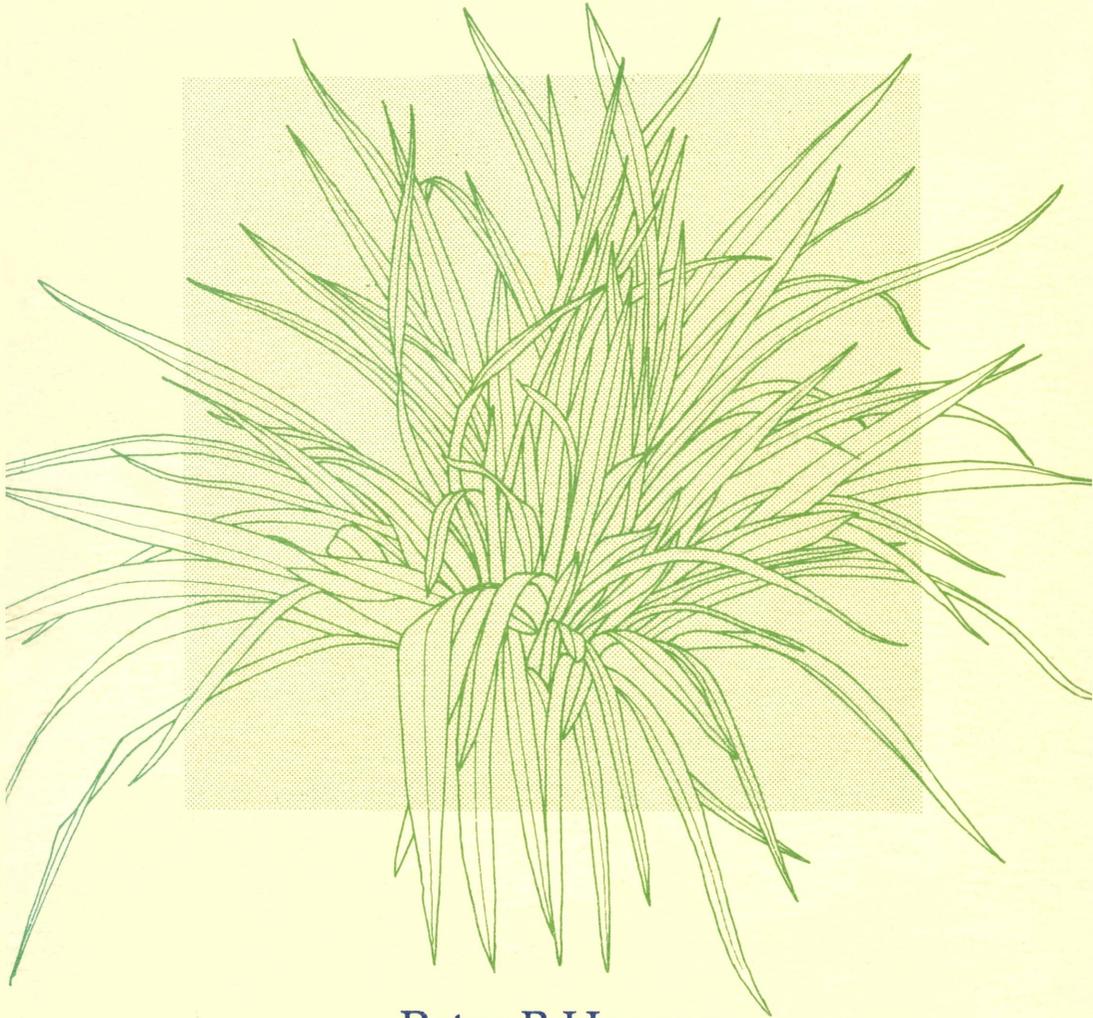


Checklist of *Phormium* Cultivars



Peter B Heenan

Royal New Zealand Institute of Horticulture (Inc.)

Checklist of

Phormium **Cultivars**

**(Prepared for the Nomenclature Committee
of the Royal New Zealand Institute
of Horticulture [Inc.]**

Peter B Heenan
Botany Institute
DSIR Land Resources
Private Bag, Christchurch

May 1991

**Published by the Royal New Zealand Institute
of Horticulture (Inc.), P.O. Box 12, Lincoln
University, Canterbury, New Zealand**

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CATALOGUING IN PUBLICATION

HEENAN, Peter B.

Checklist of *Phormium* cultivars / Peter B. Heenan ; prepared for the Nomenclature Committee of the Royal New Zealand Institute of Horticulture (Inc.). - Lincoln, N.Z. : Royal New Zealand Institute of Horticulture, 1991.
ISBN 0-9597756-1-7.

I. Title. II. Royal New Zealand Institute of Horticulture. III. Royal New Zealand Institute of Horticulture. Nomenclature Committee.

UDC 633.526.41:631.526.32

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ACKNOWLEDGEMENTS

I am particularly indebted to Mark Davis, Christchurch Botanic Garden; Jack Hobbs, Auckland Botanic Garden; Margaret Jones, New Zealand Flax Hybridisers; Lawrie Metcalf, Invercargill City Council; and Sue Scheele, DSIR Land Resources who freely shared their information and knowledge on *Phormium* cultivars. Without their co-operation and assistance the compilation of this Checklist would have been very difficult. Dr Phil Garnock-Jones and Bill Sykes gave invaluable advice on nomenclatural problems, particularly those concerning botanical names. To those other people, too numerous to mention, who provided information or assisted in other ways, thank you also.

I thank Bryony MacMillan, Phil Garnock-Jones, Colin Webb and Bill Sykes of DSIR Land Resources and Lawrie Metcalf of RNZIH Nomenclature Committee for their comments and criticism of the draft manuscript, Sabrina Malcolm and Nigel Mahoney of DSIR Crop Illustrations section for the cover design, Bruce Muschamp DSIR Physical Sciences Computer Unit for assistance in formatting the manuscript for publication and the DSIR Crop Word Processing Unit for the typing of the manuscript. The whakariki, photographed on the back cover, is a traditional weaving pattern and belongs to Dr Murray Parsons.

INTRODUCTION

At the 14th International Horticultural Congress held in 1955, New Zealand was nominated as the International Registration Authority for cultivars of the genera *Leptospermum* and *Hebe*. In 1958 the Royal New Zealand Institute of Horticulture (RNZIH) was confirmed as the International Registrar for those two genera. Subsequently the RNZIH has been appointed the International Registration Authority for *Coprosma*, *Pittosporum* and *Phormium*.

The Checklist presented here is the first on *Phormium* cultivars to be published by the RNZIH. At appropriate intervals as further information comes to hand supplementary lists will be published. The author would therefore be pleased to receive any comments and additional information to that presented here. The rules and regulations established to control and guide the nomenclature of cultivars are found as Articles, Notes and Recommendations in the International Code of Nomenclature for Cultivated Plants (Brickell et al. 1980) (ICNCP). The ICNCP has been adopted and followed in this treatment of *Phormium* cultivars.

The genus *Phormium* consists of two species. The first to be described was *Phormium tenax* J.R. et G. Forst.; this is widespread in New Zealand and also occurs on Norfolk Island. The second species is *Phormium cookianum* Le Jolis which comprises two subspecies. These are *Phormium cookianum* Le Jolis subsp. *cookianum* which is the southern-mountain form and *Phormium cookianum* subsp. *hookeri* (Gunn et Hook. f.) Wardle which is the northern-lowland form.

The vernacular names used in New Zealand for *Phormium tenax* include the Maori names harakeke and whararahi and the English name swamp flax. For the two *Phormium cookianum* subspecies the Maori name is wharariki while the English name most widely used is mountain flax. The English name flax is often applied to plants of either species.

Named cultivars of flax have long been known in cultivation, the first selections being made by the Maori. The plants selected and named by them were chosen for their particular fibre quality and strength; the Maori system for the classification of flax cultivars was founded on the strength and quality of the fibre. This fibre was used for clothing, matting, containers and cordage. By comparison, modern cultivars selected for ornamental horticulture since about the 1860's, are chosen for their distinctive form and leaf colouring. The Maori also recognised the ornamental qualities of flax as they grew three variegated varieties. Two of these had very poor quality fibre that would have been unusable for conventional weaving purposes so these plants can only have been grown for their ornamental value.

The cultivar names applied by the Maori not only referred to cultivated plants but also to selected plants found growing in the wild. Often several Maori cultivars could be found in a single wild population at one locality. Because selected plants at any one locality had similar fibre quality to different plants at another locality they were given the same name. Cultivars with good quality fibre which could be scraped out with the nail only, were given the collective name Tihore. Those with weak fibre which had to be scraped out with a shell were collectively referred to as Haro. These Maori names are acceptable as group names for the two different fibre strengths of flax (ICNCP Art.26).

Because the Maori had distinct tribes and dialects they tended to name cultivars in isolation from other tribes. This often resulted in two different tribes giving two separate names to the same clone. This is illustrated by an edible harakeke variety known by the Taupo Maori as 'Aroro-wharawhara' but called by the Wanganui Maori 'Kopaki-paki-ika'. This plant was said to have been taken to Wanganui from Taupo (N.Z. Dept. Ag. Ann. Rep. 1908). Under the ICNCP the earliest name is accepted as the legitimate name, this is 'Aroro-wharawhara'. Also, the different tribal dialects often resulted in slight variations in spelling. Further adding to these problems is the interpretation of spelling and pronunciation of Maori names by early European writers. In many cases the variation in spelling of Maori flax cultivar names can be attributed to a poor understanding and knowledge of the Maori language by the European writers. Today, because many of the plants to which the names refer are no longer in cultivation, it is difficult to clarify these naming problems. Thus, many Maori cultivar names are now only of historical importance. For the purposes of this Checklist the earliest publication for a Maori name is taken as being the correct spelling. Nevertheless, it is acknowledged here that the different tribal dialects often resulted in different spellings for the same plant.

