to long distance dispersal by wind, water or animal has the same opportunity to successfully colonise the islands. During our survey, the discovery of such a weedy, readily dispersed and conspicuous species as *Alternanthera denticulata* in a site (Blind Jim's) thoroughly botanised by studious observers over the last two decades, does suggest that long-distance dispersal is indeed ongoing and that, with time, the Chatham Islands indigenous vascular flora can be expected to grow.

Naturalised plants

The naturalised vascular flora of the Chatham Islands was last assessed in detail by Madden & Healy (1959) and Northcroft (1975) who collectively recorded 211 taxa, 16 of which we have excluded on the basis that there we have seen no supporting specimens lodged in herbaria. This leaves a verified naturalised vascular flora of 195 taxa prior to our survey. Since then the naturalised flora of the Chatham Islands has increased by a further 242 (124%) taxa and informally recognised entities. Some of this gain has come about because, aside from Northcroft's and Madden's pioneering collecting efforts in the mid

1920s and early 1950s, little attention (with the notable exception of visits to the islands by W.R. Sykes) has been paid to naturalised plants by subsequent botanical visitors on the Chathams until the last decade. Nevertheless, it cannot be denied that, as with the main islands of New Zealand (Howell & Sawyer 2006), the naturalised flora of the Chatham Islands is rapidly increasing.

Currently, exact data about the naturalised vascular flora of New Zealand is incomplete due to the lack of an update of those non-graminaceous “monocotyledonous” plants which were last treated in 1980 (Healy & Edgar 1980). While Howell & Sawyer (2006) attempts to bridge this gap by incorporating records based on data they gathered from New Zealand’s main herbaria, the classification scheme they used makes direct comparison with the Chathams Flora difficult. Also, there are now many additional records of naturalised plants that they either missed or which have been collected wild since their publication. Therefore, we have not attempted a thorough biogeographic analysis of the Chatham naturalised vascular flora in relation to the entire New Zealand flora, offering instead some observations on the general patterns we have observed. It is to be hoped that, once an update to Healy & Edgar (1980) is published, a more thorough biogeographic analysis of the Chatham naturalised vascular flora can be made.

At present there are 76 vascular plant families on the Chathams that have a naturalised component. Of these, 36 are families that are also considered wholly naturalised to New Zealand proper, e.g., Pinaceae, Selaginellaceae, while 40 represent families with both indigenous and naturalised members, e.g., Asteraceae, Poaceae, Rubiaceae. The dominant families with a mostly or completely naturalised component are given in Table 4. Of these the key contributing families are still, as noted previously by Madden & Healy (1959), those with an agriculture origin, e.g., Asteraceae, Brassicaceae, Fabaceae, Poaceae. Such key naturalised genera as *Trifolium* (Clover—12 species on the islands) and many of the exotic grasses stem either from deliberate agricultural naturalisations, e.g., cocksfoot (*Dactylis glomerata*), Kentucky bluegrass (*Poa pratensis*) rye grass (*Lolium perenne*), or have spread as agricultural seed contaminants, e.g., *Juncus pallidus*, silver tussock (*Poa cita*) (Madden & Healy 1959).

However, since the work on the Chathams naturalised flora by Madden & Healy (1959) and Northcroft (1975) there has been an increasing trend of new naturalisations sourcing from gardens (Given 1996; de Lange et al. 2008). In particular, the prominence of the Amaryllidaceae which has a completely naturalised assemblage in the Chathams Flora is noteworthy—all of its members can be sourced back to garden escapes and, in some cases (V. Croon jr. pers. comm.), deliberate attempts to naturalise species for beautification purposes, e.g., daffodils (*Narcissus* spp.). While in most cases such weeds have arisen in the vicinity of garden plantings of the same species, some garden escapes, especially those that are bird dispersed, are now establishing well outside Chatham Island settlements, and some of these weeds pose serious environmental threats unless eradicated, e.g., Chilean rhubarb (*Gunnera tinctoria*), Chilean flame creeper (*Tropaeolum speciosum*) and arum lily (*Zantedeschia aethiopica*). The recent establishment of veldt grass (*Ehrharta erecta*) within a Chatham Island garden also demonstrates another medium whereby undesired weeds are entering the Chatham Island environment. In this case it seems likely that veldt grass came as a pot plant contaminant from a New Zealand source. Gardens may also have been the source of current spike moss (*Selaginella kraussiana*) infestations on Chatham Island. Spike moss is a common pot plant contaminant in New Zealand nurseries, and, although it has appeared in several Chatham Island sites well outside gardens, the infestations are in places where plantings using New Zealand sourced nursery stock had previously been made.

Table 4. Main contributing (≥ 10 species) “weedy” families on the Chatham Islands

FAMILY	NUMBER OF NATURALISED TAXA ON CHATHAM ISLANDS	TOTAL TAXA PRESENT ON CHATHAM ISLANDS
Amaryllidaceae	16	16
Apiaceae	10	17
Asteraceae	49	91
Brassicaceae	31	43
Caryophyllaceae	11	17
Fabaceae	28	28
Geraniaceae	11	14
Lamiaceae	11	12
Poaceae	55	83
Plantaginaceae	12	24
Ranunculaceae	10	16
Rosaceae	12	17

This pattern is alarming, and it is equally disturbing to see that a range of well-documented environmentally damaging weed species in New Zealand proper are now being cultivated in island gardens. For example, although there as yet no wild occurrences of oxygen weeds (Hydrocharitiaceae) on the islands, at least two species (*Egeria densa* and *Elodea canadensis*) are grown in Chatham Island gardens. Based on the New Zealand experience (Towns et al. 2010), it is only a matter of time before these aggressive weeds establish in the waterways and wetlands of the Chatham Islands. Should that happen, the impact on the Chatham Islands’ wetlands, eel-fisheries and navigable waterways would be catastrophic. Significantly, our field work has shown an apparent absence of several key weedy plant families (Table 5) which, should they become established on the Chatham Islands, would have a severe impact on its environment, natural resources and economy. In most cases, chance has been a factor. For example, pampas grass (*Cortaderia selloana*), a well known aggressive weed of mainland New Zealand, is as yet, only known from the islands as sporadic cultivation relicts and as shelter belts. It seems that only male plants are grown on the islands, though whether this was a deliberate past measure to prevent this species spread or an accident is unclear. In any case, it would be much better if these plantings were eliminated now and other indigenous or non-invasive plants utilised as shelter belts instead, e.g., akeake (*Olearia traversiorum*), harakeke (*Phormium tenax*), Chatham Island ngaio (*Myoporum semotum*). We feel that to leave these pampas plants as they are, simply increases the inevitable likelihood that at some stage someone will introduce female plants, after which pampas grass will undoubtedly naturalise.

This highlights our observation that biosecurity measures, at least those regulating the movement of plant stock between New Zealand and the Chathams Islands, were virtually non-existent during the period we undertook out field work (2002–2008). We would stress that it is essential that more stringent controls are put in place, and that islanders embrace these positively: to fail to do so will only serve to create major problems for the island community in the future.

While we don’t know what plants are held in private gardens, an approved survey of most of the landowners’ gardens on Pitt Island in 2008 picked up some interesting patterns. We were able to trace the trade in favoured plants between gardens on Pitt Island and, in most cases, could link these to trade between Pitt Island gardens and those older and larger Chatham Island gardens that we were able to visit. While the survey disclosed only

a few potential serious weed species, several of these were thoroughly established within gardens, and some, such as mother of thousands (*Saxifraga stolonifera*) and liquorice plant (*Helichrysum petiolare*), had expanded into nearby indigenous habitats.

A final problem surrounds those indigenous New Zealand plants that have become established on the Chatham Islands. This listing recognises 21 of these. For some, e.g., pohutukawa (*Metrosideros excelsa*), houhere (*Hoheria populnea*), karo (*Pittosporum crassifolium*) and rangiora (*Brachyglottis repanda*), the evidence of naturalisation from a New Zealand source is unequivocal. However, for others, such as *Coprosma robusta*, *Dodonaea viscosa*, and ngaio (*Myoporum laetum*), the evidence is less clear, often falling down to a matter of opinion (Heenan & de Lange 2011; B.P.J. Molloy pers. comm.). For some species, such as kopi (*Corynocarpus laevigatus*), which has clearly been on the islands for a long time, and for raupo (*Typha orientalis*), which is scarcely established on Chatham Island, there is an oral tradition on the islands of deliberate naturalisation from a New Zealand source (Madden & Healy 1959; de Lange et al. 2008). In the case of kopi, this claim is at the time of writing being thoroughly investigated by the Allan Wilson Centre, Massey University using DNA sequence data. Similarly, Heenan et al. (2001) advanced the hypothesis that “wild” kōwhai (*Sophora chathamica*, and now possibly *S. microphylla*) occurrences on Chatham Island stemmed from the Ngāti Tama and Ngāti Mutuuanga invasion of the islands in the late 1830s. Their evidence is based largely on disjunctions of *Sophora chathamica* in New Zealand proper, the close association of trees in the southern part of its North Island range and on Chatham Island with former Māori pa and kainga, and an oral tradition from Ngāti Raukawa of taking their kōwhai from the Waikato with them as rongoa on the combined Ngāti Toa – Ngati Rāukawa – Ati Awa hikoi to the Wellington area (Heenan et al. 2001). When Ngāti Tama and Ngāti Mutuuanga invaded the Chatham Islands, they came from the shores of the Wellington Harbour and Matiu/Somes Island where *Sophora chathamica* is also present. So it has been postulated that they took seed of these trees with them to the Chathams. This hypothesis is also being tested by the Allan Wilson Centre, Massey University using DNA sequence data.

For those indigenous New Zealand plants that are clearly naturalised on the Chathams, control, whilst desired, may not always be possible. Some species, such as taupata (*Coprosma repens*), pose not only a significant risk to the coastal vegetation of the islands but also threatened endemic *Coprosma* through the propensity of this taupata to hybridise with other *Coprosma* species. Phylogenetic analyses reveal that taupata is most closely related to the endemic karamū (*C. chathamica*) (Heenan et al. 2010). Already karamū is known to hybridise with the more distantly related *C. robusta*, itself a species which, although collected by Travers on one of his visits (most probably the second, 1871 visit), is so localised on the island that many feel it is naturalised (see de Lange et al. 1999a). We suspect it is only a matter of time before karamū hybridises with taupata. Rangiora (*Brachyglottis repanda*) also poses a threat to rautini (*B. huntii*). Although neither species is closely related (Heenan et al. 2010), hybrids between them are known from cultivation in New Zealand (Drury 1973), and rangiora is now naturalising from nearby gardens into parts of the southern tablelands where rautini grows. Although pohutukawa poses no risk to the flora through hybridisation, as a large, fast growing, and aggressive coloniser of coastal habitats it poses a future risk to the overall character of the Chatham Islands vegetation. In particular, it occupies much the same range of habitats as akeake (*Olearia traversiorum*) a culturally significant tree to Chatham Islanders who plant it widely for shelter and use its wood for fencing, buildings and as a highly prized firewood.

Table 5. Vascular plant families with naturalised exotic taxa in New Zealand but absent from the wild on the Chatham Islands.

† Denotes families with indigenous representatives present on the Chatham Islands.

Families in **bold** type are those with representatives considered to have a potentially damaging impact on the Chatham Islands should they become established

FAMILY	FAMILY	FAMILY
Alismataceae	Elaeagnaceae	Orchidaceae
Alstroemeriaceae	Ephedraceae	† Osmundaceae
Anacardiaceae	Equisetaceae	Paulowniaceae
Annonaceae	† Ericaceae	†Phrymaceae
Aponogetonaceae	Escalloniaceae	Phyllanthaceae
Arecaceae†	Fagaceae	Phytolaccaceae
Aristolochiaceae	Garryaceae	Platanaceae
Balsaminaceae	Ginkgoaceae	Plumbaginaceae
Begoniaceae	†Haloragaceae	Podocarpaceae
Berberidaceae	Haemodoraceae	Polemoniaceae
Betulaceae	Hamamelidaceae	Polygonaceae
Bignoniaceae	Hydrocharitaceae	†Polypodiaceae
Buxaceae	Hypoxidaceae	Pontederiaceae
Cabombaceae	Juglandaceae	† Potamogetonaceae
Cactaceae	Lardizabalaceae	† Pteridaceae
Calceolariaceae	Lauraceae	Resedaceae
Calycanthaceae	† Lentibulariaceae	† Rhamnaceae
Calyceraceae	Liliaceae	Rutaceae
Cannaceae	Limnocharitaceae	Sarraceniaceae
Casuarinaceae	Linderniaceae	Saururaceae
Ceratophyllaceae	Marsileaceae	Schisandraceae
Cistaceae	Meliaceae	Simaroubaceae
Cleomaceae	Melianthaceae	Smilaceae
Cornaceae	Magnoliaceae	Staphyleaceae
Cucurbitaceae	Menyanthaceae	Tamaricaceae
Cunoniaceae	Melastomataceae	Taxaceae
†Cyatheaceae	Molluginaceae	Taxodiaceae
Davalliaceae	Moraceae	Theaceae
†Dennstaedtiaceae	Muntingiaceae	†Thymelaeaceae
Dioscoreaceae	Musaceae	Ulmaceae
Dilleniaceae	Nymphaeaceae	Verbenaceae
Droseraceae	Nyctaginaceae	Zygophyllaceae
Ebenaceae	Ochnaceae	

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Appendix 1

Checklist of the vascular flora of the Chatham Islands

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Lycophytes (7)					
Lycopodiaceae	<i>Huperzia australiana</i> (Herter) Holub	fir clubmoss		AK 259132	Chathams indigenous
Lycopodiaceae	<i>Huperzia varia</i> (R.Br.) Trevis.	hanging clubmoss	īwıtuna	AK 972	Chathams indigenous
Lycopodiaceae	<i>Lycopodiella lateralis</i> (R.Br.) B.Øllg.	clubmoss		AK 227181	Chathams indigenous
Lycopodiaceae	<i>Lycopodium fastigiatum</i> R.Br.	mountain clubmoss		WELT P3689	Chathams indigenous
Lycopodiaceae	<i>Lycopodium scariosum</i> G.Forst.	creeping clubmoss		WELT P3433	Chathams indigenous
Lycopodiaceae	<i>Lycopodium volubile</i> G.Forst.	climbing clubmoss		AK 150377	Chathams indigenous
Selaginellaceae	* <i>Selaginella kraussiana</i> (Kunze) A.Braun	African clubmoss		AK 295163	Exotic naturalised
Ferns (112)					
Aspleniaceae	<i>Asplenium bulbiferum</i> G.Forst	hen & chicken fern	pikopiko	AK 170716	Chathams indigenous
Aspleniaceae	<i>Asplenium chathamense</i> Brownsey	Chatham Islands spleenwort		AK 174330	Chathams endemic
Aspleniaceae	<i>Asplenium flaccidum</i> G.Forst.	Hanging spleenwort	raukatauri	AK 227706	Chathams indigenous
Aspleniaceae	<i>Asplenium gracillimum</i> Colenso	hen & chicken fern	pikopiko	AK 296141	Chathams indigenous
Aspleniaceae	<i>Asplenium gracillimum</i> Colenso × <i>A. lyallii</i> (Hook.f.) T.Moore			AK 296136	Chathams indigenous
Aspleniaceae	<i>Asplenium hookerianum</i> Colenso var. <i>hookerianum</i>	Hooker's spleenwort		AK 296142	Chathams indigenous
Aspleniaceae	<i>Asplenium hookerianum</i> var. <i>colensoi</i> (Colenso) T.Moore	Colenso's spleenwort		AK 230465	Chathams indigenous
Aspleniaceae	<i>Asplenium lyallii</i> (Hook.f.) T.Moore	Lyall's spleenwort		AK 227198	Chathams indigenous
Aspleniaceae	<i>Asplenium oblongifolium</i> Colenso	shining spleenwort	huruhuruwhenua	AK 150119	Chathams indigenous
Aspleniaceae	<i>Asplenium obtusatum</i> G.Forst.	shore spleenwort	paranako	AK 114911	Chathams indigenous
Aspleniaceae	<i>Asplenium pauperequitum</i> Brownsey et P.J.Jacks.	Poor Knights spleenwort		AK 294931	Chathams indigenous
Aspleniaceae	<i>Asplenium polyodon</i> G.Forst.	sickle spleenwort	peretao	AK 135787	Chathams indigenous
Aspleniaceae	<i>Asplenium chathamense</i> Brownsey × <i>A. lyallii</i> (Hook.f.) T.Moore			CHR 187401-2	Chathams indigenous
Aspleniaceae	<i>Asplenium gracillimum</i> G.Forst. × <i>A. gracillimum</i> Colenso			AK 172941	Chathams indigenous
Aspleniaceae	* <i>Asplenium flaccidum</i> G.Forst.			AK 300999	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Aspleniaceae	<i>Asplenium flaccidium</i> G.Forst. × <i>A. lyallii</i> (Hook.f.) T.Moore	lance fern	rereti	AK 300982	Chathams indigenous
Blechnaceae	<i>Blechnum chambersii</i> Tindale	Colenso's hard fern	petako	AK 150087	Chathams indigenous
Blechnaceae	<i>Blechnum colensoi</i> (Hook.f. in Hook.) N.A.Wakef.	crown fern	piupiu	CHR 403336A-B	Chathams indigenous
Blechnaceae	<i>Blechnum discolor</i> (G.Forst.) Keys	shore hard fern		AK 136082	Chathams indigenous
Blechnaceae	<i>Blechnum durum</i> (T.Moore) C.Chr.	climbing hard fern		AK 136086	Chathams indigenous
Blechnaceae	<i>Blechnum filiforme</i> (A.Cunn.) Ettingsh.	creek fern		AK 295102	Chathams indigenous
Blechnaceae	<i>Blechnum fluviatile</i> (R.Br.) Lowe ex Salomon			AK 150105	Chathams indigenous
Blechnaceae	<i>Blechnum minus</i> (R.Br.) Ettingsh.	swamp kiokio		CHR 464782	Chathams indigenous
Blechnaceae	<i>Blechnum montanum</i> T.C.Chambers et P.A.Farrant	mountain kiokio		CHR 417663	Chathams indigenous
Blechnaceae	<i>Blechnum montanum</i> T.C.Chambers et P.A.Farrant × <i>B. novae-zelandiae</i> T.C.Chambers et P.A.Farrant	Norfolk Island hard fern		CHR 417654A-B	Chathams indigenous
Blechnaceae	<i>Blechnum norfolkianum</i> (Heward) C.Chr.	kiokio	kiokio	AK 136122	Chathams indigenous
Blechnaceae	<i>Blechnum novae-zelandiae</i> T.C.Chambers et P.A.Farrant	alpine hard fern		AK 136122	Chathams indigenous
Blechnaceae	<i>Blechnum pennata-marina</i> subsp. <i>alpina</i> T.C.Chambers et P.A.Farrant			AK 136159	Chathams indigenous
Blechnaceae	<i>Blechnum procerum</i> (G.Forst.) Sw.	kiokio		CHR 403358	Chathams indigenous
Blechnaceae	<i>Blechnum triangularifolium</i> T.C.Chambers et P.A.Farrant	Green Bay kiokio		AK 296180	Chathams indigenous
Blechnaceae	<i>Blechnum vulcanicum</i> (Blume) Kuhn	mountain hard fern		CHR 420359	Chathams indigenous
Cyatheaceae	<i>Cyathea cunninghamii</i> Hook.f.	korokio		AK 136250	Chathams indigenous
Cyatheaceae	<i>Cyathea dealbata</i> (G.Forst.) Sw.	gully tree fern		AK 136263	Chathams indigenous
Cyatheaceae	<i>Cyathea medullaris</i> (G.Forst.) Sw.	silver fern		CHR 496741	Chathams indigenous
Cyatheaceae	<i>Cyathea smithii</i> Hook.f.	black tree fern		AK 496757	Chathams indigenous
Dennstaedtiaceae	<i>Histiopteris incisa</i> (Thunb.) J.Sm.	mātā		AK 211080	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis amaurorachis</i> (Kunze) Hook.			AK 295812	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis ambigua</i> (A.Rich.) Brownsey et Chinnock			AK 150116	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis ambigua</i> (A.Rich.) Brownsey et Chinnock × <i>H. rufobarbata</i> (Colenso) N.A.Wakef			AK 281374	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis dicksonioides</i> (Endl.) Hook.	ground fern		AK 295817	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis distans</i> Hook.			AK 136509	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis lactea</i> Brownsey et Chinnock	milk fern		AK 172005	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis millefolium</i> Hook.	thousand-leaved fern		WELT P12516	Chathams indigenous
Dennstaedtiaceae	<i>Hypolepis rufobarbata</i> (Colenso) N.A.Wakef.	sticky pig fern		CHR 288356	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Dennstaedtiaceae	<i>Lindsaea linearis</i> Sw.	Pig fern	mātātā	AK 142495	Chathams indigenous
Dicksoniaceae	<i>Paesia scaberula</i> (A.Rich.) Kuhn		wheki-ponga	AK 211147	Chathams indigenous
Dicksoniaceae	<i>Dicksonia fibrosa</i> Colenso	harsh tree fern	wheki	AK 227199	Chathams indigenous
Dicksoniaceae	<i>Dicksonia squarrosa</i> (G.Forst.) Sw.	brittle bladder fern		AK 137954	Chathams indigenous
Dryopteridaceae	* <i>Cystopteris fragilis</i> (L.) Bernh.	male fern		AK 281404	Exotic naturalised
Dryopteridaceae	* <i>Dryopteris filix-mas</i> (L.) Schott	smooth shield fern		AK 285891	Exotic naturalised
Dryopteridaceae	<i>Lastreopsis glabella</i> (A.Cunn.) Tindale	hairy fern		AK 150090	Chathams indigenous
Dryopteridaceae	<i>Lastreopsis hispida</i> (Sw.) Tindale	lace fern		AK 150103	Chathams indigenous
Dryopteridaceae	<i>Lastreopsis microsora</i> subsp. <i>pentangularis</i> (Colenso) Tindale	shield fern		AK 137958	Chathams indigenous
Dryopteridaceae	<i>Leptolepia novae-zelandiae</i> (Colenso) Mett. ex Diels			CHR 187234A/B	Chathams indigenous
Dryopteridaceae	<i>Polystichum neozelandicum</i> Fée subsp. <i>neozelandicum</i>			AK 296749	Chathams indigenous
Dryopteridaceae	<i>Polystichum neozelandicum</i> Fée subsp. <i>neozelandicum</i> × <i>P. vestitum</i> (G.Forst.) C.Presl			WELT P12512	Chathams indigenous
Dryopteridaceae	<i>Polystichum neozelandicum</i> subsp. <i>zerophyllum</i> (Colenso) Perrie	shield fern	pūniu	AK 296525	Chathams indigenous
Dryopteridaceae	<i>Polystichum oculatum</i> (Hook.f.) J.B.Armstr.	black shield fern	pūniu	AK 300715	Chathams indigenous
Dryopteridaceae	<i>Polystichum vestitum</i>	prickly shield fern	pūniu-o-manuhiri	AK 299664	Chathams indigenous
Dryopteridaceae	<i>Polystichum wawranum</i> (Szyszyl. in Wawra) Perrie	shield fern	pūniu	AK 296145	Chathams indigenous
Dryopteridaceae	<i>Polystichum aff. vestitum</i>	Chatham shield fern	pūniu-o-rekohu	CHR 187026	Chathams endemic
Dryopteridaceae	<i>Rumohra adiantiformis</i> (G.Forst.) Ching	climbing shield fern		AK 138065	Chathams indigenous
Gleicheniaceae	<i>Gleichenia dicarpa</i> R.Br.	Swamp umbrella fern		AK 150097	Chathams indigenous
Grammitidaceae	<i>Ctenopteris heterophylla</i> (Labill.) Tindale	comb fern		AK 215031	Chathams indigenous
Grammitidaceae	<i>Grammitis billardierei</i> Willd.	common strap fern		CHR 187373	Chathams indigenous
Grammitidaceae	<i>Grammitis givenii</i> Parris	Given's strap fern		AK 296181	Chathams indigenous
Grammitidaceae	<i>Grammitis magellanica</i> Desv. subsp. <i>magellanica</i>	strap fern		AK 296249	Chathams indigenous
Grammitidaceae	<i>Grammitis magellanica</i> subsp. <i>nothofageti</i> Parris	strap fern		AK 230438	Chathams indigenous
Grammitidaceae	<i>Grammitis patagonica</i> (C.Chr.) Parris	strap fern		AK 295983	Chathams indigenous
Hymenophyllaceae	<i>Cardiomanes reniforme</i> (G.Forst.) C.Presl	kidney fern	konehu	AK 141989	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum bivalve</i> (G.Forst.) Sw.	filmy fern		WELT P3472	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum cupressiforme</i> Labill.	filmy fern		AK 300747	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum demissum</i> (G.Forst.) Sw.	drooping filmy fern	piripiri	AK 139898	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum dilatatum</i> (G.Forst.) Sw.	filmy fern	matua mauku	AK 139907	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY

TAXON		COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Hymenophyllaceae	<i>Hymenophyllum flabellatum</i> Labill.	fan-like filmy fern		WELT P3437	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum flexuosum</i> A.Cunn.	crisped filmy fern		WELT P3668	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum lyallii</i> Hook.f.	filmy fern		AK 305162	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum minimum</i> A.Rich.	filmy fern		AK 230436	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum multifidum</i> (G.Forst.) Sw.	much-divided filmy fern		WELT P3472	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum rarum</i> R.Br.	filmy fern		CHR 403309	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum revolutum</i> Colenso	filmy fern		AK 303979	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum scabrum</i> A.Rich.	rough filmy fern		WELT P3668	Chathams indigenous
Hymenophyllaceae	<i>Hymenophyllum villosum</i> Colenso	hairy filmy fern		AK 296082	Chathams indigenous
Hymenophyllaceae	<i>Trichomanes colensoi</i> Hook.f.	Colenso's bristle fern		AK 229973	Chathams indigenous
Hymenophyllaceae	<i>Trichomanes elongatum</i> A.Cunn.	bristle fern		AK 300692	Chathams indigenous
Hymenophyllaceae	<i>Trichomanes endlicherianum</i> C.Presl	Endlicher's bristle fern		AK 228204	Chathams indigenous
Hymenophyllaceae	<i>Trichomanes strictum</i> Menzies ex Hook. et Grev.	erect bristle fern		AK 228203	Chathams indigenous
Hymenophyllaceae	<i>Trichomanes venosum</i> R.Br.	veined bristle fern		AK 141999	Chathams indigenous
Oleandraceae	<i>Arthropteris tenella</i> (G.Forst.) J.Sm. ex Hook.f.	jointed fern		CHR 3595	Chathams indigenous
Ophioglossaceae	<i>Botrychium australe</i> R.Br.	pātōtara		AK 300649	Chathams indigenous
Ophioglossaceae	<i>Botrychium biforme</i> Colenso	fine-leaved parsley fern		AK 300650	Chathams indigenous
Ophioglossaceae	<i>Ophioglossum coriaceum</i> A.Cunn.	Adder's tongue		WELT P12507	Chathams indigenous
Ophioglossaceae	<i>Ophioglossum petiolatum</i> Hook.	stalked adder's tongue		AK 136596	Chathams indigenous
Osmundaceae	<i>Leptopteris hymenophylloides</i> (A.Rich.) C.Presl	single crape fern	heruhru	AK 918	Chathams indigenous
Polypodiaceae	* <i>Loxogramme dictyopteris</i> (Mett.) Copel.	lance fern		AK 303792	Chathams indigenous
Polypodiaceae	<i>Microsorum pustulatum</i> (G.Forst.) Copel. subsp. <i>pustulatum</i>	hound's tongue	kōwraowao,	AK 840	Chathams indigenous
Polypodiaceae	<i>Microsorum scandens</i> (G.Forst.) Tindale	fragrant fern	mokimoki	AK 142506	Chathams indigenous
Polypodiaceae	<i>Pyrrosia eleagnifolia</i> (Bory) Hovenkamp	leather-leaf fern		AK 853	Chathams indigenous
Psilotaceae	<i>Tmesipteris tannensis</i> (Spreng.) Bernh.	fork fern		CHR 403236	Chathams indigenous
Psilotaceae	<i>Tmesipteris lanceolata</i> P.A.Dang	fork fern		AK 296646	Chathams indigenous
Psilotaceae	<i>Tmesipteris elongata</i> P.A.Dang	fork fern		AK 230462	Chathams indigenous
Pteridaceae	<i>Adiantum cunninghamii</i> Hook.	Cunningham's maidenhair	tawatawa	WELT P8285	Chathams indigenous
Pteridaceae	<i>Adiantum diaphanum</i> Blume	maidenhair		AK 303483	Chathams indigenous
Pteridaceae	<i>Adiantum fulvum</i> Raoul	tuber-rooted maidenhair		AK 300996	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Pteridaceae	<i>Adiantum hispidulum</i> Swartz	rosy maidenhair fern		AK 297709	Chathams indigenous
Pteridaceae	<i>Pellaea rotundifolia</i> (G.Forst.) Hook.	button fern	tarawera	WELT P3674	Chathams indigenous
Pteridaceae	<i>Pteridium esculentum</i> (G.Forst.) Cockayne	bracken	aruhe	AK 229974	Chathams indigenous
Pteridaceae	<i>Pteris macilenta</i> A.Rich.	sweet fern		WELT P12521	Chathams indigenous
Pteridaceae	<i>Pteris tremula</i> R.Br.	shaking brake	turawera	CHR 496820	Chathams indigenous
Schizaeaceae	<i>Schizaea australis</i> Gaudich.	southern comb fern		AK 888	Chathams indigenous
Schizaeaceae	<i>Schizaea fistulosa</i> Labill.	comb fern		AK 227189	Chathams indigenous
Thelypteridaceae	<i>Pneumatopteris pennigera</i> (G.Forst.) Holttum	gully fern	pākauharoaha	WELT P3701	Chathams indigenous
Gymnosperms (4)					
Araucariaceae	*	<i>Araucaria heterophylla</i> (Salisb.) Franco	Norfolk pine	AK 296146	Exotic naturalised
Cupressaceae	*	<i>Cupressus lusitanica</i> Mill. var. <i>lusitanica</i>	Mexican cypress	AK 295819	Exotic naturalised
Cupressaceae	*	<i>Cupressus macrocarpa</i> Hartw. ex Gordon	macrocarpa	AK 295899	Exotic naturalised
Pinaceae	*	<i>Pinus radiata</i> D.Don	radiata pine	AK 285915	Exotic naturalised
Magnoliids (1)					
Piperaceae		<i>Macropiper excelsum</i> (G.Forst.) Miq. subsp. <i>excelsum</i>	pepper tree	kawakawa	AK 227167
Monocots (86)					
Amaryllidaceae	*	<i>Agapanthus praecox</i> subsp. <i>orientalis</i> (F.M.Leight) F.M.Leight	agapanthus	AK 295928-29	Exotic naturalised
Amaryllidaceae	*	<i>Allium cepa</i> L.	onion	AK 304121	Exotic naturalised
Amaryllidaceae	*	<i>Allium porrum</i> L.	leek	AK 296176	Exotic naturalised
Amaryllidaceae	*	<i>Allium schoenoprasum</i> L.	chives	AK 296010	Exotic naturalised
Amaryllidaceae	*	<i>Allium triquetrum</i> L.	three-cornered garlic	CHR 469763	Exotic naturalised
Amaryllidaceae	*	<i>Allium vineale</i> var. <i>compactum</i> (Thuill.) Bor.	wild onion	AK 296121	Exotic naturalised
Amaryllidaceae	*	<i>Iphethon uniflorum</i> (Lindl.) Raf.	spring star-flower	CHR 594897	Exotic naturalised
Amaryllidaceae	*	<i>Leucojum aestivum</i> L.	spring snowflake	AK 300313	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus jonquilla</i> L.	daffodil	CHR 594744	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus papryraceus</i> Ker Gawl. 'Paper White'	daffodil	CHR 594895	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus poeticus</i> L.	Poet's daffodil	AK 300314	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus pseudonarcissus</i> L.	daffodil	AK 300316	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus tazetta</i> L.	daffodil	AK 300315	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus tazetta</i> L. 'Early Cheer'	daffodil	CHR 594848	Exotic naturalised
Amaryllidaceae	*	<i>Narcissus ×incomparabilis</i> Mill.	daffodil	CHR 594893	Exotic naturalised

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Amaryllidaceae	* <i>Narcissus ×mediolatus</i> Mill.	daffodil		CHR 594852	Exotic naturalised
Araceae	* <i>Arum italicum</i> Mill.	Italian arum		CHR 403216	Exotic naturalised
Araceae	* <i>Landoltia punctata</i> (G.Mey.) Les et D.J.Crawford	purple-backed duckweed		CHR 568066	Exotic naturalised
Araceae	<i>Lemna minor</i> L.	duckweed	kārareaea	AK 296179	Chathams indigenous
Araceae	<i>Wolffia australiana</i> (Benth.) Hartog et Plas	watermeal		AK 299663	Chathams indigenous
Araceae	* <i>Zantedeschia aethiopica</i> (L.) Spreng.	arum lily		CHR 585635	Exotic naturalised
Asparagaceae	† <i>Arthropodium cirratum</i> (G.Forst.) R.Br.	rengarenga lily	rengarenga	AK 295078	NZ indigenous, Chats naturalised
Asparagaceae	† <i>Cordyline australis</i> (G.Forst.) Endl.	cabbage tree	ti	AK 291428	NZ indigenous, Chats naturalised
Asparagaceae	* <i>Eucomis comosa</i> (Houtt.) Wehrh.	pineapple lily		AK 299987	Exotic naturalised
Asparagaceae	* <i>Hyacinthoides non-scripta</i> (L.) Chouard ex Rothm.	bluebell		CHR 594851	Exotic naturalised
Asparagaceae	* <i>Muscari armeniacum</i> Baker	grape hyacinth		AK 172003	Exotic naturalised
Asteliaceae	<i>Astelia chathamica</i> (Skottsb.) L.B.Moore	Moriori flax	kakaha	CHR 269482	Chathams endemic
Hemerocallidaceae	* <i>Aloe arborescens</i> Mill	candelabra aloe		AK 300350	Exotic naturalised
Hemerocallidaceae	* <i>Aloe maculata</i> All.	soap aloe		AK 298519	Exotic naturalised
Iridaceae	* <i>Crocosmia ×crocosmiiflora</i> (G.Nicholson) N.E.Br.	montbretia		CHR 541801	Exotic naturalised
Iridaceae	* <i>Gladiolus communis</i> subsp. <i>byzantinus</i> (Miller). A.P.Ham.	gladiolus		CHR 604593	Exotic naturalised
Iridaceae	* <i>Gladiolus ×colvillei</i> Sweet	gladiolus		CHR 602343	Exotic naturalised
Iridaceae	* <i>Iris pseudacorus</i> L.	yellow flag		CHR 97747	Exotic naturalised
Iridaceae	* <i>Iris unguicularis</i> Poir.			AK 300011	Exotic naturalised
Iridaceae	<i>Libertia peregrinans</i> Cockayne et Allan	native iris	mikoikoi	AK 228468	Chathams indigenous
Iridaceae	* <i>Sisyrinchium iridifolium</i> Kunth	purple-eyed grass		AK 295918	Exotic naturalised
Iridaceae	* <i>Tritonia lineata</i> (Salisb.) Ker Gawl.	tritonia		AK 295789	Exotic naturalised
Iridaceae	* <i>Watsonia meriana</i> (L.) Mill.	watsonia		CHR 604803	Exotic naturalised
Iridaceae	* <i>Watsonia zeyheri</i> L.Bolus	watsonia		CHR 604804	Exotic naturalised
Juncaginaceae	<i>Triglochin striata</i> Ruiz et Pav.			CHR 178479	Chathams indigenous
Orchidaceae	<i>Acianthus strobclairii</i> Hook.f.	heart-leaved orchid		AK 170667	Chathams indigenous
Orchidaceae	<i>Adenochilus gracilis</i> Hook.f.			CHR 532785	Chathams indigenous
Orchidaceae	<i>Aporostylis bifolia</i> (Hook.f.) Rupp et Hatch	odd-leaved orchid		AK 170632	Chathams indigenous
Orchidaceae	<i>Caladenia chlorostyla</i> D.L.Jones, Molloy et M.A.Clem.			AK 255053	Chathams indigenous
Orchidaceae	<i>Caladenia variegata</i> Colenso			CHR 534769	Chathams indigenous