From the above discussion on Maori flax cultivars, it is evident that they, like their modern ornamental counterpart, have nomenclature problems

including name priority, synonymy and orthography. It was Hector (1872) who noted that many Maori flax cultivars were difficult to tell apart. He wrote "fifty five different names as applied to the *Phormium* plant by the . . . [Maori are listed] . . . but it is doubtful if more than twenty marked varieties can be distinguished". The Checklist presented here includes over 200 names applied by the Maori; for these names, Hector's (1872) statement is as true today as it was when it was made. In fact, today the situation is further compounded because many of the plants are not in cultivation and a comparison of living material is not possible. Also, the original descriptions are often inadequate to tell plants apart. Despite these problems the information presented here does serve as a comprehensive bibliography of Maori harakeke and wharariki cultivar names. This list is therefore submitted to promote uniformity, accuracy, and permanence in the naming of *Phormium* cultivars now in cultivation and also those of historical importance.

In the preparation of this Checklist three significant problem areas were identified regarding the identification of flax cultivars. Firstly, in recent years too many selections of ornamental flax are being produced and marketed without having validly published names, often with inadequate descriptions, and with little or no information on their origin and the originator. If this information were more readily provided by those releasing new cultivars the quality and clarity of flax cultivar identification and nomenclature would be of a higher standard and those problems that are encountered could more easily and more confidently be corrected. The second problem is the diversity of leaf color and growth form that one particular cultivar will show when grown under a number of different situations and localities. *Phormium*, when grown as a garden plant, responds to the variability of soils, light intensity, moisture availability and wind exposure by producing growth and coloring that the conditions dictate. Thus, when plants of one particular cultivar are grown over a range of environmental conditions they can often look so dissimilar that they could easily be regarded as distinct cultivars. Thirdly, with age the plant can change its appearance. For example, a newly divided and strongly growing fan, originally taken from an older, an unhealthy or a densely fanned plant, will have leaf characters that appear quite different from the parent plant. These three problems, independently and occasionally collectively, have made the identification and authentication of some of the cultivar names, and the plant to which that name refers very difficult. It is hoped that where these problems have been identified, the correct interpretation of the available information has been made.

In this treatment of *Phormium* cultivars four lists are presented. The first alphabetical list includes all known valid, invalid, legitimate and illegitimate Maori and ornamental cultivar names and indicates any synonymy. The second bibliographic list, again in alphabetical order, gives

the validly published and legitimate Maori and ornamental cultivar names together with the earliest known published reference to that cultivar, any synonyms and if available the principal characters generally used to define or distinguish that cultivar. The third list includes those cultivar names that are invalid or illegitimate under the ICNCP. These names are invalid or illegitimate for several reasons: they can be a name of horticultural useage (Hort.) that is not validly published (ICNCP, Art. 31); they can be names without a description published after 1 January 1959 (ICNCP, Art. 39); they can be names published in Latin form after 1 January 1959 (ICNCP, Art. 27); and there is one example of a cultivar name being the vernacular name of another species (ICNCP Art. 31). Where a name is invalid or illegitimate this is indicated in the Alphabetical List of *Phormium* Cultivars; that name is then listed under Invalid and Illegitimate Cultivar Names in *Phormium*. The forth list includes those botanical names that have been published in *Phormium* J.R. et G. Forst. Some of these names have been published in conformity with the International Code of Botanical Nomenclature while others are names that have appeared in horticultural publications but for which it is difficult to confirm the status of the specific epithet. Botanical names in Latin form are listed only in the section titled Botanical Names Published in *Phormium* J.R. et G. Forst. All names belong to *Phormium* J.R. et G. Forst. except where otherwise stated.

Cultivar names that refer to selections of a particular species are preceded by that specific name and interspecific hybrids are listed only as the cultivar name. The collective epithet *Phormium* Rainbow Hybrids has been given to all variegated *Phormium* cultivars that are derived from crossing *Phormium cookianum* and *Phormium tenax*; this epithet is not applied to individual entries in this Checklist. The abbreviation "Hort." is given after names for which a publication has not been located; if plant material of these cultivars is available a brief description is given, thereby validating that name. Names that were published without a description are nomina nuda (nomen nudum in text); if published before 1 January 1959 these are accepted as being valid, however, those published on or after that date are invalid as they require a description or reference to a previously published description (ICNCP Art. 39). Where a description is here added to a name that is a nomen nudum, that name is henceforth validated. For these descriptions the Royal Horticultural Society Colour Chart has been used for colour identification; this is indicated by the numerical and alphabetical letters being enclosed in parenthesis.

ALPHABETICAL LIST OF *PHORMIUM* CULTIVARS

Cultivars that are not preceded by a species name are derived from hybrids between *Phormium cookianum* and *Phormium tenax*. The collective epithet *Phormium* Rainbow Hybrids has been given to all variegated *Phormium* cultivars that are derived from crossing *Phormium cookianum* and *Phormium tenax*; this collective name is not applied to individual entries.

'Alba Lineatus' = *tenax* 'Alba Lineatus'
'Albomarginatum' Hort.
'Alpinum' = *tenax* 'Alpinum'
alpinum = *tenax* 'Alpinum'
'Apricot Queen' Hort.
'Argenteum Variegatum' = *tenax* 'Argenteum Variegatum'
'Atropurpureum' = *tenax* 'Atropurpureum'
'Atropurpureum Nanum' = *tenax* 'Atropurpureum Nanum'
'Atropurpureum Variegatum' = *tenax* 'Atropurpureum Variegatum'
'Aureum Striatum' = *tenax* 'Aureum Striatum'
'Aureum Variegatum' = *tenax* 'Aureum Variegatum'
'Aureum' = *cookianum* 'Aureum' or *tenax* 'Aureum'
'Aurora'
'Black Knight' Hort. = 'Black Prince' Hort.
'Black Magic' = 'Platts Black'
'Black Prince' Hort.
'Bobby Dazzler' Invalid
'Bronze' = *tenax* 'Bronze'
'Bronze Age' Hort.
'Bronze Baby'
'Bronze Elf'
'Bronze Knight' Hort.
'Bronze Tongue' = *cookianum* 'Bronze Tongue'
'Burgundy'
'Centennial Fanfare' Hort.
'Chocolate Fingers'
'Coffee' Illegitimate
colensoi 'Aureum' = *cookianum* 'Aureum'
colensoi 'Tricolor' = *cookianum* subsp. *hookeri* 'Tricolor'

colensoi 'Variegatum' = *cookianum* 'Variegatum'
colensoi 'Wharaeki' = *cookianum* 'Wharaeki'
colensoi 'Whararipi' = *cookianum* 'Whararipi'
colensoi 'Witau' = *cookianum* 'Witau'
cookianum subsp. *hookeri* 'Cream Delight'
cookianum subsp. *hookeri* 'Tricolor'
cookianum 'Aureum' Invalid
cookianum 'Bronze Tongue'
cookianum 'Dazzler' Hort. = 'Dazzler'
cookianum 'Dwarf Form'
cookianum 'Emerald Green'
cookianum 'Green Fingers'
cookianum 'Green Goblin'
cookianum 'Greensleeves' Hort. Invalid
cookianum 'Nana' = 'Needles'
cookianum 'Nigrum' = *cookianum* 'Bronze Tongue'
cookianum 'Purpureum' Hort. Invalid
cookianum 'Red Stripe' Hort. = 'Dazzler'
cookianum 'Variegatum'
cookianum 'Whakaari'
cookianum 'Wharaeki'
cookianum 'Wharariki' Illegitimate
cookianum 'Whararipi'
cookianum 'Witau'
'Co-ordination' = *tenax* 'Co-ordination'
'Cream Delight' = *cookianum* subsp. *hookeri* 'Cream Delight'
'Cream Light' Hort.
'Dark Delight'
'Dawn' Hort.
'Dazzler'
'Double Delight' = 'Dark Delight'
'Duet'
'Dusky Chief'
'Dwarf Form' = *cookianum* 'Dwarf Form'
'Dwarf Red' = *tenax* 'Dwarf Red'
'Elephen' = 'Elfin'
'Elfin'
'Elphin' Hort. = 'Elfin'
'Emerald Green' = *cookianum* 'Emerald Green'
'Evening Glow' Hort.
'Fanfare' Hort. = 'Centennial Fanfare'
'Festival'
'Firebird'
'Fountain City' Hort.
'Golden' = *tenax* 'Golden'
'Goldie' Hort. Invalid
'Gold Spike'
'Gold Spire' Hort. Invalid

'Gold Stripe' Hort.
 'Gold Sword' Hort.
 'Goliath' = *tenax* 'Goliath'
 'Green Fingers' = *cookianum* 'Green Fingers'
 'Green Goblin' = *cookianum* 'Green Goblin'
 'Greensleeves' = *cookianum* 'Greensleeves' Hort.
 'Guardian' Hort. = 'Guardsmen'
 'Guardsmen'
 'Jack Spratt' Hort.
 'Levels Gold' Hort.
 'Maori Chief' Hort.
 'Maori Maiden' Hort.
 'Maori Queen' Hort.
 'Maori Sunrise' Hort.
 'Maori Sunset' Hort. = 'Sunset'
 'Moorlandii' = *tenax* 'Moorlandii'
 'Nana' = 'Needles'
 'Nanum' = *tenax* 'Nanum'
 'Nanum Purpureum' = *tenax* 'Nanum Purpureum'
 'Needles'
 'Nigromarginetum' = *tenax* 'Nigromarginetum'
 'Nigrolimbatum' = *tenax* 'Nigrolimbatum'
 'Nigropictum' = *tenax* 'Nigropictum'
 'Nigrum' = *cookianum* 'Bronze Tongue'
 'Nobilis Variegata'
 'Pendula' = *tenax* 'Pendulum'
 'Pinkie' Hort.
 'Pink Panther' Hort. Invalid
 'Platt's Black' Hort.
 'Powerscourtii' = *tenax* 'Powerscourtii'
 'Powerscourt Variety' = *tenax* 'Powerscourtii'
 'Purple Giant' = *tenax* 'Purple Giant'
 'Purpurea' = *tenax* 'Purpureum'
 'Purpureum' = *cookianum* 'Purpureum' or *tenax* 'Purpureum'
 'Purpureum Nigro-limbatum'
 'Purpureum Superba' = *tenax* 'Purpureum Superbum'
 'Radiance' = *tenax* 'Radiance'
 'Rainbow'
 Rainbow Hybrids
 'Rainbow Maiden' Hort. = 'Maori Maiden'
 'Rainbow Red' Hort. = 'Maori Maiden'
 'Rainbow Sunrise' Hort. = 'Maori Sunrise'
 'Red Dwarf' = *tenax* 'Red Dwarf'
 'Red Pendula' = *tenax* 'Red Pendula'
 'Red Stripe' Hort. = 'Dazzler'
 'Red Witch' Hort. Invalid
 'Rosy Dawn' = 'Smiling Morn'
 'Rosy Glow'