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Orchidaceae	<i>Chiloglottis cornuta</i> Hook.f.	green bird orchid		AK 170684	Chathams indigenous
Orchidaceae	<i>Corybas cheesemanii</i> (Hook.f. ex Kirk) Kuntze	spider orchid		AK 229955	Chathams indigenous
Orchidaceae	<i>Corybas iridescens</i> Irwin et Molloy	spider orchid		CHR 585752	Chathams indigenous
Orchidaceae	<i>Corybas macranthus</i> (Hook.f.) Rchb.f.	spider orchid		CHR 541689	Chathams indigenous
Orchidaceae	<i>Corybas oblongus</i> (Hook.f.) Rchb.f.	spider orchid		AK 229951	Chathams indigenous
Orchidaceae	<i>Corybas orbiculatus</i> (Colenso) L.B.Moore	helmet orchid		CHR 178504	Chathams indigenous
Orchidaceae	<i>Corybas rotundifolius</i> (Hook.f.) Rchb.f.	Christmas orchid	pekapeka	CHR 594948	Chathams indigenous
Orchidaceae	<i>Dendrobium cunninghamii</i> Lindl.			AK 229949	Chathams indigenous
Orchidaceae	<i>Drymoanthus adversus</i> (Hook.f.) Dockrill			AK 230475	Chathams indigenous
Orchidaceae	<i>Earina aestivalis</i> Cheeseman	bamboo orchid	peka-a-waka	AK 230474	Chathams indigenous
Orchidaceae	<i>Earina mucronata</i> Lindl.	bamboo orchid	peka-a-waka	AK 150441	Chathams indigenous
Orchidaceae	<i>Gastrodia cunninghamii</i> Hook.f.	black orchid	perei	AK 3680	Chathams indigenous
Orchidaceae	<i>Genoplesium nudum</i> (Hook.f.) D.L.Jones et M.A.Clem.	leek orchid		CHR 398162	Chathams indigenous
Orchidaceae	<i>Genoplesium pumilum</i> (Hook.f.) D.L.Jones et M.A.Clem.	leek orchid		AK 302031	Chathams indigenous
Orchidaceae	<i>Microtis oligantha</i> L.B.Moore	small onion orchid		AK 227738	Chathams indigenous
Orchidaceae	<i>Microtis unifolia</i> (G.Forst.) Rchb.f.	onion orchid		AK 229132	Chathams indigenous
Orchidaceae	<i>Microtis aff. unifolia</i>	onion orchid		AK 296182	Chathams indigenous
Orchidaceae	<i>Nematoceras aff. sulcatum</i>	spider orchid		AK 300648	Chathams endemic
Orchidaceae	<i>Prasophyllum colensoi</i> Hook.f.	Colenso's leek orchid		CHR 403134	Chathams indigenous
Orchidaceae	<i>Prasophyllum hectorii</i> (Buchanan) Molloy, D.L.Jones et M.A.Clem.	Hector's leek orchid		CHR 508996	Chathams indigenous
Orchidaceae	<i>Pterostylis alobula</i> (Hatch) L.B.Moore	green hood	tutukiwi	AK 300247	Chathams endemic
Orchidaceae	<i>Pterostylis auriculata</i> Colenso	greenhood	tutukiwi	CHR 604805	Chathams indigenous
Orchidaceae	<i>Pterostylis banksii</i> A.Cunn.	greenhood	tutukiwi	AK 227197	Chathams indigenous
Orchidaceae	<i>Pterostylis micromega</i> Hook.f.	swamp greenhood	tutukiwi	CHR 288394	Chathams indigenous
Orchidaceae	<i>Pterostylis silvicultrix</i> (F.Muell.) Molloy, D.L.Jones et M.A.Clem.	Chatham Islands greenhood	tutukiwi	AK 227380	Chathams endemic
Orchidaceae	<i>Pterostylis aff. montana</i>	greenhood	tutukiwi	AK 3500	Chathams endemic
Orchidaceae	<i>Spiranthes novae-zelandiae</i> Hook.f.	lady's tresses		CHR 191772	Chathams indigenous
Orchidaceae	<i>Thelymitra cyanea</i> (Lindl.) Benth.	striped sun orchid	mākaka	CHR 150832	Chathams indigenous
Orchidaceae	<i>Thelymitra longifolia</i> J.R.Forst et G.Forst. s.l.	white sun orchid	mākaka	CHR 158351	Chathams indigenous
Orchidaceae	<i>Thelymitra nervosa</i> Colenso	spotted sun orchid	mākaka	CHR 534747	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

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TAXON

			COMMON NAME	MĀORI NAME	VOUCHER	INDIGENOUS STATUS
Orchidaceae	<i>Thelymitra aff. pauciflora</i>		sun orchid	mālkaka	AK 3438	Chathams indigenous
Orchidaceae	<i>Lepilaena bilocularis</i> Kirk		sun orchid	mālkaka	CHR 534750	Chathams indigenous
Potamogetonaceae	<i>Potamogeton cheesemanii</i> A.Benn.				AK 236536	Chathams indigenous
Potamogetonaceae	<i>Stuckenia pectinata</i> (L.) Börner		red pondweed	rērēwai	AK 296078	Chathams indigenous
Ripogonaceae	<i>Ripogonum scandens</i> J.R.Forst. et G.Forst.		fennel-leaved pondweed		AK 228077	Chathams indigenous
Ruppiaceae	<i>Ruppia megacarpa</i> R. Mason		supplejack	kareao	AK 230473	Chathams indigenous
Ruppiaceae	<i>Ruppia polycarpa</i> R.Mason		horse's mane weed		AK 281910	Chathams indigenous
Xanthorrhoeaceae	<i>Herpolirion novaezelandiae</i> Hook.f.		horse's mane weed		CHR 288382	Chathams indigenous
Xanthorrhoeaceae	* <i>Kniphofia uvaria</i> (L.) Hook.		sky lily		AK 292946	Chathams indigenous
Xanthorrhoeaceae	<i>Phormium tenax</i> J.R.Forst. et G.Forst.		red hot poker		CHR 610002	Exotic naturalised
			muka flax	harakeke	CHR 503918, CHR 503936	Chathams indigenous

Monocots II—Commelinids (153)

Arecaceae	<i>Rhopalostylis sapida</i>	cabbage tree	nikau	AK 227148	Chathams indigenous
Commelinaceae	* <i>Tradescantia fluminensis</i> Vell.	wandering jew		CHR 585634	Exotic naturalised
Commelinaceae	* <i>Tradescantia aff. fluminensis</i>	wandering jew		AK 297600	Exotic naturalised
Cyperaceae	<i>Baumea arthrophylla</i> (Nees) Boeck			CHR 568081	Chathams indigenous
Cyperaceae	<i>Baumea rubiginosa</i> (Spreng.) Boeck.	common twig rush		AK 170709	Chathams indigenous
Cyperaceae	<i>Baumea tenax</i> (Hook.f.) S.T.Blake			AK 229972	Chathams indigenous
Cyperaceae	<i>Carex appressa</i> R.Br.	tussock sedge		AK 230426	Chathams indigenous
Cyperaceae	<i>Carex chathamica</i> Petrie	Chatham Islands swamp sedge		AK 228205	Chathams endemic
Cyperaceae	* <i>Carex divulsa</i> Stokes			AK 297962	Exotic naturalised
Cyperaceae	* <i>Carex flacca</i> Schreb.	blue sedge		AK 281444	Exotic naturalised
Cyperaceae	<i>Carex flagellifera</i> Colenso	trip-me-up		CHR 595006	Chathams indigenous
Cyperaceae	<i>Carex flavigiformis</i> Nelm	yellow sedge		AK 228208	Chathams indigenous
Cyperaceae	<i>Carex pumila</i> Thunb.	sand sedge		CHR 288764	Chathams indigenous
Cyperaceae	<i>Carex secta</i> Boot	nigger head	pukio	AK 236413	Chathams indigenous
Cyperaceae	<i>Carex sectoides</i> (Kük.) Edgar	nigger head		AK 227175	Chathams indigenous
Cyperaceae	<i>Carex temiculmis</i> (Petrie) Heenan et de Lange	slender nigger head		CHR 399079	Chathams indigenous
Cyperaceae	<i>Carex ternaria</i> Boot	southern cutty grass	rautahi	AK 227196	Chathams indigenous
Cyperaceae	<i>Carex trifida</i> Cav.	mutton bird sedge	tataki	AK 229971	Chathams indigenous

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Cyperaceae	<i>Carex venusta</i> C.B.Clarke	Chatham Islands forest sedge	totoi	AK 228471	Chathams endemic
Cyperaceae	<i>Carex virgata</i> Sol. ex Boott				
Cyperaceae	<i>Carex appressa</i> R.Br. × <i>C. virgata</i> Sol. ex Boott				
Cyperaceae	* <i>Cyperus eragrostis</i> Lam.	umbrella sedge	puketangata	AK 227709	Chathams indigenous
Cyperaceae	<i>Cyperus ustulatus</i> A.Rich.	coastal cutty grass	upokotangata	AK 227731	Chathams indigenous
Cyperaceae	<i>Eleocharis acuta</i> R.Br.	sharp spike rush		CHR 187505	Exotic naturalised
Cyperaceae	<i>Eleocharis gracilis</i> R.Br.	slender spike rush		AK 228462	Chathams indigenous
Cyperaceae	<i>Ficinia nodosa</i> (Rottb.) Goetgh., Muasya et D.A.Simpson	knobby club rush	wiwi	CHR 293309	Chathams indigenous
Cyperaceae	<i>Ficinia spiralis</i> (A.Rich.) Muasya et de Lange	golden sand sedge	pingao	AK 150291	Chathams indigenous
Cyperaceae	<i>Isolepis aucklandica</i> Hook.f.			AK 228462	Chathams indigenous
Cyperaceae	<i>Isolepis basilaris</i> Hook.f.	pygmy clubrush		AK 232569	Chathams indigenous
Cyperaceae	<i>Isolepis cernua</i> (Vahl) Roem. et Schult. var. <i>cernua</i>	slender clubrush		AK 298647	Chathams indigenous
Cyperaceae	<i>Isolepis distigmatosa</i> (C.B.Clarke) Edgar			AK 228964	Chathams indigenous
Cyperaceae	<i>Isolepis habra</i> (Edgar) Soják			AK 229971	Chathams indigenous
Cyperaceae	<i>Isolepis inundata</i> R.Br.			AK 227177	Chathams indigenous
Cyperaceae	<i>Isolepis pottsii</i> (V.J.Cook) Soják			CHR 91386	Chathams indigenous
Cyperaceae	<i>Isolepis praetextata</i> (Edgar) Soják			AK 296338	Chathams indigenous
Cyperaceae	<i>Isolepis prolifer</i> (Rottb.) R.Br.			AK 296336	Chathams indigenous
Cyperaceae	<i>Isolepis reticularis</i> Colenso	square sedge		AK 230424	Chathams indigenous
Cyperaceae		three square		AK 2131	Chathams indigenous
Cyperaceae		lake clubrush	kūwāwā	AK 150292	Chathams indigenous
Cyperaceae	<i>Schoenoplectus pungens</i> (Vahl) Palla			AK 227701	Chathams indigenous
Cyperaceae	<i>Schoenoplectus tabernaemontani</i> (C.C.Gmel.) Palla			AK 236684	Chathams indigenous
Cyperaceae	<i>Schoenus apogon</i> Roem. et Schult.			AK 170662	Chathams indigenous
Cyperaceae	<i>Schoenus concinna</i> Hook.f.			AK 295644	Chathams indigenous
Cyperaceae	<i>Schoenus fluitans</i> Hook.f.			AK 295161	Chathams indigenous
Cyperaceae	<i>Schoenus maschalinus</i> Roem. et Schult.			CHR 221322	Chathams indigenous
Cyperaceae	<i>Schoenus nitens</i> (R.B.) Roem. et Schult.			AK 230445	Chathams indigenous
Cyperaceae	<i>Schoenus puciflorus</i> (Hook.f.) Hook.f.		wiwi	AK 232568	Chathams indigenous
Cyperaceae	<i>Uncinia angustifolia</i> Hamlin	bastard grass		CHR 294828	Chathams indigenous
Cyperaceae	<i>Uncinia zotovii</i> Hamlin	Zotov's bastard grass		CHR 294828	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Cyperaceae	<i>Uncinia aff. uncinata</i>	Chatham Island bastard grass		AK 230477	Chathams endemic
Juncaceae	<i>Juncus antarcticus</i> Hook.f.	dwarf rush		CHR 399090	Chathams indigenous
Juncaceae	* <i>Juncus articulatus</i> L.	jointed rush		CHR 567961	Exotic naturalised
Juncaceae	* <i>Juncus bufonius</i> L. var. <i>bufonius</i>	toad rush		AK 2976	Exotic naturalised
Juncaceae	<i>Juncus distegus</i> Edgar	leafless rush	wiwi	CHR 187206	Chathams indigenous
Juncaceae	<i>Juncus edgariae</i> L.A.S.Johnson et K.L.Wilson	Edgar's rush	wiwi	CHR 187540	Chathams indigenous
Juncaceae	* <i>Juncus holoschoenus</i> var. <i>multiflorus</i> Carse			AK 228210	Exotic naturalised
Juncaceae	<i>Juncus kraussii</i> var. <i>australis</i> (Buchenau) Snogerup	sea rush	wiwi	CHR 293191	Chathams indigenous
Juncaceae	+ <i>Juncus pallidus</i> R.Br.	giant rush	wiwi	AK 228212	NZ indigenous, Chats naturalised
Juncaceae	<i>Juncus planifolius</i> R.Br.	grass-leaved rush		CHR 496882	Chathams indigenous
Juncaceae	<i>Juncus prismatocarpus</i> R.Br.	angled-fruit rush		AK 228078	Chathams indigenous
Juncaceae	<i>Juncus pusillus</i> Buchenau	dwarf rush		AK 231013	Chathams indigenous
Juncaceae	<i>Juncus sarophorus</i> L.A.S.Johnson	leafless fan rush	wiwi	CHR 187536	Chathams indigenous
Juncaceae	* <i>Juncus tenuis</i> Willd. var. <i>tenuis</i>	track rush		AK 296168	Exotic naturalised
Juncaceae	<i>Juncus usitatus</i> L.A.S.Johnson	leafless rush	wiwi	AK 299144	Chathams indigenous
Juncaceae	<i>Luzula banksiana</i> var. <i>acra</i> Edgar	coastal woodrush		AK 230480	Chathams indigenous
Juncaceae	<i>Luzula congesta</i> (Thunb.) Lej.	field woodrush		CHR 594799	Exotic naturalised
Juncaceae	* <i>Luzula campestris</i> (L.) DC.	brown top		CHR 403088	Exotic naturalised
Juncaceae	* <i>Agrostis capillaris</i> L.	creeping bent		AK 296015	Exotic naturalised
Poaceae	* <i>Agrostis stolonifera</i> L.	silvery hair grass		AK 231009	Exotic naturalised
Poaceae	* <i>Aira caryophyllea</i> L. subsp. <i>caryophyllea</i>	early hair grass		CHR 436561	Exotic naturalised
Poaceae	* <i>Aira praecox</i> L.	kneed foxtail		AK 209733	Exotic naturalised
Poaceae	* <i>Alopecurus geniculatus</i> L.	marram		AK 228970	Exotic naturalised
Poaceae	* <i>Ammophila arenaria</i> (L.) Link	sweet vernal grass		AK 98127	Exotic naturalised
Poaceae	* <i>Anthoxanthum odoratum</i> L.	onion twitch		CHR 82502	Exotic naturalised
Poaceae	* <i>Arrhenatherum elatius</i> subsp. <i>bulbosum</i> (Willd.) Schübl. et G.Martens			CHR 187583	Exotic naturalised
Poaceae	<i>Austroderia turbaria</i> (Connor) N.P.Barker et H.P.Linder	Chatham Island toetoe		AK 232570	Chathams endemic
Poaceae	* <i>Avena fatua</i> L.	wild oat		AK 216341	Exotic naturalised
Poaceae	* <i>Briza maxima</i> L.	great quaking grass		CHR 96638	Exotic naturalised

*= Exotic naturalised; †= NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Poaceae	<i>Bromus arenarius</i> Labill.	sand brome		AK 228069	Chathams indigenous
Poaceae	* <i>Bromus diandrus</i> Roth	ripgut brome		AK 170698	Exotic naturalised
Poaceae	* <i>Bromus hordeaceus</i> L.	soft brome		AK 277619	Exotic naturalised
Poaceae	* <i>Bromus lithobius</i> Trin.	Chliean brome		AK 296169	Exotic naturalised
Poaceae	* <i>Bromus sterilis</i> L.	barren brome		AK 295931	Exotic naturalised
Poaceae	* <i>Bromus valdivianus</i> Phil.	stripey brome		CHR 517776	Exotic naturalised
Poaceae	* <i>Bromus willdenowii</i> Kunth	prairie grass		AK 277616	Exotic naturalised
Poaceae	* <i>Critisision murinum</i> (L.) Å.Löve subsp. <i>murinum</i>	barley grass		AK 170663	Exotic naturalised
Poaceae	* <i>Cynosurus cristatus</i> L.	crested dogstail		AK 234158	Exotic naturalised
Poaceae	* <i>Dactylis glomerata</i> L.	cocksfoot		AK 170621	Exotic naturalised
Poaceae	* <i>Danthonia decumbens</i> (L.) DC.	heath grass		AK 298644	Exotic naturalised
Poaceae	<i>Deschampsia cespitosa</i> (L.) P.Beauv.	golden hair grass		AK 227735	Chathams indigenous
Poaceae	<i>Deyeuxia avenoides</i> (Hackf.) Buchanan	mountain oat grass		CHR 82500	Chathams indigenous
Poaceae	<i>Deyeuxia quadrisetata</i> (Labill.) Benth.	plume grass		AK 230458	Chathams indigenous
Poaceae	<i>Dichelachne inaequiglumis</i> (Hack.) Edgar et Connor	purple plume grass		CHR 96675	Chathams indigenous
Poaceae	* <i>Digitaria sanguinalis</i> (L.) Scop.	summer grass		AK 303983	Chathams indigenous
Poaceae	* <i>Echinochloa crus-galli</i> (L.) P.Beauv.	barnyard grass		AK 296014	Exotic naturalised
Poaceae	<i>Echinopogon ovatus</i> (G.Forst.) P.Beauv.	hedgehog grass		CHR 92047	Exotic naturalised
Poaceae	* <i>Ehrhartia erecta</i> Lam.	veltd grass		CHR 436509	Chathams indigenous
Poaceae	* <i>Elytrigia repens</i> (L.) Nevski	couch	herewhena	AK 297836	Exotic naturalised
Poaceae	* <i>Eragrostis amabilis</i> (L.) Hook. et Arn.	Japanese lover grass		CHR 92049	Exotic naturalised
Poaceae	* <i>Eragrostis cilianensis</i> (All.) Janch.	stink grass		AK 296451	Exotic naturalised
Poaceae	<i>Festuca coxii</i> (Petrie) Hack.	Cox's fescue		AK 295791	Chathams endemic
Poaceae	* <i>Festuca rubra</i> subsp. <i>commutata</i> Gaudin	chewings fescue		AK 2010	Chathams endemic
Poaceae	* <i>Glyceria declinata</i> Bréb.	floating sweet grass		CHR 415595	Exotic naturalised
Poaceae	* <i>Glyceria maxima</i> (Hartm.) Holmb.	reed sweet grass		CHR 96566	Exotic naturalised
Poaceae	* <i>Glyceria panicata</i> (Fr.) Fr.	reed sweet grass		AK 298649	Exotic naturalised
Poaceae	<i>Hierochloe fusca</i> Zotov	holy grass	käretu	CHR 96658	Chathams indigenous
Poaceae	<i>Hierochloe redolens</i> (Vahl) Roem. et Schult.	holy grass	käretu	AK 296175	Chathams indigenous
Poaceae	* <i>Holcus lanatus</i> L.	Yorkshire fog		AK 227174	Chathams indigenous
				AK 170664	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Poaceae	* <i>Holcus mollis</i> L.	creeping fog		CHR 478458	Exotic naturalised
Poaceae	<i>Lachnagrostis billardierei</i> (R.Br.) Trin.	sand wind grass		AK 229942	Chathams indigenous
Poaceae	<i>Lachnagrostis leptostachys</i> (Hook.f.) Zотов	wind grass		WELT 76281	Chathams indigenous
Poaceae	<i>Lachnagrostis littoralis</i> (Hack.) Edgar subsp. <i>littoralis</i>	wind grass		AK 296108	Chathams indigenous
Poaceae	<i>Lachnagrostis lyallii</i> (Hook.f.) Zотов	coastal wind grass		CHR 397609	Chathams indigenous
Poaceae	<i>Lachnagrostis pilosa</i> (Buchanan) Edgar subsp. <i>pilosa</i>	Lyall's wind grass		CHR 197342	Chathams indigenous
Poaceae	<i>Lachnagrostis filiformis</i> (G.Forst.) Trin.	wind grass		AK 227190	Chathams indigenous
Poaceae	* <i>Lagurus ovatus</i> L.	hare's tail		CHR 496721	Exotic naturalised
Poaceae	* <i>Leymus arenarius</i> (L.) Hochst.	lyme grass		CHR 5043	Exotic naturalised
Poaceae	* <i>Lolium perenne</i> L.	perennial rye grass		AK 228968	Exotic naturalised
Poaceae	* <i>Lolium rigidum</i> Gaudin	annual ryegrass		AK 296189	Exotic naturalised
Poaceae	<i>Microlaena stipoides</i> (Labill.) R.Br. var. <i>stipoides</i>	meadow ricegrass	pātī	CHR 96655	Chathams indigenous
Poaceae	* <i>Nardus stricta</i> L.	mat grass		CHR 569360	Exotic naturalised
Poaceae	* <i>Paspalum dilatatum</i> Poir.	paspalum		AK 295942	Exotic naturalised
Poaceae	* <i>Phalaris canariensis</i> L.	canary grass	pātī	CHR 96679	Exotic naturalised
Poaceae	* <i>Phalaris minor</i> Retz.	lesser canary grass		CHR 96683	Exotic naturalised
Poaceae	* <i>Phleum pratense</i> L.	timonthy		CHR 436515	Exotic naturalised
Poaceae	* <i>Poa annua</i> L.	annual poa		CHR 436513	Exotic naturalised
Poaceae	<i>Poa billardierei</i> (Spengg.) St.-Yves	sand tussock		CHR 288420	Chathams indigenous
Poaceae	<i>Poa chathamica</i> Petrie	Chatham Islands poa		AK 223546	Chathams endemic
Poaceae	† <i>Poa cita</i> Edgar	silver tussock	wī	CHR 193322	NZ indigenous, Chats naturalised
Poaceae	<i>Poa imbecilla</i> Spreng.	feeble poa		AK 1951	Chathams indigenous
Poaceae	* <i>Poa pratensis</i> L.	Kentucky bluegrass		CHR 96614	Exotic naturalised
Poaceae	* <i>Poa trivialis</i> L.	rough meadow grass		CHR 82026	Exotic naturalised
Poaceae	* <i>Polypogon fugax</i> Nees ex Steud.	beard grass		AK 295907	Exotic naturalised
Poaceae	<i>Puccinellia chathamica</i> Cheeseman	Chatham Islands saltgrass		AK 227145	Chathams indigenous
Poaceae	<i>Rytidosperma clavatum</i> (Zотов) Connor et Edgar	bristle grass		CHR 82046	Chathams indigenous
Poaceae	* <i>Rytidosperma gracile</i> (Hook.f.) Connor et Edgar	bristle grass		AK 209130	Chathams indigenous
Poaceae	* <i>Rytidosperma penicillatum</i> (Labill.) Connor et Edgar	bristle grass		AK 296157	Exotic naturalised
Poaceae	* <i>Rytidosperma pilosum</i> (R.Br.) Connor et Edgar	bristle grass		AK 295818	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Poaceae	* <i>Rytidosperma racemosum</i> (R.Br.) Connor et Edgar	bristle grass		AK 296159	Exotic naturalised
Poaceae	* <i>Rytidosperma unarede</i> (Raoul) Connor et Edgar	bristle grass		CHR 397613	Chathams indigenous
Poaceae	* <i>Schedonorus arundinaceus</i> (Schiarb.) Dumort.	tall fescue		CHR 96763	Exotic naturalised
Poaceae	* <i>Setaria gracilis</i> Kunth	knot-root bristle grass		AK 295786	Exotic naturalised
Poaceae	* <i>Setaria verticillata</i> (L.) P.Beauv.	rough bristle grass		AK 296080	Exotic naturalised
Poaceae	* <i>Setaria viridis</i> (L.) P.Beauv.	green bristle grass		CHR 92051	Exotic naturalised
Poaceae	<i>Trisetum arduanum</i> Edgar et A.P.Druce			AK 304029	Chathams indigenous
Poaceae	<i>Trisetum lepidum</i> Edgar et A.P.Druce			WELT 69097	Chathams indigenous
Poaceae	<i>Trisetum spicatum</i> (L.) K.Richt.			AK 228470	Chathams indigenous
Poaceae	* <i>Vulpia bromoides</i> (L.) Gray	vulpia hair grass		AK 219679	Exotic naturalised
Poaceae	* <i>Vulpia myuros</i> (L.) C.C.Gmel. var. <i>myuros</i>	Rats-tail fescue		AK 296444	Exotic naturalised
Restionaceae	<i>Apodasmia aff. similis</i>	jointed rush	oioi	CHR 594809	Chathams endemic
Restionaceae	<i>Sporadanthus traversii</i> (F.Muell.) F.Muell.	Chatham Island giant		MEI 15163	Chathams endemic
Typhaceae	† <i>Typha orientalis</i> C.Presl	wire rush			
Zingiberaceae	* <i>Hedychium gardnerianum</i> Ker Gawl.	bull rush	raupo	CHR 966678	NZ indigenous, Chats naturalised
Zingiberaceae	wild ginger			AK 307272	Exotic naturalised
Eudicots (24)					
Gunneraceae	<i>Gunnera monoica</i> Rauol			AK 227696	Chathams indigenous
Gunneraceae	* <i>Gunnera tinctoria</i> (Mol.) Mirb.	Chilean rhubarb		AK 300345	Exotic naturalised
Papaveraceae	* <i>Fumaria muralis</i> W.D.J.Koch subsp. <i>muralis</i>	scrambling fumitory		AK 281437	Exotic naturalised
Papaveraceae	* <i>Glaucium flavum</i> Crantz	horned poppy		CHR 403135	Exotic naturalised
Papaveraceae	* <i>Papaver dubium</i> L.	long-headed poppy		AK 232566	Exotic naturalised
Papaveraceae	* <i>Papaver rhoes</i> L.	field poppy		CHR 604584	Exotic naturalised
Papaveraceae	* <i>Papaver somniferum</i> subsp. <i>setigerum</i> (DC.) Corb.	opium poppy		AK 295082	Exotic naturalised
Proteaceae	* <i>Banksia integrifolia</i> L.f. var. <i>integrifolia</i>	coastal banksia		AK 296183	Exotic naturalised
Ranunculaceae	* <i>Anemone × hybrida</i> Paxton	Japanese anemone		AK 296119	Exotic naturalised
Ranunculaceae	* <i>Aquilegia vulgaris</i> L.	columbine		CHR 594739	Exotic naturalised
Ranunculaceae	† <i>Clematis paniculata</i> J.F.Gmel.	white clematis	puawhānaga	AK 297964	NZ indigenous, Chats naturalised
Ranunculaceae	* <i>Clematis vitalba</i> L.	old man's beard		AK 150435	Exotic naturalised
Ranunculaceae	* <i>Helleborus orientalis</i> Lam.	winter rose		CHR 604558	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Ranunculaceae	* <i>Nigella damascena</i> L.	love in the mist		CHR 416681	Exotic naturalised
Ranunculaceae	<i>Ranunculus acaulis</i> DC.	shore buttercup		CHR 510515	Chathams indigenous
Ranunculaceae	<i>Ranunculus</i> aff. <i>foliosus</i>			AK 295117	Chathams endemic
Ranunculaceae	<i>Ranunculus</i> aff. <i>royi</i>			CHR 569361	Chathams endemic
Ranunculaceae	<i>Ranunculus amphitrichus</i> Colenso	water buttercup	waoriki	AK 227699	Chathams indigenous
Ranunculaceae	* <i>Ranunculus ficaria</i> subsp. <i>ficariaformis</i> (F.W.Schultz) Rouy et Foucaud	celandine		AK 299984	Exotic naturalised
Ranunculaceae	<i>Ranunculus glabifolius</i> Hook.	water buttercup	waoriki	AK 298608	Chathams indigenous
Ranunculaceae	* <i>Ranunculus parviflorus</i> L.	small-flowered buttercup		AK 300550	Exotic naturalised
Ranunculaceae	<i>Ranunculus reflexus</i> Garn.-Jones	hairy buttercup	mārūrū	AK 230466	Chathams indigenous
Ranunculaceae	* <i>Ranunculus repens</i> L.	creeping buttercup		CHR 96597	Exotic naturalised
Ranunculaceae	* <i>Ranunculus sceleratus</i> L.	celery-leaved buttercup		AK 295909	Exotic naturalised
Core eudicots (514)					
Acanthaceae	* <i>Acanthus mollis</i> L.	Bears breaches		AK 295955	Exotic naturalised
Actinidiaceae	* <i>Actinidia deliciosa</i> (A.Chev.) C.F.Liang et A.R.Ferguson var. <i>deliciosa</i>	Kiwifruit		AK 299998	Exotic naturalised
Aizoaceae	* <i>Carpobrotus chilensis</i> (Molina) N.E.Br.	Chilean ice plant		AK 295158	Exotic naturalised
Aizoaceae	* <i>Carpobrotus edulis</i> (L.) N.E.Br.	Hottentot fig		CHR 371567	Exotic naturalised
Aizoaceae	* <i>x Carpophytma pallida</i> Sykes et Heenan			CHR 604533	Exotic naturalised
Aizoaceae	<i>Disphyma australe</i> (W.T.Aiton) N.E.Br. subsp. <i>australe</i>	Maori ice plant	horokaka	AK 233104	Chathams indigenous
Aizoaceae	<i>Disphyma papillatum</i> Chinnock	Chatham Islands ice plant		AK 227716	Chathams endemic
Aizoaceae	* <i>Drosanthemum floribundum</i> (Haw.) Schwantes			AK 275650	Exotic naturalised
Aizoaceae	* <i>Lampranthus multiradiatus</i> (Jacq.) N.E.Br.			CHR 604595	Exotic naturalised
Aizoaceae	* <i>Lampranthus spectabilis</i> (Haw.) N.E.Br.			CHR 496723	Exotic naturalised
Aizoaceae	<i>Tetragonia implexicoma</i> (Miq.) Hook.f.	native spinach		AK 170693	Chathams indigenous
Aizoaceae	<i>Tetragonia tetragonoides</i> (Pall.) Kunze	native spinach		AK 230034	Chathams indigenous
Amaranthaceae	<i>Alternanthera denticulata</i> R.Br.	lesser joyweed		AK 300308	Chathams indigenous
Amaranthaceae	<i>Atriplex australasica</i> Moq.	Australian orache		AK 295633	Chathams indigenous
Amaranthaceae	<i>Atriplex billardierei</i> (Moq.) Hook.f.	crystalwort		CHR 288453	Chathams indigenous
Amaranthaceae	<i>Atriplex buchananii</i> (Kirk) Cheeseman	orache		CHR 496900	Chathams indigenous
Amaranthaceae	* <i>Atriplex prostrata</i> DC.			CHR 496735	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Amaranthaceae	* <i>Beta vulgaris</i> L.	beet		AK 295957	Exotic naturalised
Amaranthaceae	* <i>Chenopodium album</i> L.	fat-hen		CHR 96689	Exotic naturalised
Amaranthaceae	<i>Chenopodium ambiguum</i> R.Br.	glaucous goosefoot		AK 2299939	Chathams indigenous
Amaranthaceae	* <i>Chenopodium murale</i> L.	nettles-leaved fat-hen		CHR 92058	Exotic naturalised
Amaranthaceae	* <i>Dysphania ambrosioides</i> (L.) Mosyakin et Clements	Mexican tea		AK 295790	Exotic naturalised
Amaranthaceae	<i>Einadia triandra</i> (G.Forst.) A.J.Scott	pigweed	poipapa	CHR 288449	Chathams indigenous
Amaranthaceae	<i>Einadia trigonos</i> (Boem. et Schult.) Paul G.Wilson subsp. <i>trigonos</i>	pigweed	poipapa	CHR 496770	Chathams indigenous
Amaranthaceae	<i>Sarcocornia quinqueflora</i> (Bunge ex Ung.-Sternb.) A.J.Scott subsp. <i>quinqueflora</i>	saltwort		CANU 19841	Chathams indigenous
Apiaceae	<i>Aciphylla dieffenbachii</i> (F.Muell.) Kirk	coxella	taramea	AK 6552	Chathams endemic
Apiaceae	<i>Aciphylla traversii</i> (F.Muell.) Hook.f.	Chatham Island speargrass	taramea	CHR 97893	Chathams endemic
Apiaceae	* <i>Angelica pachycarpa</i> Lange	angelica		AK 295927	Exotic naturalised
Apiaceae	* <i>Apium graveolens</i>	celery		AK 300311	Exotic naturalised
Apiaceae	<i>Apium prostratum</i> subsp. <i>denticulatum</i> P.S.Short	Chatham Islands celery		AK 227721	Chathams indigenous
Apiaceae	<i>Centella uniflora</i> (Colenso) Nannf.	centella		AK 150019	Chathams indigenous
Apiaceae	<i>Chaerophyllum colensoi</i> (Hook.f.) K.F.Chung var. <i>colensoi</i>	Colenso's mountain myrrh		AK 227191	Chathams indigenous
Apiaceae	* <i>Conium maculatum</i> L.	hemlock		CHR 92059	Exotic naturalised
Apiaceae	* <i>Coriandrum sativum</i> L.	coriander		AK 295086	Exotic naturalised
Apiaceae	* <i>Daucus carota</i> subsp. <i>sativus</i> (L.) Schuebler et Martens	carrot		AK 295954	Exotic naturalised
Apiaceae	<i>Daucus glauciatus</i> (Labill.) Fisch., C.A.Mey. et Avé-Lall.	native carrot		CHR 288436	Chathams indigenous
Apiaceae	* <i>Foeniculum vulgare</i> Mill.	fennel		AK 295958	Exotic naturalised
Apiaceae	<i>Lilaeopsis novae-zelandiae</i> (Gand.) A.W.Hill			CHR 159011	Chathams indigenous
Apiaceae	* <i>Melanoselinum decipiens</i> (Schrad. et J.C.Wendl.) Hoffm.	parsnip palm		AK 295079	Exotic naturalised
Apiaceae	* <i>Pastinaca sativa</i> L.	parsnip		CHR 403416AC	Exotic naturalised
Apiaceae	* <i>Petroselinum crispum</i> (Mill.) A.W.Hill	parsley		AK 295085	Exotic naturalised
Apiaceae	* <i>Torilis japonica</i> (Houtt.) DC.	hedge parsley		AK 298522	Exotic naturalised
Apocynaceae	* <i>Vinca major</i> L.	periwinkle		CHR 371557	Exotic naturalised
Aquifoliaceae	* <i>Ilex aquifolium</i> L.	holly		CHR 594758	Exotic naturalised
Araliaceae	* <i>Fatsia japonica</i> (Thunb.) Decne. et Planch.	fatsia		CHR 594925	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Araliaceae	* <i>Hedera helix</i> L. subsp. <i>helix</i> ivy	Canary Island ivy		AK 403208	Exotic naturalised
Araliaceae	* <i>Hedera helix</i> subsp. <i>canariensis</i> (Willd.) Cout. <i>Hydrocotyle</i> aff. <i>robusta</i>			Ak 310439	Exotic naturalised
Araliaceae	* <i>Hydrocotyle bowlesioides</i> Mathias et Constance <i>Hydrocotyle heteromeria</i> A.Rich.	waxweed		AK 230418	Chathams endemic
Araliaceae	<i>Hydrocotyle microphylla</i> A.Cunn.			NZFRI 126160	Exotic naturalised
Araliaceae	<i>Hydrocotyle moschata</i> G.Forst. var. <i>moschata</i> <i>Hydrocotyle novaeseelandiae</i> DC.	hairy pennywort		AK 229130	Chathams indigenous
Araliaceae	<i>Hydrocotyle robusta</i> Kirk			CHR 468037	Chathams indigenous
Araliaceae	<i>Hydrocotyle heteromeria</i> A.Rich. × <i>H. moschata</i> G.Forst. var. <i>moschata</i>			AK 6287	Chathams indigenous
Araliaceae	<i>Pseudopanax chathamicus</i> Kirk	Chatham Island lancewood	hoho	AK 227195	Chathams endemic
Araliaceae	* <i>Tetrapanax papyriferus</i> (Hook.) K.Koch	Chinense rice-paper tree		AK 300324	Exotic naturalised
Argophyllaceae	<i>Corokia macrocarpa</i> Kirk	hokataka		AK 6737	Chathams endemic
Asteraceae	* <i>Achillea millefolium</i> L.	yarrow		CHR 417539	Exotic naturalised
Asteraceae	<i>Anaphalioides bellidoides</i> (G.Forst.) Glenny	hells bells		CHR 288478	Chathams indigenous
Asteraceae	* <i>Anthemis cotula</i> L.	stinking mayweed		AK 294946	Exotic naturalised
Asteraceae	* <i>Anthemis punctata</i> subsp. <i>cupaniana</i> (Tod. ex Nyman) R.Fern.	blue-eyed African daisy		CHR 604801	Chathams indigenous
Asteraceae	* <i>Arctotis hybrida</i>	absinth		AK 296097	Exotic naturalised
Asteraceae	* <i>Artemisia absinthium</i> L.	hedge artemisia		CHR 604595	Exotic naturalised
Asteraceae	* <i>Artemisia arboreascens</i> L.	lawn daisy		AK 296089	Exotic naturalised
Asteraceae	* <i>Bellis perennis</i> L.	lawn daisy		CHR 96615	Exotic naturalised
Asteraceae	* <i>Bellis perennis</i> L. 'Flore-plena'			CHR 604589	Exotic naturalised
Asteraceae	<i>Brachyglottis huntii</i> (F.Muell.) B.Nord.	Chatham Island rautini		AK 10701	Chathams endemic
Asteraceae	† <i>Brachyglottis repanda</i> J.R.Forst. et G.Forst.	Christmas tree	rangiora	AK 296644	NZ indigenous, Chats naturalised
Asteraceae	† <i>Brachyglottis compacta</i> (Kirk) B.Nord. × <i>B. greyi</i> (Hook.f.) B.Nord.	bushman's friend		AK 295930	NZ indigenous, Chats naturalised
Asteraceae	* <i>Calendula officinalis</i> L.			AK 281439	Exotic naturalised
Asteraceae	* <i>Carduus pycnocephalus</i> L.	marigold		CHR 464774	Exotic naturalised
Asteraceae	<i>Centipeda aotearoana</i> N.G.Walsh	slender winged thistle		AK 300309	Chathams indigenous
		sneezeweed			