'Rubrum'
 'Saundersii' = *tenax* 'Saundersii'
 'Scarlet O'Hara' Hort. Invalid
 'Sea Jade' Hort. Invalid
 'Shady Lady' Hort. Invalid
 'Shy Lady' Hort. = 'Shady Lady' Hort.
 'Smiling Morn'
 'Striatum' = *tenax* 'Striatum'
 'Sundown' = 'Sundowner'
 'Sundowner'
 'Sunset'
 'Surfer' Hort.
 'Surfer Boy'
 'Surpha Boy' = 'Surfer Boy'
 'Surf Rider' Hort.
tenax 'Aka Taramoa'
tenax 'Alba Lineatus'
tenax 'Alpinum'
tenax 'Aoanga' = *tenax* 'Aonga'
tenax 'Aohanga' = *tenax* 'Aonga'
tenax 'Aonga'
tenax 'Aoraki' Hort. Invalid
tenax 'Aorangi' = *tenax* 'Aonga'
tenax 'Aranoa' Hort.
tenax 'Arawa'
tenax 'Argenteum Variegatum'
tenax 'Arotara'
tenax 'Aroro-wharawhara'
tenax 'Atarau'
tenax 'Ate'
tenax 'Atemango'
tenax 'Ateraukawa' = *tenax* 'Atiraukawa'
tenax 'Ate Weka'
tenax 'Atewheke' = *tenax* 'Ate Weka'
tenax 'Atewhiki' = *tenax* 'Ate Weka'
tenax 'Atiraukawa'
tenax 'Atropurpureum'
tenax 'Atropurpureum Nanum'
tenax 'Atropurpureum Variegatum'
tenax 'Auranga' Hort.
tenax 'Aureum'
tenax 'Aurea Striata'
tenax 'Aurea Variegatum'
tenax 'Awahou'
tenax 'Awanga' = *tenax* 'Aonga'
tenax 'Bronze' Invalid
tenax 'Bronze Baby' = 'Bronze Baby'
tenax 'Burgundy' = 'Burgundy'

tenax 'Co-ordination'
tenax 'Dark Delight' = 'Dark Delight'
tenax 'Dazzler' = 'Dazzler'
tenax 'Dwarf Red'
tenax 'Fountain City' Hort. = 'Fountain City' Hort.
tenax 'Golden' Invalid
tenax 'Goliath'
tenax 'Guardsmen' = 'Guardsmen'
tenax 'Harakeke Parae'
tenax Haro Group
tenax 'Hati Rau Kawa'
tenax 'Hewara'
tenax 'Hiraka' = *tenax* 'Makaweroa'
tenax 'Huhi'
tenax 'Huhiroa'
tenax 'Huiroa' = *tenax* 'Huhiroa'
tenax 'Huki'
tenax 'Hurahura-hika' = *tenax* 'Huruhuruhika'
tenax 'Huruhuruhika'
tenax 'Huruhuruwhika' = *tenax* 'Huruhuruhika'
tenax 'Kahungaiti' Hort.
tenax 'Kaipu'
tenax 'Kapiti' Hort.
tenax 'Karuamoā'
tenax 'Karumanu'
tenax 'Katiraukawa'
tenax 'Kauhangamoā' = *tenax* 'Kauhangaroa'
tenax 'Kauhangaroa'
tenax 'Kiri Kiri' Hort.
tenax 'Kohuinga' = *tenax* 'Kohunga'
tenax 'Kohunga'
tenax 'Kopakipaki-ika' = *tenax* 'Aroro-wharawhara'
tenax 'Koraka'
tenax 'Koritawa'
tenax 'Koura'
tenax 'Kuroa'
tenax 'Kuru'
tenax 'Maeneene'
tenax 'Makaweroa'
tenax 'Manga Eka'
tenax 'Manunu' = *tenax* 'Manunui'
tenax 'Manunui'
tenax 'Maomao'
tenax 'Mao Mau' = *tenax* 'Maomao'
tenax 'Mataroa' = *tenax* 'Matoroa'
tenax 'Matawai Taniwha'
tenax 'Matoroa'
tenax 'Mawaru'

tenax 'Moorlandii'
tenax 'Motuaruhi' = *tenax* 'Motu-o-ru'i'
tenax 'Motu-o-nui' = *tenax* 'Motu-o-ru'i'
tenax 'Motu-o-ruhi' = *tenax* 'Motu-o-ru'i'
tenax 'Motu-o-ru'i'
tenax 'Nanum'
tenax 'Nanum Purpureum' Invalid
tenax 'Nga Otomawe' = *tenax* 'Ngatotomawe'
tenax 'Ngaro'
tenax 'Ngaro Waaka'
tenax 'Ngarowaka' = *tenax* 'Ngaro Waaka'
tenax 'Ngatotomawe'
tenax 'Ngatunui' = *tenax* 'Ngutunui'
tenax 'Ngutukaka' = *tenax* 'Ngutu Kaka'
tenax 'Ngutu Kaka'
tenax 'Ngutunui'
tenax 'Ngutu-nui' = *tenax* 'Ngutunui'
tenax 'Ngutuparera' = *tenax* 'Ngutu Parura'
tenax 'Ngutuparura' = *tenax* 'Ngutu Parura'
tenax 'Ngutu Parura'
tenax 'Nguturua'
tenax 'Ngutuwahine' = *tenax* 'Nguturua'
tenax 'Nigrolimbatum'
tenax 'Nigromarginetum'
tenax 'Nigropictum'
tenax 'Okaoka' = *tenax* 'Oka Oka'
tenax 'Oka Oka'
tenax 'Omahuta' Hort.
tenax 'One' = *tenax* 'Oue'
tenax 'Opiki'
tenax 'Oue'
tenax 'Oueroa' = *tenax* 'Oue Roa'
tenax 'Oue Roa'
tenax 'Ouhe' = *tenax* 'Oue'
tenax 'Paheke'
tenax 'Pango'
tenax 'Paoa'
tenax 'Papu' = *tenax* 'Pupu'
tenax 'Parekawariki'
tenax 'Parekoritawa' = *tenax* 'Radiance'
tenax 'Pare Kore Tawa' = *tenax* 'Radiance'
tenax 'Parera'
tenax 'Paretaniwha' = *tenax* 'Paritaniwha'
tenax 'Parikaritawa' = *tenax* 'Radiance'
tenax 'Paritanewha' = *tenax* 'Paritaniwha'
tenax 'Paritaniwha'
tenax 'Pari-taniwha' = *tenax* 'Paritanewha'
tenax 'Pato'

tenax 'Pehu'
tenax 'Pendulum'
tenax 'Pihere' Hort.
tenax 'Pikoko'
tenax 'Poi Taniwha'
tenax 'Poitaniwha' = *tenax* 'Poi Taniwha'
tenax 'Potaka'
tenax 'Potango'
tenax 'Powerscourtii'
tenax 'Powerscourt Variety' = *tenax* 'Powerscourtii'
tenax 'Pupu'
tenax 'Purple Giant'
tenax var. *purpurea* = *tenax* 'Purpureum'
tenax 'Purpurea' = *tenax* 'Purpureum'
tenax 'Purpureum'
tenax 'Purpureum Superbum'
tenax 'Putaiore'
tenax 'Radiance'
tenax 'Rainbow' = 'Rainbow'
tenax 'Rangiwhao'
tenax 'Rataroa'
tenax 'Ratawa'
tenax 'Rauehu'
tenax 'Raumoa'
tenax 'Rautakiri' Hort.
tenax 'Red Dwarf' Invalid
tenax 'Red Pendula' Invalid
tenax 'Rehutai' Hort.
tenax 'Rehutairoa' Hort.
tenax 'Rerehape'
tenax 'Ririhape' = *tenax* 'Rerehape'
tenax 'Rongoinui' = *tenax* 'Rongotainui'
tenax 'Rongotainui'
tenax 'Rongotinui' = *tenax* 'Rongotainui'
tenax 'Ruahine'
tenax 'Ruapani'
tenax 'Ruatapu'
tenax 'Ruawai'
tenax *rubra* = 'Rubrum'
tenax 'Rubrum' Hort. = 'Rubrum'
tenax 'Rukutia'
tenax 'Ruumoa'
tenax 'Saundersii'
tenax 'Seiferts Superior' = *tenax* 'Tapamangu'
tenax 'Selected Red' Hort. = 'Rubrum'
tenax 'Striatum'
tenax 'Summersii Tricolor' = *cookianum* subsp. *hookeri* 'Tricolor'
tenax 'Superba' = *tenax* 'Purpureum Superbum'

tenax 'Taeore' = *tenax* 'Taiore'
tenax 'Taihore' = *tenax* Tihore Group
tenax 'Tai One' = *tenax* 'Taiore'
tenax 'Taiore'
tenax 'Takahiapu' = *tenax* 'Takaiapu'
tenax 'Takaiapu'
tenax 'Takiri' = *tenax* Tihore Group
tenax 'Takirikau' = *tenax* 'Tapoto'
tenax 'Tamure'
tenax 'Taneawai'
tenax 'Tane-a-wai' = *tenax* 'Taneawai'
tenax 'Tangaroa' Hort.
tenax 'Taniwha'
tenax 'Tapamangu'
tenax 'Tapoto'
tenax 'Tara Rika' = *tenax* 'Tarariki'
tenax 'Tararika' = *tenax* 'Tarariki'
tenax 'Tarariki'
tenax 'Taringa Hoiho' Hort.
tenax 'Taroa'
tenax 'Tawai Kakako'
tenax 'Teheke' Hort.
tenax 'Te Mata'
tenax 'Tepuna'
tenax 'Te Tatua'
tenax 'Thumbelina' = 'Thumbelina'
tenax 'Tiheru'
tenax Tihore Group
tenax 'Tihore' = *tenax* Tihore Group
tenax 'Tika'
tenax 'Tipareouni'
tenax 'Tipuna'
tenax 'Tito-o-moe-wai'
tenax 'Titoonewai' = *tenax* 'Tito-o-moe-wai'
tenax 'Tituao'
tenax 'Toitoi' Illegitimate
tenax var. *tricolor* = *cookianum* subsp. *hookeri* 'Tricolor'
tenax 'Tuau'
tenax 'Tuawhitu'
tenax 'Tukura'
tenax 'Tumara'
tenax 'Tupurupuru' = *tenax* 'Tarariki'
tenax 'Turepo'
tenax 'Turingawari'
tenax 'Tutae-manu'
tenax 'Tutaewheke'
tenax 'Tutai Wiki'
tenax 'Uhiroa'

tenax 'Variegata' = *tenax* 'Variegatum'
tenax 'Variegatum'
tenax 'Veitchianum'
tenax 'Waihinere'
tenax 'Waranui' = *tenax* 'Wharanui'
tenax 'Wararika'
tenax 'Wara Rika' = *tenax* 'Wararika'
tenax 'Wharanui'
tenax 'Whararahi'
tenax 'Wharariki' = *cookianum* 'Wharariki'
tenax 'Whararipi' = *cookianum* 'Whararipi'
tenax 'Whareongaonga'
tenax 'Wharerohi' Hort.
tenax 'Williamsii' = *tenax* 'Williamsii Variegatum'
tenax 'Williamsii Variegatum'
tenax 'Wini'
tenax 'Witau' = *cookianum* 'Witau'
tenax 'Yellow Queen'
'Thom Thumb' Hort. = 'Tom Thumb' Hort.
'Thumbelina'
'Thumberlina' Hort. = 'Thumbelina'
'Tom Thumb' Hort.
'Tricolor' = *cookianum* subsp. *hookeri* 'Tricolor'
'Twister' Hort. = 'Elfin'
'Variegatum' = *cookianum* 'Variegatum' or *tenax* 'Variegatum'
'Veitchianum' = *tenax* 'Veitchianum'
'Williamsii Variegatum' = *tenax* 'Williamsii Variegatum'
'Yellow Breaker' Hort.
'Yellow Queen' = *tenax* 'Yellow Queen'
'Yellow Wave'

BIBLIOGRAPHIC LIST OF *PHORMIUM* CULTIVARS

Cultivars that are not preceded by a species name are derived from hybrids between *Phormium cookianum* and *Phormium tenax*. The collective epithet *Phormium* Rainbow Hybrids has been given to all variegated *Phormium* cultivars that are derived from crossing *Phormium cookianum* and *Phormium tenax*; this collective name is not applied to individual entries.

***Phormium* 'Albomarginatum' Hort.**

NOTES: This plant is up to 2 m high, with the older leaves drooping and young leaves erect, leaves green with 1-2 narrow bands of cream inside each margin.

***Phormium* 'Apricot Queen' Hort.**

NOTES: This plant is up to 70 cm high with spreading leaves 60-80 X 3 cm, young leaves soft apricot, older leaves fading to a yellow-orange (14C).

***Phormium* 'Aurora'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 209 [1972]). Detailed botanical description in Metcalf (1972).

***Phormium* 'Black Prince'**

(Hugh Redgrove, *New Zealand Gardener Vol. 31 (12)* 49 [Dec. 1974]). Described as having "rich colouring, nearer to black than purple . . . very vigorous and grows to a large plant with drooping foliage".

Syn. *Phormium* 'Black Knight' Hort.

***Phormium* 'Bronze Age' Hort.**

NOTES: This plant has leaves 1.2-1.5 m X 5-7 cm with fine, suffused green and bronze vertical stripes occupying the width of the leaf.

***Phormium* 'Bronze Baby'**

(C E Gibbons and Co. Ltd. *Catalogue of Ornamental Shrubs and Flowering Trees*, 31 [1969] as *Phormium tenax* 'Bronze Baby'). Described as being "the best real dwarf variety with numerous 2ft.arching branches of rich purple red".

NOTES: A selection of *Phormium* 'Rubrum' cultivated by F Sydenham, Tauranga. Harrison's Nursery obtained stock and named it *Phormium* 'Bronze Baby'.

***Phormium* 'Bronze Elf'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 253 [1987]). Described as being "a low growing bronze leaved plant".

NOTES: A selection raised from seed collected from *Phormium cookianum* at the Christchurch Botanic Garden in about 1966 by Allenton Nursery, Ashburton.

***Phormium* 'Bronze Knight' Hort.**

NOTES: This plant has erect young leaves with bent tips, older leaves spreading, 1.5 m X 5-7 cm, green-bronze colour.

***Phormium* 'Burgundy'**

(Frank M Winstone [Merchants] Ltd., *Nurs. Cat.* [1976]). Described as having "non fading purple foliage".

NOTES: Said to have been introduced by Mr B Haggio of Dawn Nurseries during the late 1970's.

Syn. *Phormium tenax* 'Burgundy' (R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106 [1979]*). Described as having "leaves 1 m long, 4-5 cm wide, dark ox blood purple".

***Phormium* 'Centennial Fanfare' Hort.**

NOTES: This plant forms a low, spreading clump, leaves drooping, spreading, 1.2 m X 5 cm, central area of the leaf green, towards each margin a 10-15 cm band of crimson. Raised by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

Syn. *Phormium* 'Fanfare' Hort.

***Phormium* 'Chocolate Fingers'**

(*Commercial Horticulture*, 22 [July 1990]). Described as being "upright . . . metre high, bronze coloured . . .".

NOTES: Selected by Mr R Mole, Otari Native Plant Museum, from plants growing at the Wellington City Council Parks and Recreation Department Nursery.

***Phormium cookianum* subsp. *hookeri* 'Cream Delight'**

(M Jones, *New Zealand Gardener*, 24 [October 1978]). Described as having "leaves up to 100 cm long by 7 cm wide. The broad centre band of cream up to 4 cm wide is its special feature. This is edged with a narrow band of dark green with cream stripings, and the margins of each leaf is dark red . . .".

NOTES: A selection from *Phormium cookianum* subsp. *hookeri* 'Tricolor' introduced in 1978 by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

***Phormium cookianum* subsp. *hookeri* 'Tricolor'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 271 [1972] as *Phormium cookianum* 'Tricolor'). Detailed botanical description in Metcalf (1972).

Syn. *Phormium colensoi* 'Tricolor' (*Duncan and Davies Nursery Catalogue*, 142 [1959-60]).

Syn. *Phormium tenax* 'Tricolor' (R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106 [1979]*). Described as having "leaves 2 m long, 8-10 cm wide, narrow cream margin, centre dark green edge red".

Syn. *Phormium tenax* var. *tricolor* (*Duncan and Davies Nursery Catalogue* [c.1935]).

Syn. *Phormium tenax* 'Summersii Tricolor' (*A Robinson and Sons Nursery Catalogue* [c.1957]).

Syn. *Phormium* 'Tricolor' Hort.

***Phormium cookianum* 'Bronze Tongue' new name**

This plant has spreading, evenly coloured bronze foliage 80-100 X 2.5-3.5 cm.

Syn. *Phormium cookianum* 'Nigra' (*Talisman Nurseries Ltd. Catalogue* [1987]), nomen nudum. This name is invalid because it is a Latin name published after 1 January 1959.

***Phormium cookianum* 'Dwarf Form'**

(R Cheek, *Journal of Royal Horticultural Society Vol. 104 (3) 101-106 [1979]*). Described as being "like the parent species but . . . the attractive arching leaves are only 2ft long (60 cm) and 1 1/2 inches wide (4 cm)".

***Phormium cookianum* 'Emerald Green'**

(R Cheek, *Journal of Royal Horticultural Society Vol. 104 (3) 101-106 [1979]*). Described as having "leaves 1 m long, 4-6 cm wide, bright green".

NOTES: Introduced by Topline Nursery, Oratia, Auckland.

***Phormium cookianum* 'Green Fingers'**

(*Allenton Nursery Catalogue* [Feb. 1974]), nomen nudum, validated here. This plant is 75 cm tall with spreading and drooping leaves that are yellow-green (146B).

***Phormium cookianum* 'Green Goblin'**

(*Parva Plants Catalogue* 52 [Spring/Summer 1990]). Described as being "a particularly compact and tidy variety forming a pleasing clump of sage green. Slow growing slightly weeping . . .".

NOTES: Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

***Phormium cookianum* 'Variegatum'**

(*Floral Mag. N. Ser.*, t.112 [1874] as *Phormium colensoi* 'Variegatum'). Described as having "narrowish, erect, pointed, dark green leaves, banded with one or more narrow stripes of creamy-yellow, each leaf elegantly margined with a narrow crimson line".

NOTES: Listed, as nomen nudum, in *Matthews Nursery Catalogue of New Zealand Flora* (c.1873) as *Phormium colensoi* 'Variegatum'.

***Phormium cookianum* 'Whakaari'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 18 [1988]). Described as being of "medium height, short, strong, unusual blades which shape into a narrow neck about 15 cm from the tips. No color on margin and keel. Medium green, dull leaves not shiny".

***Phormium cookianum* 'Wharaeki'**

(*Flax Commissioners*, 71 [1871] as *Phormium colensoi* 'Wharaeki'), nomen nudum.

***Phormium cookianum* 'Whararipi'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847] as *Phormium tenax* 'Whararipi'), nomen nudum.

Syn. *Phormium colensoi* 'Whararipi' (*Flax Commissioners*, 71 [1871]), nomen nudum.

***Phormium cookianum* 'Witau'**

(Major V C Heaphy, *Transactions N.Z. Institute* Vol. 2, 116 [1869] as *Phormium tenax* 'Witau'). Not described, but listed as yielding a poor fibre.

Syn. *Phormium colensoi* 'Witau' (*Flax Commissioners*, 71 [1871]), nomen nudum.