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Asteraceae	* <i>Chrysanthemum segetum</i> L.	corn marigold		AK 295910	Exotic naturalised
Asteraceae	* <i>Cirsium arvense</i> (L.) Scop.	Californian thistle		AK 310440	Exotic naturalised
Asteraceae	* <i>Cirsium vulgare</i> (Savi) Ten.	Scotch thistle		CHR 436579	Exotic naturalised
Asteraceae	* <i>Conyza sumatrensis</i> (Retz.) E.H.Walker	fleabane		CHR 326689	Exotic naturalised
Asteraceae	<i>Cotula australis</i> (Spreng.) Hook.f.	soldier's button		CHR 178478	Chathams indigenous
Asteraceae	<i>Cotula coronopifolia</i> L.	bachelor's buttons		CHR 399153	Chathams indigenous
Asteraceae	<i>Craspedia aff. minor</i>	Chatham Island woolly head		AK 228074	Chathams endemic
Asteraceae	* <i>Crepis capillaris</i> (L.) Wallr.	smooth hawksbeard		AK 205962	Exotic naturalised
Asteraceae	* <i>Cynara scolymus</i> L.	artichoke		AK 295083	Exotic naturalised
Asteraceae	* <i>Delairea odorata</i> Lem.	German ivy		AK 296124	Exotic naturalised
Asteraceae	<i>Embergeria grandifolia</i> (Kirk) Boulos	Chatham Island sowthistle		CHR 108784	Chathams endemic
Asteraceae	* <i>Erigeron karvinskianus</i> DC.	Mexican daisy		AK 296018	Exotic naturalised
Asteraceae	<i>Euchiton audax</i> (D.G.Drury) Holub	creeping cudweed		CHR 415585	Chathams indigenous
Asteraceae	<i>Euchiton collinus</i> Cass.	creeping cudweed		CHR 288474	Chathams indigenous
Asteraceae	<i>Euchiton delicatus</i> (D.G.Drury) Holub	creeping cudweed		AK 295124	Chathams indigenous
Asteraceae	<i>Euchiton involucratus</i> (G.Forst.) Holub	creeping cudweed		WELT 3336	Chathams indigenous
Asteraceae	<i>Euchiton limosus</i> (D.G.Drury) Holub	creeping cudweed		CHR 403055	Chathams indigenous
Asteraceae	<i>Euchiton paludosus</i> (Petrie) Holub	creeping cudweed		AK 304126	Chathams indigenous
Asteraceae	<i>Euchiton ruahinicus</i> (D.G.Drury) Breitw. et J.M.Ward	creeping cudweed		CHR 415585	Chathams indigenous
Asteraceae	<i>Euchiton sphaericus</i> (Willd.) Holub	Japanese cudweed		AK 231012	Chathams indigenous
Asteraceae	* <i>Galinsoga parviflora</i> Cav.	galinsoga		CHR 496857	Exotic naturalised
Asteraceae	* <i>Gazania rigens</i> (L.) Gaertn.			AK 298748	Exotic naturalised
Asteraceae	<i>Helichrysum filicaule</i> Hook.f.	creeping everlasting daisy	niniao	CHR 97214	Chathams indigenous
Asteraceae	<i>Helichrysum lanceolatum</i> (Buchanan) Kirk			CHR 3594	Chathams indigenous
Asteraceae	* <i>Helichrysum petiolare</i> Hilliard et B.I.Burtt	liquorice plant		AK 291556	Exotic naturalised
Asteraceae	* <i>Helminthotheca echiooides</i> (L.) Holub	oxtongue		AK 296102	Exotic naturalised
Asteraceae	* <i>Hypochoeris glabra</i> L.	smooth catsear		AK 150027	Exotic naturalised
Asteraceae	* <i>Hypochoeris radicata</i> L.	catsear		AK 234700	Exotic naturalised
Asteraceae	* <i>Jacobsaea vulgaris</i> Gaertn.	ragwort		CHR 121724	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Asteraceae	<i>Lagenifera petiolata</i> Hook.f.		papatāniwhaniwha	CHR 269005	Chathams indigenous
Asteraceae	<i>Lagenifera pumila</i> (G.Forst.) Cheeseman	nipplewort	papatāniwhaniwha	AK 230487	Chathams indigenous
Asteraceae	* <i>Lapsana communis</i> L.	hawkbit		AK 295638	Exotic naturalised
Asteraceae	* <i>Leontodon taraxacoides</i> (Vill.) Mérat	Chatham Island button		CHR 159002	Exotic naturalised
Asteraceae	<i>Leptinella featherstonii</i> F.Muell.	daisy		AK 230487	Chathams endemic
Asteraceae	<i>Leptinella potentillina</i> F.Muell.	cotula		AK 228469	Chathams indigenous
Asteraceae	<i>Leptinella squalida</i> Hook.f. subsp. <i>squalida</i>	cotula		CHR 464786	Chathams indigenous
Asteraceae	* <i>Leucanthemum maxima</i> (Ramond) DC.	shasta daisy		AK 296116	Exotic naturalised
Asteraceae	* <i>Leucanthemum vulgare</i> Lam.	ox-eye daisy		AK 295959	Exotic naturalised
Asteraceae	* <i>Matricaria discoidea</i> DC.	pineapple weed		CHR 96582	Exotic naturalised
Asteraceae	<i>Olearia chathamica</i> Kirk	Chatham Island tree daisy	keketererehē	AK 9426	Chathams endemic
Asteraceae	<i>Olearia semidentata</i> Decne.	Chatham aster	hangatare	AK 295147	Chathams endemic
Asteraceae	<i>Olearia telmateia</i> Heenan et de Lange	shell akeake	akeake	CHR 595004	Chathams endemic
Asteraceae	<i>Olearia traversiorum</i> (F.Muell.) Hook.f.		akeake	CHR 290054	Chathams endemic
Asteraceae	<i>Olearia chathamica</i> Kirk × <i>O. semidentata</i> Decne.			CHR 417547	Chathams endemic
Asteraceae	* <i>Osteospermum fruticosum</i> (L.) Norl.	dimorphotheca		CHR 496764	Exotic naturalised
Asteraceae	* <i>Pericallis ×hybrida</i> B.Nord.	cinerea		AK 295801	Exotic naturalised
Asteraceae	<i>Picris burridgeae</i> S.Holzapfel	native oxtongue		AK 227152	Chathams indigenous
Asteraceae	<i>Pseudognaphalium</i> aff. <i>luteoalbum</i> (a)	Jersey cudweed		AK 296140	Chathams indigenous
Asteraceae	<i>Pseudognaphalium</i> aff. <i>luteoalbum</i> (b)	Jersey cudweed		AK 227210	Chathams indigenous
Asteraceae	<i>Pseudognaphalium</i> aff. <i>luteoalbum</i> (c)	Jersey cudweed		AK 227153	Chathams indigenous
Asteraceae	* <i>Senecio angulatus</i> L.f.	cape ivy		AK 234155	Exotic naturalised
Asteraceae	* <i>Senecio cineraria</i> DC.	dusty miller		CHR 496725	Exotic naturalised
Asteraceae	* <i>Senecio elegans</i> L.	shore groundsel		AK 170628	Exotic naturalised
Asteraceae	<i>Senecio glomeratus</i> Poir.	fireweed		AK 300977	Chathams indigenous
Asteraceae	<i>Senecio hispidulus</i> A.Rich.	fireweed		AK 296178	Chathams indigenous
Asteraceae	<i>Senecio lautus</i> G.Forst. ex Willd. var. <i>lautus</i>	New Zealand groundsel		AK 228200	Chathams indigenous
Asteraceae	<i>Senecio marotiri</i> C.J.Webb	Hauraki Gulf groundsel		AK 296077	Chathams indigenous
Asteraceae	<i>Senecio minimus</i> Poir.	fireweed		AK 298063	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Asteraceae	<i>Senecio radiolatus</i> F.Muell. subsp. <i>radiolatus</i>	Chatham Island groundsel		AK 177207	Chathams endemic
Asteraceae	* <i>Senecio scaberulus</i> (Hook.f.) D.G.Drury	fireweed		AK 228461	Chathams indigenous
Asteraceae	* <i>Senecio skirrhodon</i> DC.	gravel groundsel		AK 295956	Exotic naturalised
Asteraceae	<i>Senecio sterkulinus</i> Ornd.	guano groundsel		AK 294929	Chathams indigenous
Asteraceae	* <i>Senecio sylvaticus</i> L.	wood groundsel		AK 170675	Exotic naturalised
Asteraceae	* <i>Senecio vulgaris</i> L.	common groundsel		CHR 496888	Exotic naturalised
Asteraceae	<i>Senecio</i> aff. <i>glomeratus</i> Poir.	Chatham Island fireweed		AK 227154	Chathams endemic
Asteraceae	* <i>Silybum marianum</i> (L.) Gaertn.	variegated thistle		CHR 403391	Exotic naturalised
Asteraceae	* <i>Sonchus arvensis</i> L.	field sowthistle		AK 229926	Exotic naturalised
Asteraceae	* <i>Sonchus asper</i> (L.) Hill	prickly sowthistle	puha	CHR 496848	Exotic naturalised
Asteraceae	<i>Sonchus kirkii</i> Hamlin	native sowthistle	puha	CHR 178478	Chathams indigenous
Asteraceae	* <i>Sonchus oleraceus</i> L.	sowthistle	puha	AK 170651	Exotic naturalised
Asteraceae	* <i>Tanacetum parthenium</i> (L.) Sch.Bip.	feverfew		AK 295923	Exotic naturalised
Asteraceae	* <i>Taraxacum hamatum</i> Raunk.	dandelion		CHR 156630	Exotic naturalised
Asteraceae	* <i>Taraxacum officinale</i> F.H.Wigg. agg.	dandelion		CHR 436642	Exotic naturalised
Asteraceae	<i>Taraxacum</i> aff. <i>magellanicum</i>	native dandelion		CHR 178769	Chathams indigenous
Asteraceae	* <i>Tragopogon porrifolius</i> L.	salsify		AK 230450	Exotic naturalised
Asteraceae	* <i>Tripleurospermum inodorum</i> Schultz-Bip.	scentless mayweed		AK 303550	Exotic naturalised
Boraginaceae	* <i>Borago officinalis</i> L.	borage		AK 295087	Exotic naturalised
Boraginaceae	* <i>Echium candicans</i> L.f.	pride of Madeira		CHR 300321	Exotic naturalised
Boraginaceae	* <i>Echium pininana</i> Webb et Berthel.	giant bugloss		AK 300323	Exotic naturalised
Boraginaceae	<i>Myosotidium hortensium</i> (Decne.) Baill.	Chatham Island forget-me-not	kōpukapuka	AK 221067	Chathams endemic
Boraginaceae	* <i>Myosotis discolor</i> Pers.	grassland forget-me-not		CHR 496733	Exotic naturalised
Boraginaceae	* <i>Myosotis laxa</i> subsp. <i>caespitosa</i> (Schultz) Hyl. ex Nordh.	water forget-me-not		CHR 178731	Exotic naturalised
Boraginaceae	<i>Myosotis spathulata</i> G.Forst.	forget-me-not		AK 7509	Chathams indigenous
Boraginaceae	* <i>Myosotis sylvatica</i> Hoffm. subsp. <i>sylvatica</i>	garden forget-me-not		CHR 496668	Exotic naturalised
Boraginaceae	* <i>Nemophila menziesii</i> Hook. et Arn.			CHR 594846	Exotic naturalised
Boraginaceae	* <i>Phacelia tanacetifolia</i> Benth.	phacelia		CHR 602339	Exotic naturalised
Boraginaceae	* <i>Symphytum × uplandicum</i> Nyman	comfrey		AK 295911	Exotic naturalised
Brassicaceae	* <i>Alyssum saxatile</i> L.			CHR 85962	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Brassicaceae	* <i>Brassica juncea</i> (L.) Czern. var. <i>junccea</i>	Indian mustard		CHR 496898A-C	Exotic naturalised
Brassicaceae	* <i>Brassica napus</i> L. var. <i>napus</i>	rape		CHR 585632	Exotic naturalised
Brassicaceae	* <i>Brassica nigra</i> (L.) W.D.J.Koch	black mustard		AK 295798	Exotic naturalised
Brassicaceae	* <i>Brassica oleracea</i> L. var. <i>oleracea</i> ^a	cabbage		AK 296980	Exotic naturalised
Brassicaceae	* <i>Brassica oleracea</i> var. <i>acephala</i> DC.	kale		CHR 594743	Exotic naturalised
Brassicaceae	* <i>Brassica oleracea</i> var. <i>botrytis</i> L.	cauliflower		AK 304038	Exotic naturalised
Brassicaceae	* <i>Brassica oleracea</i> var. <i>gemmifera</i> (DC.) Zenker	Brussel sprouts		AK 295938-39	Exotic naturalised
Brassicaceae	* <i>Brassica oleracea</i> var. <i>italica</i> Plenck	broccoli		AK 300255	Exotic naturalised
Brassicaceae	* <i>Brassica rapa</i> L. var. <i>rapa</i>	turnip		CHR 585633	Exotic naturalised
Brassicaceae	* <i>Brassica rapa</i> var. <i>chinensis</i> (L.) Kitam.	Chinese cabbage		CHR 604587	Exotic naturalised
Brassicaceae	* <i>Brassica rapa</i> var. <i>oleifera</i> DC.	wild turnip		AK 295797	Exotic naturalised
Brassicaceae	* <i>Cakile edentula</i> (Bigelow) Hook.f.	sea rocket		CHR 371559	Exotic naturalised
Brassicaceae	* <i>Capsella bursa-pastoris</i> (L.) Medik.	shepherd's purse		CHR 96603	Exotic naturalised
Brassicaceae	* <i>Cardamine corymbosa</i> Hook.f. agg.	native bittercress		AK 227382	Chathams indigenous
Brassicaceae	* <i>Cardamine debilis</i> DC. agg.	native bittercress		AK 314512	Chathams indigenous
Brassicaceae	* <i>Cardamine hirsuta</i> L.	bittercress		CHR 496903	Exotic naturalised
Brassicaceae	* <i>Diplotaxis muralis</i> (L.) DC.	wall rocket		AK 291496	Exotic naturalised
Brassicaceae	* <i>Diplotaxis tenuifolia</i> (L.) DC.	perennial rocket		AK 295933	Exotic naturalised
Brassicaceae	* <i>Eruca vesicaria</i> subsp. <i>sativa</i> (Mill.) Thell.	rocket		AK 295084	Exotic naturalised
Brassicaceae	* <i>Hesperis matronalis</i> L.	dame's violet		CHR 604585	Exotic naturalised
Brassicaceae	* <i>Lepidium desvauxii</i> Thell.	bushy peppergrass		AK 295804	Chathams indigenous
Brassicaceae	* <i>Lepidium didymum</i> L.	twin cress		CHR 156626	Exotic naturalised
Brassicaceae	* <i>Lepidium flexicaule</i> Kirk	shore cress		AK 294940	Chathams indigenous
Brassicaceae	* <i>Lepidium sativum</i> L.	Cook's scurvy grass	nau	AK 295979	Chathams indigenous
Brassicaceae	* <i>Lepidium squamatum</i> Forssk.	garden cress		AK 297485	Exotic naturalised
Brassicaceae	* <i>Lepidium flexicaule</i> Kirk × <i>L. aff. oloraceum</i> (a)	wart cress		AK 296447	Exotic naturalised
Brassicaceae	* <i>Lepidium oloraceum</i> Sparr. ex G.Forst.			AK 295155	Chathams indigenous
Brassicaceae	* <i>Lepidium oloraceum</i> Kirk × <i>L. aff. oloraceum</i> (b)			AK 294942	Chathams indigenous
Brassicaceae	* <i>Lepidium aff. oloraceum</i> (a)	Chatham Islands scurvy grass		AK 230459	Chathams endemic
Brassicaceae	* <i>Lepidium aff. oloraceum</i> (b)			AK 208579	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Brassicaceae	<i>Lepidium aff. oleraceum</i> (d)	Mangere Island scurvy grass		AK 255607	Chathams endemic
Brassicaceae	* <i>Lobularia maritima</i> (L.) Desv.	alyssum		AK 295940	Exotic naturalised
Brassicaceae	* <i>Lunaria annua</i> L.	honesty		CHR 594764	Exotic naturalised
Brassicaceae	* <i>Malcolmia maritima</i> (L.) R.Br.	Virginian stock		AK 281371	Exotic naturalised
Brassicaceae	* <i>Matthiola incana</i> (L.) R.Br. var. <i>incana</i>	stock		AK 296137	Exotic naturalised
Brassicaceae	* <i>Nasturtium microphyllum</i> Reichb.	water cress		CHR 96612	Exotic naturalised
Brassicaceae	* <i>Nasturtium officinale</i> R.Br.	water cress		CHR 156631	Exotic naturalised
Brassicaceae	* <i>Raphanus sativus</i> L. var. <i>sativus</i>	radish		CHR 604598	Exotic naturalised
Brassicaceae	<i>Rorippa diivaricata</i> (Hook.f.) Garn.Jones et Jonsell	New Zealand water cress	maturanga	AK 237353	Chathams indigenous
Brassicaceae	<i>Rorippa palustris</i> (L.) Besser	marsh yellow cress	poniu	CHR 464799	Chathams indigenous
Brassicaceae	* <i>Sinapis alba</i> L. subsp. <i>alba</i>	white mustard		AK 297666	Exotic naturalised
Brassicaceae	* <i>Sisymbrium officinale</i> (L.) Scop.	hedge mustard		CHR 496902	Exotic naturalised
Campanulaceae	* <i>Campanula poscharskyana</i> Degen	shore lobelia	pānekenēke	CHR 604591	Exotic naturalised
Campanulaceae	<i>Lobelia anceps</i> L.f.	bedding lobelia		CHR 176553	Chathams indigenous
Campanulaceae	<i>Lobelia arenaria</i> (Hook.f.) Heenan et de Lange	native hare bell	rimuroa	AK 228464	Chathams indigenous
Campanulaceae	* <i>Lobelia erinus</i> L.	native hare bell	rimuroa	AK 304011	Exotic naturalised
Campanulaceae	<i>Wahlenbergia ramosa</i> G.Simpson	native hare bell	rimuroa	AK 228201	Chathams indigenous
Campanulaceae	<i>Wahlenbergia vernicosa</i> J.A.Peterson	native hare bell	rimuroa	AK 226783	Chathams indigenous
Campanulaceae	<i>Wahlenbergia violacea</i> J.A.Peterson	native hare bell	rimuroa	AK 304028	Chathams indigenous
Cannabaceae	* <i>Cannabis sativa</i> L.	marijuana		AK 295916	Exotic naturalised
Cannabaceae	* <i>Humulus lupulus</i> L.	hops		CHR 496861	Exotic naturalised
Caprifoliaceae	* <i>Leycesteria formosa</i> Wall.	Himalayan honeysuckle		CHR 417541	Exotic naturalised
Caprifoliaceae	* <i>Lonicera periclymenum</i> L.	honeysuckle		AK 298510	Exotic naturalised
Caprifoliaceae	* <i>Sambucus nigra</i> L.	elderberry		CHR 179719	Exotic naturalised
Caryophyllaceae	* <i>Cerastium fontanum</i> subsp. <i>vulgare</i> (Hartm.) Greuter et Burdet	mouse-ear chickweed		CHR 436462	Exotic naturalised
Caryophyllaceae	* <i>Cerastium glomeratum</i> Thuill.	annual mouse-ear chickweed		AK 170699	Exotic naturalised
Caryophyllaceae	<i>Colobanthus apetalus</i> (Labill.) Druce			CHR 496831	Chathams indigenous
Caryophyllaceae	<i>Colobanthus muelleri</i> Kirk			AK 174279	Chathams indigenous
Caryophyllaceae	<i>Colobanthus muscoides</i> Hook.f.			CANU 19811	Chathams indigenous
Caryophyllaceae	* <i>Moenchia erecta</i> (L.) Gaertn.	erect chickweed		AK 304012	Exotic naturalised