***Phormium* 'Cream Light' Hort.**

NOTES: This plant is up to 1 m tall with stiff, erect leaves that are banded green (146C) and yellow (6C). Bands 5-12 mm broad.

***Phormium* 'Dark Delight'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 253 [1987]). Described as having "leaves deep purplish bronze becoming blackish bronze with age. Midrib slightly reddish, becoming prominently reddish purple towards the base".

NOTES: Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga in 1979.

Syn. *Phormium* 'Double Delight' (*Commercial Horticulture* [Nov. 1989]).

***Phormium* 'Dawn' Hort.**

NOTES: This plant has young leaves erect, older leaves drooping, 1 m X 3.5-5 cm, young leaves with a central band soft orange-pink, towards each margin a 8-15 mm band of bronze-green, central band fading to cream-yellow. Introduced by Mr B Hagg of Dawn Nurseries during the 1980's.

***Phormium* 'Dazzler'**

(*Royal Horticultural Society Yearbook Lilies and other Lilaceae*, 85 [1973]). Described as having leaves that are "bronze with bright red stripes".

NOTES: Introduced by Mr R Jordon, Australasian Nurseries, Pakuranga.

Syn. *Phormium cookianum* 'Dazzler' Hort.

Syn. *Phormium tenax* 'Dazzler' Hort.

Syn. *Phormium* 'Red Stripe' Hort.

Syn. *Phormium cookianum* 'Red Stripe' Hort.

***Phormium* 'Duet'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Described as being "a low-growing plant with rather stiff leaves which are erect to somewhat spreading. They are green in the centre with the creamy white variegation concentrated toward the margins. Normally it grows no more than about 1 m".

NOTES: Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga in 1979.

***Phormium* 'Dusky Chief'**

(*Wilson's Nurseries Cat.* [1969]). Described as being "dwarfish, black-purple, very richly coloured".

***Phormium* 'Elfin'**

(*Elliott's Wholesale List* [January 1989] as *Phormium* 'Elephen'), nomen nudum, validated here. This plant is up to 70 cm high and has stiff young leaves while the older leaves are bent at the tips. Young leaves have the central area green (138A) with brown (200D) stripes down the margin; older leaves are yellow-green (148A). The margins and the raised back mid-rib are red.

NOTES: The ICNCP Art. 41 states that a cultivar name is invalid if it is against the expressed wish of the originator. The plant was distributed by Mr J Burton as *Phormium* 'Elfin' so that spelling has priority over any subsequent names.

Syn. *Phormium* 'Twister' Hort.

***Phormium* 'Evening Glow' Hort.**

NOTES: This plant has young leaves erect, older leaves spreading, 80-100 X 3 cm, bright red-pink. Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

***Phormium* 'Festival'**

(*Guide List to Plants at Otari Native Plant Museum* [1987]), nomen nudum, validated here. This plant is up to 2 m tall with young leaves erect and the older leaves spreading. Leaves are green with 1-4 bands of yellow which vary in width between 5-18 mm.

NOTES: Introduced in 1979 by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

***Phormium* 'Firebird'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Described as being "less than 1m tall with slightly drooping foliage. Leaves purple-bronze in the centre with brightish crimson stripes towards the margins and with some fine bronze lines. Sometimes it has a broad marginal crimson stripe".

NOTES: Introduced in 1982 by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga.

***Phormium* 'Fountain City' Hort.**

NOTES: This cultivar has erect leaves 1.5-1.8 m X 6.5-8.5 cm, with a green edge and green- bronze suffused lines in the central part of the leaf.

Syn. *Phormium tenax* 'Fountain City' Hort.

***Phormium* 'Goldspike'**

(Hugh Redgrove, *New Zealand Gardener Vol. 31 (12) 49* [Dec. 1974]). Described as having "a broad yellow band of yellow down each leaf edge. The plant is sturdy, of medium size . . . [and] . . . the foliage will reach about 4ft and the flower spike 6ft".

NOTES: Selected by Mr F Jury and introduced by Mr O Gibson, both of Waitara.

***Phormium* 'Gold Strike' Hort.**

NOTES: This plant is up to 1.2 m high, the leaves mostly erect, some of the older, outside leaves spreading. Leaves green with a narrow band of yellow toward each margin. Introduced by Duncan and Davies Nursery.

***Phormium* 'Gold Sword' Hort.**

NOTES: This plant is up to 1 m high and has leaves that are stiff, erect and broad, the central leaf area is yellow with a green band toward each margin. Introduced by Duncan and Davies Nursery.

***Phormium* 'Guardian'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs, 254* [1987]). Described as being "an erect plant 1.5 m or so tall. The bronze leaves are striped with red and deep pink".

NOTES: Introduced by Mr B Haggo, Dawn Nurseries, Auckland. This cultivar may be a form of *Phormium tenax* but this cannot be confirmed as flowering material has not been seen.

Syn. *Phormium* 'Guardian' Hort.

Syn. *Phormium tenax* 'Guardian' (R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106* [1979]).

***Phormium* 'Jack Spratt' Hort.**

NOTES: This plant has erect, arching leaves that are 50-60 cm X 13-23 mm, with a green (147B) central band bordered by two brown (200D) marginal bands, the margin and the raised back mid-rib are black. Selected by Mr J Burton of Hamilton.

***Phormium* 'Levels Gold' Hort.**

NOTES: This plant forms a low spreading clump up to 80 cm high. The leaves are yellow (6C) with yellow-green (146A) stripes 1-10 mm broad toward each margin.

***Phormium* 'Maori Chief' Hort.**

NOTES: This plant is a large and clumpy with spreading leaves, 1.2-1.5 m X 6-7 cm, central area bronze-green with pink-red stripes inside each margin. Selected by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga about 1981 from seedlings raised from *Phormium* Rainbow Hybrids seed marketed by Mr J Burton of Hamilton.

***Phormium* 'Maori Maiden' Hort.**

NOTES: This plant is low and spreading with leaves 1.2-1.5 m X 3-5 cm, central leaf area dark salmon-pink on new leaves, fading to yellow-pink on older leaves, narrow green-bronze band inside margin. Selected by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga about 1981 from seedlings raised from *Phormium* Rainbow Hybrids seed marketed by Mr J Burton of Hamilton.

Syn. *Phormium* 'Rainbow Red' Hort.

Syn. *Phormium* 'Rainbow Maiden' Hort.

***Phormium* 'Maori Queen' Hort.**

NOTES: This plant forms a large clump with erect leaves slightly bent at the tips, 1.2-1.5 m X 6-7 cm, central area bronze-green with red-pink stripes inside each margin. Raised and selected by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga about 1981.

***Phormium* 'Maori Sunrise' Hort.**

NOTES: This is a low spreading plant with leaves 80 X 3-4 cm, central colour is salmon pink new growth fading to pale yellow, a narrow bronze-green band runs down the margin. Selected by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga about 1981 from seedlings raised from *Phormium* Rainbow Hybrid seed marketed by Mr J Burton of Hamilton.

Syn. *Phormium* 'Rainbow Sunrise' Hort.

***Phormium* 'Needles' new name**

NOTES: This plant forms a small, tight clump of erect green leaves 20-40 cm X 8-12 mm.

Syn. *Phormium cookianum* 'Nana' (*Landscape Services Plant Catalogue [Ministry of Works]* [June 1990]), nomen nudum. This name is invalid because it is a latin name published after 1 January 1959 (ICNCP, Art. 27).

***Phormium* 'Nobilis Variegata'**

(*Nairn and Sons, Nurserymen, Catalogue* [1889]), nomen nudum.

***Phormium* 'Pinkie' Hort.**

NOTES: This plant has spreading leaves up to 80 cm long; young leaves are red (148A) but soon fade to greyed-yellow (160B). Selected by Mr Jury of New Plymouth and introduced by Midland Horticulture of Palmerston North.

***Phormium* 'Platt's Black' Hort.**

NOTES: This plant has spreading leaves and forms a clump 1-1.2 m high. The leaves are brown (200A) and have a fine bloom on the under surface. Raised by Mr G Platt of Auckland, from seed collected off *Phormium* 'Black Knight'. Named by Mr B Hagar.

Syn. *Phormium* 'Black Magic' Hort.

***Phormium* 'Purpureum Nigro-limbatum'**

(L H Bailey, *The Standard Cyclopaedia of Horticulture Vol. 3, 2595* [1922] as *Phormium purpureum nigro-limbatum*), nomen nudum.

***Phormium* 'Rainbow'**

(R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106* [1979] as *Phormium tenax* 'Rainbow'). Described as having leaves "6 cm wide, bronzy olive, narrow salmon rose stripes near margin".

***Phormium* Rainbow Hybrids**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs, 249* [1987]). Described as a collective epithet for all variegated *Phormium* cultivars that have been derived by crossing *Phormium cookianum* and *Phormium tenax* (ICNCP, Art. 18).

NOTES: *Phormium* Rainbow Hybrids were originally a seed strain developed by Mr O Gibson of Waitara and marketed by Mr L Foote a seedsman from New Plymouth and Mr J Burton of Hamilton.

***Phormium* 'Rosy Glow'**

(*Parva Plants Catalogue 52* [Spring/Summer 1990]). Described as having "glowing pink/red foliage . . . forming a very neat narrow leaved plant of lovely weeping form".

NOTES: Raised and selected by Mrs M Jones of New Zealand Flax Hybridisers, Tauranga.

***Phormium* 'Rubrum'**

(*Duncan and Davies Nursery Catalogue* [1923] as *Phormium tenax rubra*). Described as being "a red flax".

Syn. *Phormium tenax* 'Rubrum' Hort.

Syn. *Phormium tenax* 'Selected Red' Hort.

***Phormium* 'Smiling Morn'**

(R H Mole, *New Zealand Gardener* Vol. 24, 469 [1968]). Described as having "young leaves wholly pink, or pink banded bronze to purple. As the leaves increase in size the pink colouring becomes less intense, gradually being replaced by purple tones, which in turn fade to green. In old leaves the pink pigmentation is evident only on the leaf margins, the main surface area being then variegated-green and cream".