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Caryophyllaceae	* <i>Polycarpon tetraphyllum</i> (L.) L.	allseed pearlwort		AK 295953 AK 296463	Exotic naturalised Exotic naturalised
Caryophyllaceae	* <i>Sagina apetala</i> Ard.	procumbent pearlwort		AK 150009	Exotic naturalised
Caryophyllaceae	* <i>Sagina procumbens</i> L.			AK 295912	Exotic naturalised
Caryophyllaceae	* <i>Silene armeria</i> L.			CHR 602345	Exotic naturalised
Caryophyllaceae	* <i>Silene dioica</i> (L.) Clairv. subsp. <i>dioica</i>	red campion		CHR 496753	Exotic naturalised
Caryophyllaceae	* <i>Silene gallica</i> L.	catchfly		AK 170647	Exotic naturalised
Caryophyllaceae	* <i>Silene latifolia</i> subsp. <i>alba</i> (Miller) Greuter et Burdet	white campion		AK 298512	Exotic naturalised
Caryophyllaceae	* <i>Spergularia rubra</i>	sand spurrey		AK 301051	Exotic naturalised
Caryophyllaceae	* <i>Stellaria graminea</i> L.	stitchwort		CHR 436471	Exotic naturalised
Caryophyllaceae	* <i>Stellaria media</i> (L.) Cirillo subsp. <i>media</i>	chickweed		CHR 288392	Chathams indigenous
Caryophyllaceae	* <i>Stellaria parviflora</i> Hook.f.	Japanese spindletree		CHR 602342	Exotic naturalised
Celastraceae	* <i>Euonymus europaeus</i> L.	native bindweed	pohuehue	AK 295091	Chathams indigenous
Convolvulaceae	<i>Calystegia sepium</i> subsp. <i>roseata</i> Brummitt	greater bindweed		CHR 403215	Exotic naturalised
Convolvulaceae	* <i>Calystegia silvatica</i> subsp. <i>disjuncta</i> Brummitt	shore bindweed	rauparaha	CHR 288405	Chathams indigenous
Convolvulaceae	<i>Calystegia soldanella</i> (L.) R.Br.	climbing bindweed	pōwhirihwi	CHR 158299	Chathams indigenous
Convolvulaceae	<i>Calystegia tuguriorum</i> (G.Forst.) Hook.f.			AK 295090	Chathams indigenous
Convolvulaceae	<i>Calystegia sepium</i> subsp. <i>roseata</i> Brummitt × <i>C. tuguriorum</i> (G.Forst.) Hook.f.			CHR 398548	Exotic naturalised
Convolvulaceae	* <i>Cuscuta epithymum</i> (L.) L.	clover dodder		AK 170706	Chathams indigenous
Convolvulaceae	<i>Dichondra repens</i> J.R.Forst. et G.Forst.	Mercury Bay weed		AK 230471	Chathams indigenous
Convolvulaceae	<i>Dichondra aff. brevifolia</i> (a) "large"	Mercury Bay weed		CHR 496665	Chathams indigenous
Convolvulaceae	<i>Dichondra aff. brevifolia</i> (b) "small"	Mercury Bay weed		AK 300243	Chathams indigenous
Convolvulaceae	<i>Dichondra aff. brevifolia</i> (c) "slender"	Mercury Bay weed	Toot	AK 170622	Chathams indigenous
Coriariaceae	<i>Coriaria arborea</i> R.Linds. var. <i>arborea</i>	tutu	kopī	AK 234255	NZ indigenous, Chats naturalised
Corynocarpaceae	† <i>Corynocarpus laevigatus</i> J.R.Forst. et G.Forst.			AK 296094	Exotic naturalised
Crassulaceae	* <i>Aeonium arboreum</i> (L.) Webb et Berthel.	pinwheel plant		AK 295645	Chathams indigenous
Crassulaceae	<i>Crassula kirkii</i> (Allan) A.P.Druce et D.R.Given			CHR 496844	Chathams indigenous
Crassulaceae	<i>Crassula moschatata</i> G.Forst.	shore stonewrop		CHR 594955	Exotic naturalised
Crassulaceae	* <i>Crassula multicava</i> Lem. subsp. <i>multicava</i>	fairy crassula		AK 291557	Exotic naturalised
Crassulaceae	* <i>Crassula ovata</i> (Mill.) Druce	Jade plant		AK 229937	Chathams indigenous
Crassulaceae	<i>Crassula ruamahanga</i> A.P.Druce				

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Crassulaceae	<i>Crassula sieberiana</i> (Schult. et Schult.f.) Druce			AK 300746	Chathams indigenous
Crassulaceae	<i>Crassula sinclairii</i> (Hook.f.) A.P.Druce et D.R.Given	shrubby stonecrop		AK 296075	Chathams indigenous
Crassulaceae	* <i>Sedum praeraltum</i> A.D.C.	forked sundew		CHR 594774	Exotic naturalised
Droseraceae	<i>Drosera binata</i> Labill.			AK 150419	Chathams indigenous
Ericaceae	<i>Androstoma empetrifolia</i> Hook.f.	Bog mingimingi		WEIT 35243	Chathams indigenous
Ericaceae	<i>Dracophyllum arboreum</i> Cockayne	tarahinaiu		AK 6994	Chathams endemic
Ericaceae	<i>Dracophyllum scoparium</i> Hook.f.	inaka		AK 6997	Chathams indigenous
Ericaceae	<i>Dracophyllum arboreum</i> Cockayne × <i>D. scoparium</i> Hook.f.	snowberry		AK 282282	Chathams indigenous
Ericaceae	<i>Gaultheria antipoda</i> G.Forst.	tauwiniwini		AK 296324	Chathams indigenous
Ericaceae	<i>Leptecophylla robusta</i> (Hook.f.) C.M.Weiller	pouterete		AK 232319	Chathams endemic
Ericaceae	<i>Leucopogon parviflorus</i> (Andrews) Lindl.	mingimingi		CHR 399144	Chathams indigenous
Ericaceae	<i>Pentachondra pumila</i> (J.R.Forst. et G.Forst.) R.Br.			AK 296093	Chathams indigenous
Euphorbiaceae	<i>Euphorbia glauca</i> G.Forst.	New Zealand shore spurge	waiūatua	CHR 288457	Chathams indigenous
Euphorbiaceae	* <i>Euphorbia helioscopia</i> L.	sun spurge		AK 295977	Exotic naturalised
Euphorbiaceae	* <i>Euphorbia lathyris</i> L.	caper spurge		CHR 602341	Exotic naturalised
Euphorbiaceae	* <i>Euphorbia peplus</i> L.	milkweed		AK 296016	Exotic naturalised
Euphorbiaceae	* <i>Ricinus communis</i> L.	castor oil plant		AK 296084	Exotic naturalised
Fabaceae	* <i>Acacia sophorae</i> R.Br.	coastal wattle		AK 303302	Exotic naturalised
Fabaceae	* <i>Cytisus scoparius</i> (L.) Link	broom		AK 295914	Exotic naturalised
Fabaceae	* <i>Lathyrus tingitanus</i> L.	Tangier pea		AK 295641	Exotic naturalised
Fabaceae	* <i>Lotus pedunculatus</i> Cav.	lotus		CHR 436492	Exotic naturalised
Fabaceae	* <i>Lotus suaveolens</i> Pers.	hairy lotus		CHR 511583	Exotic naturalised
Fabaceae	* <i>Lupinus polyphyllus</i> Lindl.	Russell lupin		CHR 594931	Exotic naturalised
Fabaceae	* <i>Medicago arabica</i> (L.) Huds.	spotted bur medic		CHR 96640	Exotic naturalised
Fabaceae	* <i>Medicago lupulina</i> L.	black medic		CHR 496720	Exotic naturalised
Fabaceae	* <i>Medicago nigra</i> (L.) Krock.	bur medic		CHR 90398	Exotic naturalised
Fabaceae	* <i>Medicago sativa</i> L.	lucerne		CHR 96585	Exotic naturalised
Fabaceae	* <i>Melilotus indicus</i> (L.) All.	King Island melilot		CHR 403178	Exotic naturalised
Fabaceae	* <i>Paraserianthes lophantha</i> (Willd.) I.C.Nielsen	brush wattle		CHR 594926	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Fabaceae	† <i>Sophora chathamica</i> Cockayne	kōwhai	AK 4973	CHR 604802	NZ indigenous, Chats naturalised
Fabaceae	† <i>Sophora microphylla</i>	kōwhai			
Fabaceae	* <i>Trifolium arvense</i> L.	harefoot trefoil	AK 296467	Exotic naturalised	
Fabaceae	* <i>Trifolium campestre</i> Schreb.	hop trefoil	AK 296469	Exotic naturalised	
Fabaceae	* <i>Trifolium cernuum</i> Brot.	drooping-flowered clover	CHR 118137	Exotic naturalised	
Fabaceae	* <i>Trifolium dubium</i> Sibth.	suckling clover	CHR 96605	Exotic naturalised	
Fabaceae	* <i>Trifolium fragiferum</i> L.	strawberry clover	CHR 96580	Exotic naturalised	
Fabaceae	* <i>Trifolium glomeratum</i> L.	clustered clover	CHR 96568	Exotic naturalised	
Fabaceae	* <i>Trifolium micranthum</i> Viv.	lesser suckling clover	CHR 436453	Exotic naturalised	
Fabaceae	* <i>Trifolium ornithopodioides</i> L.	trigonel	CHR 82040	Exotic naturalised	
Fabaceae	* <i>Trifolium pratense</i> L.	red clover	AK 231170	Exotic naturalised	
Fabaceae	* <i>Trifolium repens</i> L.	white clover	CHR 96599	Exotic naturalised	
Fabaceae	* <i>Trifolium resupinatum</i> L.	reversed clover	AK 298506	Exotic naturalised	
Fabaceae	* <i>Trifolium subterraneum</i> L.	subclover	CHR 96634	Exotic naturalised	
Fabaceae	* <i>Ulex europeus</i> L.	gorse	CHR 178709	Exotic naturalised	
Fabaceae	* <i>Vicia hirsuta</i> (L.) Gray	hairy vetch	CHR 96639	Exotic naturalised	
Fabaceae	* <i>Vicia sativa</i> L.	narrow-leaved vetch	AK 170666	Exotic naturalised	
Fabaceae	* <i>Vicia tetrasperma</i> (L.) Schreber	four-seeded vetch	AK 297553	Exotic naturalised	
Gentianaceae	* <i>Centaurium erythraea</i> Rafn. subsp. <i>erythraea</i>	centaury	AK 296106	Exotic naturalised	
Gentianaceae	* <i>Centaurium tenuiflorum</i> (Hoffm. et Link) Fritsch		AK 303484	Exotic naturalised	
Gentianaceae	<i>Gentianella chathamica</i> (Cheeseman) T.N.Ho et S.W.Liu	Chatham Islands gentian	AK 230422	Chathams endemic	
Geraniaceae	* <i>Erodium cicutarium</i> (L.) L'Hér. subsp. <i>cicutarium</i>	common storksbill	CHR 496859	Exotic naturalised	
Geraniaceae	* <i>Erodium moschatum</i> (L.) L'Hér.	musky storksbill	AK 296113	Exotic naturalised	
Geraniaceae	* <i>Erodium moschatum</i> (L.) L'Hér.	cut-leaved geranium	CHR 403100	Exotic naturalised	
Geraniaceae	* <i>Geranium dissectum</i> L.	Dove's foot cranesbill	AK 296019	Exotic naturalised	
Geraniaceae	* <i>Geranium gardneri</i> de Lange	turnip-rooted geranium	CHR 496833	Exotic naturalised	
Geraniaceae	* <i>Geranium maderense</i> Yeo	Chatham Islands	AK 229936	Exotic naturalised	
Geraniaceae	* <i>Geranium molle</i> L.	geranium	AK 4980	Chathams indigenous	
Geraniaceae	<i>Geranium solanderi</i> Carolin				
Geraniaceae	Greater herb Robert		AK 310438	Chathams endemic	

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Geraniaceae	* <i>Geranium yeoi</i> Aedo et Munoz Garm.	lemon-scented geranium	kopati	AK 295088	Exotic naturalised
Geraniaceae	* <i>Pelargonium crispum</i> (L.) L'Hér.			AK 300322	Exotic naturalised
Geraniaceae	<i>Pelargonium inodorum</i> Willd.			CHR 96652	Chathams indigenous
Geraniaceae	* <i>Pelargonium radens</i> H.E.Moore			CHR 496738	Exotic naturalised
Geraniaceae	* <i>Pelargonium ×asperum</i> Wild.			CHR 496849	Exotic naturalised
Geraniaceae	* <i>Pelargonium ×hortorum</i> L.H.Bailey	zonal pelargonium		AK 295773	Exotic naturalised
Goodeniaceae	<i>Selliera radicans</i> Cav.		remuremu	CHR 371572	Chathams indigenous
Grossulariaceae	* <i>Ribes uva-crispa</i> L.	gooseberry		CHR 594821	Exotic naturalised
Haloragaceae	<i>Gonocarpus aggregatus</i> (Buchanan) Orchard			CHR 197323	Chathams indigenous
Haloragaceae	<i>Gonocarpus micranthus</i> Thunb. subsp. <i>micranthus</i>			AK 295999	Chathams indigenous
Haloragaceae	<i>Haloragis erecta</i> (Murray) Oken subsp. <i>erecta</i>	toatoa		AK 251488	Chathams indigenous
Haloragaceae	<i>Myriophyllum pedunculatum</i> subsp. <i>novae-zelandiae</i> Orchard	milfoil		AK 230419	Chathams indigenous
Haloragaceae	<i>Myriophyllum propinquum</i> A.Cunn.	milfoil		AK 295646	Chathams indigenous
Haloragaceae	<i>Myriophyllum triphyllum</i> Orchard	milfoil		CHR 291244	Chathams indigenous
Haloragaceae	<i>Myriophyllum votschii</i> Schindl.	milfoil		AK 227694	Chathams indigenous
Haloragaceae	<i>Myriophyllum</i> aff. <i>triphyllum</i>	milfoil		AK 281809	Chathams indigenous
Hydrangeaceae	* <i>Hydrangea macrophylla</i> (Thunb.) Ser.	hydrangea		AK 296265	Exotic naturalised
Hypericaceae	* <i>Hypericum androsaemum</i> L.	tutsan		CHR 403262	Exotic naturalised
Lamiaceae	* <i>Ajuga reptans</i> L.	bugle		AK 295778	Exotic naturalised
Lamiaceae	* <i>Lamium galeobdolon</i> (L.) L. 'Variegatum'	aluminium weed		AK 300325	Exotic naturalised
Lamiaceae	* <i>Lamium hybridum</i> Vill.	cut-leaved dead nettle		CHR 604800	Exotic naturalised
Lamiaceae	* <i>Lavandula dentata</i> L.	French lavender		AK 296422	Exotic naturalised
Lamiaceae	* <i>Marrubium vulgare</i> L.	horehound		AK 149981	Exotic naturalised
Lamiaceae	* <i>Melissa officinalis</i> L.	lemon balm		CHR 602340	Exotic naturalised
Lamiaceae		native mint		AK 302032	Chathams indigenous
Lamiaceae		pennyroyal		AK 295643	Exotic naturalised
Lamiaceae	* <i>Mentha pulegium</i> L.	spearmint		CHR 417538	Exotic naturalised
Lamiaceae	* <i>Mentha suaveolens</i> Ehrh.	apple mint		AK 299993	Exotic naturalised
Lamiaceae	* <i>Mentha ×piperita</i> L. var. <i>piperita</i>	peppermint		AK 295926	Exotic naturalised
Lamiaceae	* <i>Prunella vulgaris</i> L.	self heal		AK 234699	Exotic naturalised
Lentibulariaceae	<i>Utricularia delicatula</i> Cheeseman	bladderwort		AK 230035	Chathams indigenous

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Linaceae	* <i>Linum bienne</i> Mill.	Australian flax		AK 238667	Exotic naturalised
Linaceae	<i>Linum monogynum</i> var. <i>chathamicum</i> Cockayne	Chatham Island linen flax	rauhua	AK 230459	Chathams endemic
Lythraceae	* <i>Lythrum hyssopifolium</i> L.	hyssop loosestrife		CHR 594852	Exotic naturalised
Malvaceae	† <i>Hoheria populnea</i> A.Cunn.	lacebark	houhere	AK 295802	NZ indigenous, Chats naturalised
Malvaceae	* <i>Malva dendromorpha</i> F.M.Ray	tree mallow		CHR 403413	Exotic naturalised
Malvaceae	* <i>Malva linnaei</i> M.F.Ray	Cretan mallow		CHR 468045	Exotic naturalised
Malvaceae	* <i>Malva neglecta</i> Wallr.	dwarf mallow		CHR 403418	Exotic naturalised
Malvaceae	* <i>Malva niceensis</i> All.	French mallow		AK 295642	Exotic naturalised
Malvaceae	* <i>Malva parviflora</i> L.	small-leaved mallow		AK 297197	Exotic naturalised
Malvaceae	* <i>Malva sylvestris</i> L.	large-leaved mallow		AK 295779	Exotic naturalised
Malvaceae	<i>Plagianthus divaricatus</i> J.R.Forst. et G.Forst.	marsh ribbonwood		CHR 288338	Chathams indigenous
Malvaceae	<i>Plagianthus regius</i> subsp. <i>chathamicus</i> (Cockayne) de Lange	Chatham Island ribbonwood		AK 5206	Chathams endemic
Malvaceae	<i>Plagianthus regius</i> subsp. <i>chathamicus</i> (Cockayne) de Lange × <i>P. divaricatus</i> J.R.Forst. et G.Forst.			AK 229928	Chathams indigenous
Montiaceae	<i>Montia fontana</i> L. subsp. <i>fontana</i>	blinks		CHR 496868	Chathams indigenous
Montiaceae	* <i>Montia fontana</i> subsp. <i>chondrosperma</i> (Fenzl) Walters	blinks		AK 300246	Exotic naturalised
Myrtaceae	<i>Leptospermum scoparium</i> J.R.Forst. et G.Forst.	tea tree	kahikātoa	AK 296165	Chathams indigenous
Myrtaceae	† <i>Leptospermum</i> aff. <i>scoparium</i> (a)	tea tree	kahikātoa	AK 295080	NZ indigenous, Chats naturalised
Myrtaceae	† <i>Metrosideros excelsa</i> Sol. ex Gaertn.	New Zealand Christmas tree	pohutukawa	AK 295799	NZ indigenous, Chats naturalised
Myrtaceae	* <i>Ugni molinae</i> Turcz.	Chilean guava		AK 227155	Exotic naturalised
Oleaceae	* <i>Fraxinus excelsior</i> L.	ash		CHR 604586	Exotic naturalised
Oleaceae	* <i>Jasminum officinale</i> L.	poet's jasmine		AK 299987	Exotic naturalised
Oleaceae	* <i>Ligustrum ovalifolium</i> Hassk.	Californian privet		AK 298509	Exotic naturalised
Onagraceae	<i>Epilobium alsinoides</i> A.Cunn.	willow herb		AK 5855	Chathams indigenous
Onagraceae	<i>Epilobium triplifolium</i> A.Cunn.	willow herb		WELT 40936	Chathams indigenous
Onagraceae	<i>Epilobium billardiereanum</i> (Ser.) DC.	willow herb		AK 230447	Chathams indigenous
Onagraceae	<i>Epilobium brunescens</i> (Cockayne) P.H.Raven et Engelhorn subsp. <i>brunescens</i>	willow herb		CHR 202938	Chathams indigenous

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Onagraceae	<i>Epilobium chionanthum</i> Hausskn.	willow herb		AK 150429	Chathams indigenous
Onagraceae	* <i>Epilobium ciliatum</i> Raf.	willow herb		AK 295777	Exotic naturalised
Onagraceae	<i>Epilobium cinereum</i> A.Rich.	willow herb		MEL 100311	Chathams indigenous
Onagraceae	<i>Epilobium insulare</i> Hausskn.	willow herb		AK 5722	Chathams indigenous
Onagraceae	<i>Epilobium komarovianum</i> H.Lév.	willow herb		AK 227695	Chathams indigenous
Onagraceae	<i>Epilobium microphyllum</i> A.Rich.	willow herb		AK 295952	Chathams indigenous
Onagraceae	<i>Epilobium nerterioides</i> A.Cunn.	willow herb		AK 150428	Chathams indigenous
Onagraceae	<i>Epilobium nummulariifolium</i> A.Cunn.	willow herb		CHR 202930	Chathams indigenous
Onagraceae	<i>Epilobium pallidiflorum</i> A.Cunn.	willow herb		CHR 202924	Chathams indigenous
Onagraceae	<i>Epilobium pedunculare</i> A.Cunn.	willow herb		AK 150433	Chathams indigenous
Onagraceae	<i>Epilobium pubens</i> A.Rich.	willow herb		AK 228073	Chathams indigenous
Onagraceae	<i>Epilobium rotundifolium</i> G.Forst.	willow herb		AK 170708	Chathams indigenous
Onagraceae	† <i>Fuchsia excorticata</i> (J.R.Forst. et G.Forst.) L.f.	tree fuchsia	kotukutuku	AK 227697	NZ indigenous, Chats naturalised
Onagraceae	* <i>Fuchsia magellanica</i> Lam. var. <i>magellanica</i>	fuchsia		CHR 594958	Exotic naturalised
Onagraceae	* <i>Fuchsia magellanica</i> var. <i>molinae</i> 'Espinosa'	fuchsia		CHR 595016	Exotic naturalised
Orobanchaceae	* <i>Orobanche minor</i> Sm.	broom rape		CHR 569363	Exotic naturalised
Orobanchaceae	* <i>Parentucellia viscosa</i> (L.) Carel	tar weed		AK 294947	Exotic naturalised
Oxalidaceae	* <i>Oxalis articulata</i> Savigny var. <i>articulata</i>	sourgrass		AK 172004	Exotic naturalised
Oxalidaceae	* <i>Oxalis corniculata</i> L. subsp. <i>corniculata</i>	oxalis		AK 296088	Exotic naturalised
Oxalidaceae	* <i>Oxalis exilis</i> A.Cunn.	creeping oxalis		CHR 158318	Chathams indigenous
Oxalidaceae	* <i>Oxalis incarnata</i> L.	lilac oxalis		CHR 496749	Exotic naturalised
Oxalidaceae	* <i>Oxalis latifolia</i> Kunth	fishtail oxalis		AK 296318	Exotic naturalised
Oxalidaceae	<i>Oxalis magellanica</i> G.Forst.			AK 296103	Chathams indigenous
Oxalidaceae	<i>Oxalis rubens</i> Haw.			AK 295905	Chathams indigenous
Oxalidaceae	<i>Oxalis thompsoniae</i> B.J.Conn. et P.G.Richard			AK 296184	Chathams indigenous
Passifloraceae	* <i>Passiflora tripartita</i> var. <i>mollissima</i> (Kunth) Holm-Niels. et Jørg.	banana passionfruit		AK 287687	Exotic naturalised
Phrymaceae	<i>Glossostigma elatinoides</i> Benth. ex Hook.f.			AK 297749	Chathams indigenous
Phrymaceae	* <i>Mimulus guttatus</i> DC.	monkey musk		AK 296138	Exotic naturalised
Phrymaceae	* <i>Mimulus moschatus</i> Lindl.	monkey musk		AK 298083	Exotic naturalised

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FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Pittosporaceae	† <i>Pittosporum crassifolium</i> Banks et Sol. ex A.Cunn.		karo	AK 295935	NZ indigenous, Chats naturalised
Plantaginaceae	* <i>Callitrichia heterophylla</i> Pursh	starwort		CHR 594807	Exotic naturalised
Plantaginaceae	<i>Callitrichia muelleri</i> Sond.	starwort		AK 230463	Chathams indigenous
Plantaginaceae	<i>Callitrichia petriei</i> subsp. <i>chathamensis</i> R.Mason	Chatham Island starwort		AK 227162	Chathams endemic
Plantaginaceae	* <i>Callitriches stagnalis</i> Scop.	starwort		AK 234687	Exotic naturalised
Plantaginaceae	<i>Gratiola sexdentata</i> R.Cunn. ex A.Cunn.	gratiola		AK 296074	Chathams indigenous
Plantaginaceae	<i>Hebe barkeri</i> (Cockayne) Cockayne	Barker's koromiko		WELT 16860	Chathams endemic
Plantaginaceae	<i>Hebe chathamica</i> (Buchanan) Cockayne et Allan	Chatham Islands koromiko		AK 7823	Chathams endemic
Plantaginaceae	<i>Hebe dieffenbachii</i> (Benth.) Cockayne et Allan	Dieffenbach's koromiko		WELT 35210	Chathams endemic
Plantaginaceae	† <i>Hebe elliptica</i> (G.Forst.) Pennell	hybrid hebe		AK 295936	NZ indigenous, Chats naturalised
Plantaginaceae	* <i>Hebe franciscana</i> (Eastw.) Souster			CHR 604590	Exotic naturalised
Plantaginaceae	<i>Hebe barkeri</i> (Cockayne) Cockayne × <i>H. dieffenbachii</i> (Benth.) Cockayne et Allan			AK 295988	Chathams endemic
Plantaginaceae	<i>Hebe chathamica</i> (Buchanan) Cockayne et Allan × <i>H. dieffenbachii</i> (Benth.) Cockayne et Allan	koromiko		CHR 399058	Chathams endemic
Plantaginaceae	* <i>Kickxia elatine</i> (L.) Dumort.	fluellen		AK 295639	Exotic naturalised
Plantaginaceae	<i>Limosella lineata</i> Glück	mudwort		AK 296154	Chathams indigenous
Plantaginaceae	* <i>Plantago australis</i> Lam.	swamp plantain		AK 299127	Exotic naturalised
Plantaginaceae	* <i>Plantago coronopus</i> L.	buck's horn plantain		CHR 436473	Exotic naturalised
Plantaginaceae	* <i>Plantago lanceolata</i> L.	narrow-leaved plantain		AK 170648	Exotic naturalised
Plantaginaceae	* <i>Plantago major</i> L.	broad-leaved plantain		CHR 436504	Exotic naturalised
Plantaginaceae	<i>Plantago raoulii</i> Decne.	tūkōrehu		AK 231011	Chathams indigenous
Plantaginaceae	<i>Plantago triandra</i> Berggr.	starweed		AK 296001	Chathams indigenous
Plantaginaceae	* <i>Veronica arvensis</i> L.	field speedwell		CHR 468034	Exotic naturalised
Plantaginaceae	* <i>Veronica persica</i> Poir.	scrambling speedwell		CHR 49855	Exotic naturalised
Plantaginaceae	<i>Veronica plebeia</i> R.Br.	native speedwell		AK 296171	Chathams indigenous
Plantaginaceae	* <i>Veronica serpyllifolia</i> L.	turf speedwell		AK 170654	Exotic naturalised
Polygonaceae	<i>Muehlenbeckia australis</i> (G.Forst.) Meisn.	pōhuehue		AK 229929	Chathams indigenous
Polygonaceae	<i>Persicaria decipiens</i> (R.Br.) K.L.Wilson	water pepper		CHR 602344	Chathams indigenous