NOTES: Raised in the Christchurch Botanic Garden by W B Brockie in the early 1940's, along with *Phormium* 'Aurora' and one or two others which were unnamed. Resulted from crossing a small purple-leaved plant with a taller purple-leaved plant with just one or two reddish stripes on the margin.

Syn. *Phormium* 'Rosy Dawn' (B Matthews, *Growing Native Plants*, 58 [III.] [1979]).

***Phormium* 'Sundowner'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Described as being "a rather erect-growing plant with the bronze leaves variously striped with red and pink. The striping varies and often the bronze is more dominant".

NOTES: Introduced by Mr B Porteous, Browns Bay, Auckland.

Syn. *Phormium* 'Sundown' (T H Everett, *The New York Botanical Garden Illustrated Encyclopedia of Horticulture* Vol. 8, 2610 [1981]).

***Phormium* 'Sunset'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Described as being "rather short, growing to 1 m or so, and has erect foliage. The bronze leaves are striped with strong shades of apricot-pink and pink shades".

NOTES: Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga in 1980.

Syn. *Phormium* 'Maori Sunset' Hort.

***Phormium* 'Surfer' Hort.**

NOTES: This plant has twisted, erect leaves that form a clump about 60-70 cm high. The leaves are brown (200B) with a yellow-green (152A) central stripe, the back is yellow-green (146B). The margin and the keeled mid-rib are black. Introduced by Mr J Burton of Hamilton.

***Phormium* 'Surfer Boy'**

(*Elliott's Wholesale List* [Jan. 1989] as *Phormium* 'Surpha Boy'), nomen nudum.
NOTES: This plant is up to 1 m high and has stiff, upright foliage. The leaves have a green (138A) central band with a brown (200C,D), 3-6 mm wide stripe down each margin. The ICNCP Art. 41 states that a cultivar name is invalid if it is against the expressed wish of the originator. The plant was distributed by Mr J Burton as *Phormium* 'Surfer Boy' so that spelling has priority over any subsequent names.

***Phormium* 'Surf Rider' Hort.**

NOTES: This plant forms a low spreading clump to 30 cm high. Young leaves are yellow-green (148A) with narrow grey-brown (199A) stripes, older leaves yellow-green (148C), edges and the back of the mid-rib red.

***Phormium tenax* 'Aka Taramoa'**

(E Best, *Transactions N.Z. Institute Vol. 41, 231-286* [1909]). Not described, but listed as being a "medicinal flax".

***Phormium tenax* 'Alba Lineatus'**

(*Duncan and Davies Nursery Catalogue* [1933]). Described as being "a form of the well known flax; hardy; 5 feet".

***Phormium tenax* 'Alpinum'**

(H H Thomas, *The Popular Encyclopedia of Gardening Vol. 3, 85* [not dated]). Described as having "green leaves, is less vigorous than the typical kind".

Syn. *Phormium alpinum* Wien., *Ill. Gart. Zeit. 15, 448* (1890).

NOTES: Listed by Fraser and Hemsley (1917) as being from New Caledonia. This is probably in error and should be New Zealand. Original publication not seen. Treated here as a synonym of *Phormium tenax* 'Alpinum'.

***Phormium tenax* 'Aonga'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand, 241* [1847]). Described as being a "variegated flax".

Syn. *Phormium tenax* 'Aoanga' (E Best, *Transactions N.Z. Institute Vol. 41, 231-286* [1909]). Described as being a "variegated variety".

Syn. *Phormium tenax* 'Aohanga' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 6* [1988]). Described as having "white stripes along the pale green leaf".

Syn. *Phormium tenax* 'Aorangi' (Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]). Described as being "striped".

Syn. *Phormium tenax* 'Awanga' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 116* [1870]). Described as being a "variegated kind, the fibre unserviceable for manufacture".

***Phormium tenax* 'Aranoa' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are short, soft variegated thick flesh on outside, easy to strip and has white fibre, no korari.

***Phormium tenax* 'Arawa'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 17 [1988]). Described as having "straight, fairly long, medium green blades. Up to 2.5 m tall. Reddish orange margin and keel. Very high flower heads but seldom flowers".

***Phormium tenax* 'Argenteum Variegatum'**

(*Matthews Nursery Catalogue of New Zealand Flora* [c.1873] as *Phormium tenax* 'Argentia Variegata'), nomen nudum.

***Phormium tenax* 'Arotara'**

(*Flax Commissioners*, 69 [1871]). Described as having "poor fibre; yellowish green leaves; dark brown edge".

***Phormium tenax* 'Aroro-wharawhara'**

(E Best, *Transactions N.Z. Institute Vol. 41*, 231-286 [1909]). Not described, but listed as being an "edible variety . . . main root grow(ing) to a great length, is white in color (and) has a sweet taste".

Syn. *Phormium tenax* 'Kopakipaki-ika' (E Best, *Transactions N.Z. Institute Vol. 41*, 231-286 [1909]), nomen nudum.

***Phormium tenax* 'Atarau'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 9 [1988]). Described as having a "straight, strong, pointed leaf with wine red tinges inside the old blades. Very blue bloom on the back of the blades. Very few flower heads".

***Phormium tenax* 'Ate'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]). Not described, but listed as being "found chiefly at Hauraki".

***Phormium tenax* 'Atemango'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56*, 704 [1926]), nomen nudum.

***Phormium tenax* 'Ate Weka'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 117* [1870]). Not described, but listed as being "grown at Taranaki, of first rate quality (fibre)".

Syn. *Phormium tenax* 'Atewheke' (Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]), nomen nudum.

Syn. *Phormium tenax* 'Atewhiki' (Flax Commissioners, 8-9 [1870]). Described as having leaves that are "narrow, has a reddish tinge, and a narrow line of bright scarlet on the edge and keel".

***Phormium tenax* 'Atiraukawa'**

(*Flax Commissioners, 8-9* [1870]). Described as having leaves that are "broad, light green, abrupt at the points, edges light brown".

NOTES: Listed by the *Flax Commissioners* (1871) as being probably the same as *Phormium tenax* 'Oue'.

Syn. *Phormium tenax* 'Ateraukawa' (*New Zealand Department of Agriculture Annual Report, 405-412* [1908]). Not described, but listed as being "grown in the Wanganui and Hawera area".

***Phormium tenax* 'Atropurpureum'**

(E A Carriere, *Revue Horticole, 389* [1877]). Detailed description in French.

Syn. *Phormium* 'Atropurpureum' (*Revue Horticole, 62* [1879] as *Phormium atropurpureum*), nomen nudum.

***Phormium tenax* 'Atropurpureum Nanum'**

(J Fraser and A Hemsley, *Johnson's Gardeners Dictionary, 663* [1917]). Described as being a "dwarf, dark purple leaved variety. 1908".

***Phormium tenax* 'Atropurpureum Variegatum'**

(L H Bailey, *The Standard Cyclopaedia of Horticulture Vol. 3, 2595* [1922]). Described as being a "veritable fountain of white, purple and rose color".

***Phormium tenax* 'Auranga' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as being similar to *Phormium tenax* 'Aranoa' but leaves longer and fibre finer.

***Phormium tenax* 'Aureum'**

(T H Everett, *The New York Botanical Garden Encyclopedia of Horticulture Vol. 8, 2610* [1981]). Described as being "marked with broad yellow stripes".

***Phormium tenax* 'Aureum Striatum'**

(*Gauntlett Nursery Catalogue* [1910] as *Phormium tenax* 'Aurea Striata').

***Phormium tenax* 'Aureum Variegatum'**

(*Matthews Nursery Catalogue of The New Zealand Flora* [c.1873] as *Phormium tenax* 'Aurea Variegata'), nomen nudum.

***Phormium tenax* 'Awahou'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 25 [1988]). Described as having "short, wide, strong pale green blades. Distinct blunt, gothic-shaped tips. The strong fibre shows clearly through the green skin. Orange-red keel and margin. Short korari with dense groups of blunt seed pods".

***Phormium tenax* 'Co-ordination'**

NOTES: Registered with the International Registration Authority on the 9th of December 1983. It originated as a sport from *Phormium tenax* 'Purpureum'. This plant has erect leaves 1.2-1.5 m X 5-6 cm, young leaves with a narrow green band inside each margin, central leaf area suffused with narrow green and bronze stripes. On older leaves the green marginal band is less distinct. This cultivar originated at Talisman Nurseries Ltd., Otaki.

***Phormium tenax* 'Dwarf Red'**

(R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106* [1979]). Described as having "leaves 0.3 m long, 3 cm wide, purplish red".

***Phormium tenax* 'Goliath'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 271 [1972]). Includes a detailed botanical description.

NOTES: Originally collected from Bridgewater, Nelson by Mr W B Brockie (R Mole pers. comm.).

***Phormium tenax* 'Harakeke Parae'**

(*New Zealand Department of Agriculture Annual Report*, 405-412 [1908]). Described as being a "strong growing variety; most of the butts red; the leaf hard and somewhat difficult to strip and treat generally".

***Phormium tenax* Haro Group**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]). Described as having fibre of a coarse quality that "requires to be scraped with a shell, then steeped in water for four days, afterwards taken out and beaten to clear it of refuse, and then dried again and scraped a second time".

***Phormium tenax* 'Hati Rau Kawa'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

NOTES: Listed as possibly being the same as *Phormium tenax* 'Oue'. Also listed in *Flax Commissioners* (1871) as being a possible synonym of *Phormium tenax* 'Atiraukawa'.

***Phormium tenax* 'Hewara'**

(*Flax Commissioners*, 69-71 [1871]) . Described as having a "broad, buff green leaf, with dark narrow edge".

***Phormium tenax* 'Huhi'**

(E Best, *Transactions N.Z. Institute Vol. 31*, 625-657 [1899]). Not described, but listed as being "an inferior variety" found growing "in swamps".

***Phormium tenax* 'Huiroa'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]). Not described, but listed as being "cultivated on the West Coast of the North Island".

NOTES: Listed in *Flax Commissioners* (1871) as perhaps being similar to *Phormium tenax* 'Uhiroa' or 'Oueroa'.

Syn. *Phormium tenax* 'Huiroa' (E Best, *Forest Lore of the Maori*, 101 [1942]).