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Polygonaceae	* <i>Persicaria maculosa</i> Gray	water pepper		AK 296177	Exotic naturalised
Polygonaceae	* <i>Polygonum arenastrum</i> Bureau	small-leaved wireweed		AK 295782	Exotic naturalised
Polygonaceae	* <i>Polygonum aviculare</i> L.	wireweed		AK 299032	Exotic naturalised
Polygonaceae	* <i>Rumex acetosella</i> L.	sheep's sorrel		AK 170676	Exotic naturalised
Polygonaceae	* <i>Rumex brownii</i> Campd.	hooked dock		AK 298667	Exotic naturalised
Polygonaceae	* <i>Rumex conglomeratus</i> Murray	clustered dock		CHR 403385	Exotic naturalised
Polygonaceae	* <i>Rumex crispus</i> L.	curled dock		CHR 436459	Exotic naturalised
Polygonaceae	<i>Rumex flexuosus</i> Spreng.	Maori dock	rūna	AK 295806	Chathams indigenous
Polygonaceae	<i>Rumex neglectus</i> Kirk	shore dock	rūna	AK 230446	Chathams indigenous
Polygonaceae	* <i>Rumex obtusifolius</i> L.	broad-leaved dock		CHR 436613	Exotic naturalised
Polygonaceae	* <i>Rumex pulcher</i> L.	fiddle dock		CHR 96684	Exotic naturalised
Primulaceae	* <i>Anagallis arvensis</i> L. subsp. <i>arvensis</i> var. <i>arvensis</i>	scarlet pimpernel		AK 296076	Exotic naturalised
Primulaceae	<i>Myrsine chathamica</i> F.Muell.	Chatham Island matipo	matipo	AK 105671	Chathams indigenous
Primulaceae	<i>Myrsine coxii</i> Cockayne	cox's matipo	matipo	AK 105670	Chathams endemic
Primulaceae	<i>Myrsine chathamica</i> F.Muell. × <i>M. coxii</i> Cockayne			AK 229134	Chathams indigenous
Primulaceae	* <i>Primula vulgaris</i> Huds.	primrose		CHR 585631	Exotic naturalised
Primulaceae	<i>Samolus repens</i> (J.R.Forst. et G.Forst) Pers. var. <i>repens</i>	marsh primrose		AK 150031	Chathams indigenous
Rhamnaceae	<i>Discaria toumatou</i> Raoul	matagouri	tūmatakuri	CHR 288385	Chathams indigenous
Rosaceae	<i>Acaena anserinifolia</i> (J.R.Forst. et G.Forst.) J.B.Armstr.	bidibidi	piripiri	CHR 496842	Chathams indigenous
Rosaceae	<i>Acaena novae-zelandiae</i> Kirk	bidibidi	piripiri	AK 170682	Chathams indigenous
Rosaceae	<i>Acaena pallida</i> (Kirk) Allan	bidibidi	piripiri	AK 228472	Chathams indigenous
Rosaceae	<i>Acaena novae-zelandiae</i> Kirk × <i>A. pallida</i> (Kirk) Allan			AK 227733	Chathams indigenous
Rosaceae	* <i>Cotoneaster glaucophyllus</i> Franch.	cotoneaster		AK 295900	Exotic naturalised
Rosaceae	* <i>Malus × domestica</i> Borkh.	apple		AK 295926	Exotic naturalised
Rosaceae	* <i>Potentilla anserinoides</i> Raoul	silverweed	kōwhai	AK 4770	Chathams indigenous
Rosaceae	* <i>Potentilla reptans</i> L.	creeping cinquefoil		AK 295973	Exotic naturalised
Rosaceae	* <i>Prunus cerasifera</i> Ehrh.	plum		CHR 604592	Exotic naturalised
Rosaceae	* <i>Prunus serrulata</i> Lindl.	cherry plum		AK 296875	Exotic naturalised
Rosaceae	* <i>Prunus ×domestica</i> L.	Japanese hill cherry		AK 295922	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Rosaceae	* <i>Rosa rubiginosa</i> L.	briar rose		AK 112917	Exotic naturalised
Rosaceae	* <i>Rosa wichuriana</i> 'American Pillar'	rose		AK 295793	Exotic naturalised
Rosaceae	* <i>Rosa wichuriana</i> 'Ballerina'	rose		AK 297793	Exotic naturalised
Rosaceae	* <i>Rosa wichuriana</i> 'Hiawatha'	rose		AK 298805	Exotic naturalised
Rosaceae	* <i>Rubus polyanthemus</i> Lindeb.	blackberry		AK 296258	Exotic naturalised
Rubiaceae	<i>Coprosma acerosa</i> A.Cunn.	sand coprosma	tātarahēke	AK 227207	Chathams indigenous
Rubiaceae	<i>Coprosma</i> aff. <i>propinqua</i> var. <i>martini</i>			AK 281352	Chathams endemic
Rubiaceae	<i>Coprosma cathartica</i> Cockayne		karamū	AK 227158	Chathams endemic
Rubiaceae	<i>Coprosma propinqua</i> A.Cunn. var. <i>propinqua</i>		mingimingi	AK 150469	Chathams indigenous
Rubiaceae	<i>Coprosma propinqua</i> var. <i>martini</i> W.R.B.Oliv.		mingimingi	AK 227381	Chathams endemic
Rubiaceae	† <i>Coprosma repens</i> A.Rich.	mirror bush	taupata	AK 229938	NZ indigenous, Chats naturalised
Rubiaceae	† <i>Coprosma robusta</i> Raoul	karamū		AK 227204	NZ indigenous, Chats naturalised
Rubiaceae	<i>Coprosma cathartica</i> Cockayne × † <i>C. robusta</i> Raoul			AK 296455	Chathams indigenous
Rubiaceae	<i>Coprosma cathartica</i> Cockayne × <i>C. propinqua</i> var. <i>martini</i>			AK 230430	Chathams indigenous
Rubiaceae	† <i>Coprosma robusta</i> Raoul × <i>C. propinqua</i> var. <i>martini</i>			AK 296449	Chathams indigenous
Rubiaceae	W.R.B.Oliv.				
Rubiaceae	*	cleavers		CHR 95687	Exotic naturalised
Rubiaceae	*	marsh bedstraw		AK 297963	Exotic naturalised
Rubiaceae		māwe		AK 296139	Chathams indigenous
Rubiaceae				AK 296144	Chathams indigenous
Rubiaceae				CHR 595024	Exotic naturalised
Rubiaceae				CHR 97746	Chathams indigenous
Rubiaceae				AK 228197	Chathams indigenous
Rubiaceae				AK 295784	Exotic naturalised
Rubiaceae				AK 295081	Exotic naturalised
Salicaceae	*	fen bedstraw		CHR 594862	Exotic naturalised
Rubiaceae	*	nērēra		AK 295780	Exotic naturalised
Rubiaceae	*	field madder		AK 295913	Exotic naturalised
Rubiaceae	*	kemp willow		AK 295917	Exotic naturalised
Salicaceae	*	goat willow			
Salicaceae	*	grey willow			
Salicaceae	*	crack willow			
Salicaceae	*	willow			

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Sapindaceae	* <i>Acer pseudoplatanus</i> L.	sycamore		CHR 403417	Exotic naturalised
Sapindaceae	† <i>Dodonaea viscosa</i> Jacq.	sticky hop-bush	akeake	AK 5126	NZ indigenous, Chats naturalised
Saxifragaceae	* <i>Bergenia cordifolia</i> Sternb.	bergenia		CHR 594741	Exotic naturalised
Saxifragaceae	* <i>Saxifraga stolonifera</i> Meerb.	mother of thousands		CHR 604595	Exotic naturalised
Scrophulariaceae	* <i>Antirrhinum majus</i> L.	snapdragon		AK 300004	Exotic naturalised
Scrophulariaceae	* <i>Buddleja davidii</i> Franch.	buddleia		CHR 594929	Exotic naturalised
Scrophulariaceae	† <i>Myoporum laetum</i> G.Forst.	ngao		AK 170669	NZ indigenous, Chats naturalised
Scrophulariaceae		ngao		CHR 505221	Chathams endemic
Sorophulariaceae				CHR 96650	Exotic naturalised
Solanaceae	* <i>Brugmansia sanguinea</i> (Ruiz et Pav.) D.Don	boxthorn		AK 291564	Exotic naturalised
Solanaceae	* <i>Lycium ferocissimum</i> Miers	apple of Peru		CHR 178734	Exotic naturalised
Solanaceae	* <i>Nicandra physalodes</i> (L.) Gaertn.	cape gooseberry		AK 295640	Exotic naturalised
Solanaceae	* <i>Physalis peruviana</i> L.	bulli bulli		CHR 436473	Exotic naturalised
Solanaceae	* <i>Solanum aviculare</i> G.Forst. var. <i>aviculare</i>	velvet nightshade		CHR 436598	Chathams indigenous
Solanaceae	* <i>Solanum chenopodioides</i> Lam.	bulli bulli		CHR 496835	Exotic naturalised
Solanaceae	* <i>Solanum laciniatum</i> Aiton	tomato		AK 227163	Chathams indigenous
Solanaceae	* <i>Solanum lycopersicum</i> L.	black nightshade		AK 234157	Exotic naturalised
Solanaceae	* <i>Solanum nigrum</i> L.	nightshade		AK 296340	Chathams indigenous
Solanaceae	* <i>Solanum nodiflorum</i> Jacq.	potato		AK 295941	Exotic naturalised
Solanaceae	* <i>Solanum tuberosum</i> L.	sand daphne		CHR 112915	Chathams indigenous
Thymelaeaceae		autu taranga		AK 298511	Exotic naturalised
Tropaeolaceae	* <i>Tropaeolum majus</i> L.	nasturtium		AK 296314	Exotic naturalised
Tropaeolaceae	* <i>Tropaeolum speciosum</i> Poepp. et Endl.	Chilean flame creeper		AK 230461	Chathams indigenous
Urticaceae		australina		AK 227205	Chathams indigenous
Urticaceae	* <i>Australina pusilla</i> Gaudich.	pellitory		AK 300307	Exotic naturalised
Urticaceae	* <i>Parietaria debilis</i> G.Forst.	pellitory of the wall		AK 315859	Exotic naturalised
Urticaceae	* <i>Parietaria judaica</i> L.	Baby's tears		AK 3781	Chathams indigenous
Urticaceae	* <i>Soleirolia soleirolii</i> (Reg.) Dandy	southern nettle		CHR 178756	Exotic naturalised
Urticaceae	* <i>Urtica urens</i> L.	small nettle		AK 11410	Chathams endemic
Violaceae		Chatham Island mahoe	mahoe		

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

FAMILY	TAXON	COMMON NAME	MAORI NAME	VOUCHER	INDIGENOUS STATUS
Violaceae	<i>Viola cunninghamii</i> Hook.f.	mountain violet		CANU 19827	Chathams indigenous
Violaceae	<i>Viola hyallii</i> Hook.f.	native violet	hāka	AK 299666	Chathams indigenous
Violaceae	* <i>Viola odorata</i> L.	violet		CHR 604799	Exotic naturalised
Violaceae	* <i>Viola riviniana</i> Rchb.	dog violet		CHR 496286	Exotic naturalised

* = Exotic naturalised; † = NZ indigenous, Chathams naturalised.

Appendix 2

Rejected taxa

The following 50 taxa have been recorded from the Chatham Islands but are not accepted in this publication because we have not seen substantiating voucher specimens.

- **Acaena agnipila* Gand. (Northcroft 1975)
- A. profundeincisa* (Bitter) B.H.Macmill. (Jane 1997)
- Agrostis magellanica* Lam. (Godley 1989)
- **Amaranthus retroflexus* L. (Northcroft 1975)
- **Arctium* L. sp. (Mueller 1864)
- Avicennia marina* subsp. *australasica* (Walp.) J.Everett (Mueller 1864)
- Brachyscome sinclairii* Hook.f. (Buchanan 1875)
- Carex geminata* Schkuhr (Hamlin 1954)
- **Centaurea calcitrapa* L. (Northcroft 1975)
- **Convolvulus arvensis* L. (Northcroft 1975; Webb et al. 1988)
- Coprosma foetidissima* J.R.Forst. et G.Forst. (Kirk 1899, Richards 1952)
- Earina autumnalis* (G.Forst.) Hook.f. (Cockayne 1902)
- **Echium vulgaris* L. (Northcroft 1975)
- Einadia allanii* (Aellen) Paul G. Wilson (Buchanan 1875; Richards 1952)
- Empodium minus* (Hook.f.) L.A.S.Johnson et D.F.Cutler (Druce & Kelly 1973)
- Epilobium confertifolium* Hook.f. (Buchanan 1875)
- **Eschscholzia californica* Cham. (Northcroft 1975)
- **Fragaria vesca* L. (Mueller 1864)
- Glossostigma diandrum* (L.) Kuntze (de Lange et al. 1999a)
- Isolepis fluitans* (L.) R.Br. (Jane 1997)
- Juncus novae-zelandiae* Hook.f. (Buchanan 1875)
- **Lamium purpureum* L. (Northcroft 1975)
- Lepidium draba* L. (Northcroft 1975)
- Leptinella lanata* Hook.f. (Buchanan 1875)
- **Linum catharticum* L. (Northcroft 1975)
- **L. usitatissimum* L. (Northcroft 1975)
- Luzula banksiana* var. *migrata* (Buchenau) Edgar (Cheeseman 1925)
- L. crinita* Hook.f. (Godley 1989)
- Lycopodium deuterodensum* Herter (Buchanan 1875; Cheeseman 1925; Richards 1952)
- Melicytus ramiflorus* J.R.Forst. et G.Forst. (Richards 1952)
- **Mentha ×piperita* var. *citrata* (Ehrh.) Briq. (Northcroft 1975)
- Microseris scapigera* (Sol. ex A.Cunn.) Sch.Bip. (Druce & Kelly 1973)
- Poa anceps* (Jane 1997)
- P. breviglumis* Hook.f. (Buchanan 1875, Godley 1989)
- P. foliosa* (Hook.f.) Hook.f. (Buchanan 1875)
- P. novae-zelandiae* Hack. (Buchanan 1875)
- Polystichum cystostegium* (Hook.f.) J.B.Armstr. (Crookes 1963)
- Pomaderris apetala* Labill. (Hector 1878)
- **Portulaca oleracea* L. (Northcroft 1975)
- Ranunculus multiscapus* Hook.f. (Jane 1997)
- **Sedum acre* L. (Northcroft 1975)
- Senecio quadridentatus* Labill. (de Lange et al. 1999a)
- **Trifolium hybridum* L. (Webb et al. 1988)
- **T. incarnatum* L. (Webb et al. 1988)
- **T. medium* L. (Northcroft 1975)
- Uncinia caespitosa* Boott (Cheeseman 1906)
- U. clavata* (Kük.) Hamlin (Jane 1997)
- U. ferruginea* Boott (Jane 1997)
- **Valerianella locusta* (L.) Laterr. (Northcroft 1975)
- **Vittadinia triloba* (Gaudich.) DC. (Northcroft 1975)

Appendix 3

Misapplied names, synonyms and misidentifications

The following 28 taxa are names that have been incorrectly applied to plants that are known to be on the Chatham Islands. The most probable identity for these names is provided following the literature citation in brackets, e.g., *Carex forsteri* Wahlenb (Buchanan 1875; Cockayne 1902, referred to the Chatham Islands endemic *C. ventosa* C.B.Clarke).

***Arundo conspicua* G.Forst.** (Buchanan 1875, Cockayne 1902, and Cheeseman 1925; referred to the Chatham Islands endemic *Austroderia turbaria* Connor)

***Aciphylla lyallii* Hook.f.** and ***A. monroi* Hook.f.** (Buchanan 1875; referred to the Chatham Islands endemic *A. traversii*)

***Alopecurus myosuroides* Huds.** (Northcroft 1975; referred to *Alopecurus geniculatus* L.)

***Astelia cunninghamii* Hook.f.** (Buchanan 1875; referred to the Chatham Islands endemic *A. chathamica* L.B.Moore)

***Astelia grandis* Hook.f. ex Kirk** (Buchanan 1875; referred to the Chatham Islands endemic *A. chathamica* L.B.Moore)

***Carex forsteri* Wahlenb.** (Buchanan 1875 and Cockayne 1902; referred to the Chatham Islands endemic *C. ventosa* Petrie)

***Carex lambertiana* Boott** (Buchanan 1875; referred to the Chatham Islands endemic *C. chathamica* C.B.Clarke or possibly, *C. flagellifera* Colenso)

***Colobanthus crassifolius* Hook.f.** (Richards 1952; referred to *C. muscoides* Hook.f.)

***Coprosma baueri* Endl.** (Buchanan 1875; referred to the Chatham Islands endemic *Coprosma chathamica* Cockayne or, possibly, the first literature record of *Coprosma repens* naturalising on the islands)

***Corokia buddleioides* A.Cunn.** (Buchanan 1875; referred to the Chatham Islands endemic *C. macrocarpa* Kirk)

***Dicksonia antarctica* Hook.f.** (Cockayne 1902; referred to *D. fibrosa* Colenso)

***Dracophyllum rosmarinifolium* (G.Forst.) R.Br.** (Buchanan 1875; referred to *D. scoparium* Hook.f.)

***Geranium chathamicus* Given nom. nud.** (Given 1996; referred to the Chatham Islands endemic *G. traversii* Hook.f.)

***Veronica salicifolia* G.Forst.** (Buchanan 1875; referred to one of the Chatham Islands endemic *hebes*, e.g., *Hebe barkeri* (Cockayne) Cockayne, *H. chathamica* (Buchanan) Cockayne et Allan, *H. dieffenbachii* (Benth.) Cockayne et Allan)

***Hymenophyllum javanicum* Spreng.** (Buchanan 1875; referred to *H. flexuosum* A.Cunn.)

***Libertia ixiooides* (G.Forst.) Spreng.** (Buchanan 1875, Cockayne 1902, and Cheeseman 1925; referred to *L. peregrinans* Cockayne et Allan)

Luzula rufa* Edgar var. *rufa (Edgar 1966)—this wood rush was accidentally recorded for the Chatham Islands (E. Edgar pers comm. 1999)

***Myrsine nummularia* Hook.f.** (Buchanan 1875; referred to the Chatham Islands endemic *M. coxii* Cockayne)

***Olearia angustifolia* Hook.f. var.** (Buchanan 1875, referred to the Chatham Islands endemic *O. chathamica* Kirk)

***Ophioglossum lusitanicum* L.** and ***O. vulgatum* L.** (see Allan 1961, Crookes 1963, and also Buchanan (1875) where *O. vulgatum* is mentioned as *O. vulgatum* var. β . *costatum* (R.Br.) Hook.f.)—these records are based on a mixed herbarium sheet which includes both

Chatham Island specimens of *O. petiolatum* Hook.f. and foreign *Ophioglossum* specimens (P. J. Brownsey *pers. comm.*).

Panax crassifolia Decne et Planch. (Buchanan 1875, referred to the Chatham Islands endemic *Pseudopanax chathamica* Kirk)

Pterostylis australis Hook.f. (Hatch 1949, referred to the Chatham Islands endemic *P. silvicolatrix* (F.Muell.) Molloy, D.L.Jones et M.A.Clem.)

Rumex acetosa L. (Northcroft 1975, referred to *R. acetosella* L.)

Schoenoplectus triquetus (L.) Palla (Buchanan 1875, referred to *S. pungens* (Vahl) Palla)

Sophora tetraptera var. grandiflora Hook.f. (Buchanan 1875; referred to *S. chathamica* Cockayne)

Stellaria decipiens Hook.f. (Richards 1952; referred to *S. parviflora* Hook.f.)

Uncinia rupestris Raoul (Hamlin 1954, Druce & Kelly 1973, and de Lange et al 1999a, referred to *U. angustifolia* Hamlin).

Utricularia dichotoma Labill. (Cockayne 1902; referred to *U. delicatula* see Reutz & Fineran 1999).