***Phormium tenax* 'Huki'**

(E Best, *Forest Lore of the Maori*, 101 [1942]). Described as having "dark edged leaves".

***Phormium tenax* 'Huruhuruhika'**

(*Flax Commissioners*, 8-9 [1870]), nomen nudum. Described as bearing a "general resemblance to the *Phormium tenax* 'Takaiapu'".

Syn. *Phormium tenax* 'Hurahura-hika' (Johannes Andersen, *Transactions N.Z. Institute Vol. 56*, 704 [1926]), nomen nudum.

Syn. *Phormium tenax* 'Huruhuruwhika' (E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Kahungaiti' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are short and dark green with black edges. Very strong fibre. Has korari.

***Phormium tenax* 'Kaipu'**

(*Flax Commissioners*, 71 [1871]), nomen nudum.

NOTES: Listed under *Phormium tenax* 'Takaipu' as a possible synonym.

***Phormium tenax* 'Kapiti' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are shades of bronze and red, varying from paddock to paddock in colour.

***Phormium tenax* 'Karuamoā'**

(*Flax Commissioners*, 69 [1871]). Described as being "good fibre; tapering leaf; dark chocolate edge".

***Phormium tenax* 'Karumanu'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Katiraukawa'**

(*New Zealand Department of Agriculture Annual Report*, 405-412 [1908]). Described as being a "slightly drooping variety, grows to a great height . . . reaching 12ft".

***Phormium tenax* 'Kauhangaroa'**

(*Flax Commissioners*, 8-9 [1870]). Described as having leaves "a dark green and very tall growing variety, with a black margin . . . leaves bend outwards". Syn. *Phormium tenax* 'Kauhangamoā' (E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Kiri Kiri' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having medium length, pale green shiny leaves, with only a few korari.

***Phormium tenax* 'Kohunga'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]). Not described, but listed as being "found chiefly at Maungatautari".
Syn. *Phormium tenax* 'Kohuinga' (E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Koraka'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]). Not described, but listed as being "grown in Taranaki, first-rate quality (fibre)".

***Phormium tenax* 'Koritawa'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Koura'**

(*Flax Commissioners*, 69 [1871]). Not described, but listed as being "grown in (the) Wanganui district, best fibre for korowai (shaggy mats)".

***Phormium tenax* 'Kuroa'**

(*Flax Commissioners*, 8-9 [1870]). Not described, but listed as having a "percentage of fibre (of) 17.8%".

***Phormium tenax* 'Kuru'**

(*Flax Commissioners*, 69 [1871]). Not described, but listed as being "grown in Opunake district, breaking strain 95%".

***Phormium tenax* 'Maeneene'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 6 [1988]). Described as having "tall, bendy, but strong durable blades. Medium green with red margins and keel. Bright salmon red at base of plant and inside cut blade. Very few tall korari".

***Phormium tenax* 'Makaweroa'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 15 [1988]). Described as being of "medium height, fairly straight, strong, soft leaf. Pale green with orange brown margin and keel. Very few korari. Seldom flowers".

Syn. *Phormium tenax* 'Hiraka' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 15 [1988]).

***Phormium tenax* 'Manga Eka'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 116* [1870]). Not described but listed as "yielding a fibre of ordinary quality".

NOTES: Listed by *Flax Commissioners* (1871) as a possible synonym of *Phormium tenax* 'Wararika'.

***Phormium tenax* 'Manunui'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 117* [1870]). Described as being a "good kind for cordage" and as coming from the West Coast of the North Island.

Syn. *Phormium tenax* 'Manunu' (*Flax Commissioners, 8-9* [1870]). Described as having a "short leaf and black edge".

***Phormium tenax* 'Maomao'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]), nomen nudum.

Syn. *Phormium tenax* 'Mao Mau' Hort.

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland.

***Phormium tenax* 'Matawai Taniwha'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 16* [1988]). Described as being "very tall, slightly bendy flax. Leaves a yellowy bronze color with darker shadings. Reddish brown margin and keel. Very tall seed heads. Bright salmon red inside cut blade".

***Phormium tenax* 'Mataroa'**

(*Flax Commissioners, 69* [1871]). Not described, but listed as being from "Pipiriki district, strong and durable; short fibre . . .".

Syn. *Phormium tenax* 'Mataroa' (E Best, *Forest Lore of the Maori, 101* [1942]), nomen nudum.

***Phormium tenax* 'Mawaru'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 8* [1988]). Described as being a "medium to tall bush, bendy, wide, soft, and shiny blades. Pale yellow-green with a very pale cream margin and keel. Produces flower heads on very dark purple stems and later, rather droopy, twisted seed pods". They also note that it is perhaps a hybrid or a *Phormium cookianum* variety.

***Phormium tenax* 'Moorlandii'**

(J Fraser and A Hemsley, *Johnson's Gardeners Dictionary*, 748 [1913]). Described as having "leaves variegated".

***Phormium tenax* 'Motu-o-rui'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 116 [1870]). Described as being a "variegated kind".

Syn. *Phormium tenax* 'Motu-o-nui' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 15 [1988]). Described as being of "medium height, straight, strong very wide green blades unevenly striped with white. Gothic pointed. Very few, very small flower heads".

Syn. *Phormium tenax* 'Motu-oruhi' (E Best, *Transactions N.Z. Institute Vol. 41*, 231-286 [1909]). Listed as being grown by the Tuhoe Tribe.

Syn. *Phormium tenax* 'Motuaruhi' (E Best, *Forest Lore of the Maori*, 101 [1942]). Listed as being an "inferior variety".

***Phormium tenax* 'Nanum'**

(Lebas, *Revue Horticole*, 418 [1877]). Detailed botanical description in French.

***Phormium tenax* 'Ngaro'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]). Not described, but listed as having been grown on the West Coast of the North Island and containing a stiff fibre.

***Phormium tenax* 'Ngaro Waaka'**

(*Flax Commissioners*, 8-9 [1870]). Described as the leaf being a "bright green (with a) red edge".

Syn. *Phormium tenax* 'Ngarowaka' (*Flax Commissioners*, 70 [1871]). Described as the leaves being "bright green . . . (with a) . . . red edge".

***Phormium tenax* 'Ngatotomawe'**

(*Flax Commissioners*, 70 [1871]). Not described, but listed as being grown at Opunake and having a breaking strain of 84%.

Syn. *Phormium tenax* 'Nga Otomawe' (James Hector, *Phormium tenax as a Fibrous Plant* [1889]), nomen nudum. Listed as being from Opunake.

***Phormium tenax* 'Ngutu Kaka'**

(*Flax Commissioners*, 8-9 [1870]). Described as having a "dark green" leaf.

Syn. *Phormium tenax* 'Ngutukaka' (*Flax Commissioners*, 70 [1871]). Described as having a "dark green leaf" and listed with *Phormium tenax* 'Poitaniwha'.

***Phormium tenax* 'Ngutunui'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 117* [1870]). Not described, but listed as being grown on the West Coast of the North Island and containing a stiff fibre.

Syn. *Phormium tenax* 'Ngutu-nui' (E Best, *Transactions N.Z. Institute Vol. 31, 625-657* [1899]), nomen nudum.

Syn. *Phormium tenax* 'Ngatunui' (*New Zealand Department of Agriculture Annual Report, 405-412* [1908]). Described as being "a drooping variety with a thin leaf and a red butt".

***Phormium tenax* 'Ngutu Parura'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 117* [1870]). Not described, but listed as being grown on the West Coast of the North Island and containing a stiff fibre.

Syn. *Phormium tenax* 'Ngutuparera' (*Flax Commissioners, 8-9* [1870]). Listed as being grown in the New Plymouth area.

NOTES: In *Flax Commissioners* (1871) it is noted that this cultivar may be the same a *Phormium tenax* 'Parera'.

Syn. *Phormium tenax* 'Ngutuparura' (*Flax Commissioners, 70* [1871]).

***Phormium tenax* 'Nguturua'**

(*New Zealand Department of Agriculture Annual Report, 405-412* [1908]). Not described, but listed as having a fine fibre.

Syn. *Phormium tenax* 'Ngutuwhine' (*New Zealand Department of Agriculture Annual Report, 405-412* [1908]), nomen nudum.

***Phormium tenax* 'Nigromarginetum'**

(*Gauntlett Nursery Catalogue* [1910] as *Phormium tenax* 'Nigra-marginata'). Listed as being new.

***Phormium tenax* 'Nigrolimbatum'**

(G Nicholson, *The Century Supplement to the Illustrated Dictionary of Gardening and Encyclopedia of Horticulture, 597* [1901] as *Phormium tenax* 'Nigro-limbatum'). Described as having "leaves glaucous-green, erect, rather broad, margined blackish-purple; the points split, both sides of each of the divided portions having the blackish-purple margin".

***Phormium tenax* 'Nigropictum'**

(G Nicholson, *The Illustrated Dictionary of Gardening Vol. 4*, 106 [1886] as *Phormium tenax* 'Nigro-pictum'). Described as having "leaves deep green, about two feet long and one-and-a-quarter inches wide, narrowly edged with blackish-purple, the edge becoming broader and more distinct on the base, where it forms a conspicuous zig-zag line, elegantly spread out as the plants become mature. A compact growing form, much dwarfer in habit than the type, and smaller also in foliage".

***Phormium tenax* 'Oka Oka'**

(*Flax Commissioners*, 70 [1871]), nomen nudum. Not described, but listed as being one of the best varieties.

Syn. *Phormium tenax* 'Okaoka' (James Hector, *Phormium tenax as a Fibrous Plant* [1889]), nomen nudum. Described being as one of the best varieties.

***Phormium tenax* 'Omahuta' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having long wide leaves of a grey-green colour.

***Phormium tenax* 'Opiki'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 17 [1988]). Described as having "very tall, wide, medium green blades. Few korari".

***Phormium tenax* 'Oue'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]). Not described, but listed as being "found chiefly at Maungatautari".

Syn. *Phormium tenax* 'One' (Thomas Kelly, *The Soil, Climate and Capabilities of Taranaki*, [1866]).

Syn. *Phormium tenax* 'Ouhe' (*Flax Commissioners*, 70 [1871]), nomen nudum.

***Phormium tenax* 'Oue Roa'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Oueroa' (*Flax Commissioners*, 69 [1871]), nomen nudum. Listed under *Phormium tenax* 'Huhiroa' as a possible synonym.

***Phormium tenax* 'Paheke'**

(*Flax Commissioners*, 70 [1871]). Not described, but listed as having a breaking strain of 87%.

***Phormium tenax* 'Pango'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 19 [1988]). Described as being a "short, bendy flax . . . blades are a bronze color. Reddish brown margin and keel. Brownish purple korari. Flowers well".

***Phormium tenax* 'Paoa'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 7 [1988]). Described as being a bush of a "yellowy-green appearance, slightly droopy leaves, soft but strong. Margin and keel have fine bright orange lines. Yellow shading on tips of young blades which are gothic pointed. Flowers freely, long korari with dense strong seed pods".

***Phormium tenax* 'Parekawariki'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Parera'**

(*Flax Commissioners*, 70 [1871]), nomen nudum. Listed as being from Opunake and perhaps a synonym of *Phormium tenax* 'Ngutuparera'.

***Phormium tenax* 'Paritaniwha'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847] as 'Paritanewha'), nomen nudum. Listed as being found chiefly at Maungatautari. Syn. *Phormium tenax* 'Paretaniwha' (*Flax Commissioners*, 70 [1871]). Described as being the "yellow hill flax". Syn. *Phormium tenax* 'Pari-taniwha' (E Best, *Transactions N.Z. Institute Vol. 31*, 625-657 [1899]), nomen nudum.

***Phormium tenax* 'Pato'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

***Phormium tenax* 'Pehu'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Pendulum'**

(*Gauntlett Nursery Catalogue*, [1910] as *Phormium tenax* 'Pendula'). Described as having leaves to 15 cm wide.

***Phormium tenax* 'Pihere' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having long narrow, dark green leaves.

***Phormium tenax* 'Pikoko'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]), nomen nudum.

***Phormium tenax* 'Poi Taniwha'**

(*Flax Commissioners, 819* [1870] as *Phormium tenax* 'Poi Tamwha'[sic.]). Described as having "dark green" leaves.

Syn. *Phormium tenax* 'Poitaniwha' (*Flax Commissioners, 70* [1871]). Described as having a "dark green" leaf and listed with *Phormium tenax* 'Ngutukaka'.

***Phormium tenax* 'Potaka'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 20* [1988]). Described as having "tall, slightly bendy, blue-green leaves with powdery blue undersides. Black margin and keel. Sends up plenty of very tall korari with light seed pods".

***Phormium tenax* 'Potango'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]), nomen nudum.

***Phormium tenax* 'Powerscourtii'**

(*Die Gartenwelt, 3* [1907]). Original publication not seen.

Syn. *Phormium tenax* 'Powercourt Variety' (David Watson, *Gardeners Chronicle, 188* [1908]), nomen nudum.

***Phormium tenax* 'Pupu'**

(*Flax Commissioners, 8-9* [1870]). Described as having leaves that are "yellowish green, brown butts, red edge".

Syn. *Phormium tenax* 'Papu' (*Flax Commissioners, 70* [1871]). Described as having leaves a "yellowish-green; brown butts, red edge".

***Phormium tenax* 'Purple Giant'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs, 271* [1972]). Includes a detailed botanical description.

***Phormium tenax* 'Purpureum'**

(*Horton Nurs. Cat.* [1906-07] as *Phormium tenax* 'Purpurea'), nomen nudum.

Syn. *Phormium tenax* var. *purpurea* (G Mallett, *Gardeners Chronicle*, 148 [1908]).

Syn. *Phormium* 'Purpureum' (*C E Gibbons and Co. [Christchurch] Nursery Catalogue* [1913-14]). Described as having "dark, purple foliage, sometimes striped with red".

***Phormium tenax* 'Purpureum Superbum'**

(*A W Buxton Limited, Nurserymen and Seedsmen Nurs. Cat.* [1911] as *Phormium tenax purpureum superba*).

Syn. *Phormium tenax* 'Superba' (*Lennie Nurs. Cat.* [c.1925]). Described as "deep, broad, purple blade".

***Phormium tenax* 'Putaiore'**

(*New Zealand Department of Agriculture Annual Report*, 405 [1908]). Described as being an "erect variety, growing from 8ft. to 10ft. high, with a leaf even throughout".

***Phormium tenax* 'Radiance'**

(L J Metcalf, *Journal of the Royal New Zealand Institute of Horticulture N.S.1*, 172 [1969]). Includes a detailed botanical description.

Syn. *Phormium tenax* 'Pare Kore Tawa' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Parekoritawa' (*Flax Commissioners*, 8-9 [1870]). Described as having leaves "of a bright green, striped longitudinally by a brimstone color; the edge and keel is of an orange color".

Syn. *Phormium tenax* 'Parikaritawa' (*New Zealand Department of Agriculture Annual Report*, 412 [1908]), nomen nudum. Listed as being cultivated on the West Coast as far south as Wanganui.

NOTES: Although the name 'Pare Kore Tawa' was published prior to 'Radiance' the International Registrar has advised that 'Radiance' is to be conserved because it is the established name in horticulture and a change would lead to confusion (ICNCP, Art. 46).

***Phormium tenax* 'Rangiwaho'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 15 [1988]). Described as being a "short bush, bendy leaves, with reddish brown margin and keel. Small flower heads with heavy seed pods".

***Phormium tenax* 'Rataroa'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]). Not described, but listed as yielding the best fibre.

***Phormium tenax* 'Ratawa'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]), nomen nudum. Described as being found chiefly at Hauraki.

NOTES: *Flax Commissioners* (1871) comment that this name is probably misprinted for *Phormium tenax* 'Rataroa'.

***Phormium tenax* 'Rauehu'**

(E Best, *Forest Lore of the Maori*, 101 [1942]). Not described, but listed as yielding a good fibre.

***Phormium tenax* 'Raumoa'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]), nomen nudum. Listed as being found chiefly at Taranaki.

***Phormium tenax* 'Rautakiri' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves with black edges.

***Phormium tenax* 'Rehutai' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves of a medium green colour with distinctive brown edges and tips.

***Phormium tenax* 'Rehutairoa' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are yellowish, wide and very soft.

***Phormium tenax* 'Rerehape'**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1847]). Not described, but listed as being found chiefly at Maungatautari. Syn. *Phormium tenax* 'Ririhape' (Thomas Kelly, *The Soil, Climate and Capabilities of Taranaki* [1866]).

***Phormium tenax* 'Rongotainui'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2, 117* [1870]), nomen nudum.

Syn. *Phormium tenax* 'Rongotinui' (*Flax Commissioners, 69-71* [1871]), nomen nudum.

Syn. *Phormium tenax* 'Rongoinui' (James Hector, *Phormium tenax as a Fibrous Plant* [1872]), nomen nudum.

***Phormium tenax* 'Ruahine'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 18* [1988]). Described as having "tall, straight, strong yellow green blades. Light orange keel and margins. Tall thin korari with light seed heads".

***Phormium tenax* 'Ruapani'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 18* [1988]). Described as having "tall, straight, strong medium green blades. Reddish brown keel and margins on the older leaf and a fine orange-red on the younger rito leaves".

***Phormium tenax* 'Ruatapu'**

(E Best, *Transactions N.Z. Institute Vol. 31, 625-657* [1899]), nomen nudum.

***Phormium tenax* 'Ruawai'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection, 9* [1988]). Described as having "tall, rather bendy leaves. Bright, light blue-green blades. Silver blue, powdery undersides. Black margin and keel. Orange keel and black margin on young leaf. Silver purple shading at base of plant".

***Phormium tenax* 'Rukutia'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56, 704* [1926]), nomen nudum.

***Phormium tenax* 'Ruumoa'**

(James Hector, *Phormium tenax as a Fibrous Plant* [1872]). Described as having a "darkish green leaf; broad red-brown edge on upper side".

***Phormium tenax* 'Saundersii'**

(Wright, *Johnson's Gardeners Dictionary, 748* [1913]). Described as being a "dwarf form".

***Phormium tenax* 'Striatum'**

(Lennie Nurs. Cat. [c.1925] as *Phormium tenax* 'Striata'). Described as being "yellow striped".

***Phormium tenax* 'Taiore'**

(*Flax Commissioners*, 8-9 [1870]). Described as having leaves that are "light green, and has a wide black edge".

Syn. *Phormium tenax* 'Taeore' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 10 [1988]).

Syn. *Phormium tenax* 'Tai One' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

***Phormium tenax* 'Takaiapu'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Takahiapu' (*New Zealand Department of Agriculture Annual Report*, 405-412 [1908]), nomen nudum.

***Phormium tenax* 'Tamure'**

(E Best, *Transactions N.Z. Institute Vol. 41*, 231-286 [1909]), nomen nudum.

***Phormium tenax* 'Taneawai'**

(E Best, *Transactions N.Z. Institute Vol. 31*, 625-657 [1899]). Described as a "variegated flax".

Syn. *Phormium tenax* 'Tane-a-wai' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 14 [1988]). Described as being of "medium height, rather bendy, wide blades. Brown margins and keel".

***Phormium tenax* 'Tangaroa' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are very short, dark green with a black edge.

***Phormium tenax* 'Taniwha'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 8 [1988]). Described as having "deep brown tones with crimson, almost translucent margins and markings along centre of blades. Sometimes known as the blue flax because of the distinct purply-blue bloom on the underside of the leaves and on the korari".

***Phormium tenax* 'Tapamangu'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 11 [1988]). Described as having "straight, stiff pale green blades. Black margin and keel. Very seldom flowers".

Syn. *Phormium tenax* 'Seifert's Superior' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 11 [1988]).

***Phormium tenax* 'Tapoto'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 116 [1870]), nomen nudum.

NOTES: Sometimes erroneously called *Phormium tenax* 'Tihore' or 'Takiri' (*Flax Commissioners*, 1871).

Syn. *Phormium tenax* 'Takirikau' (*Flax Commissioners*, 8-9 [1870]), nomen nudum.

***Phormium tenax* 'Tarariki'**

(Thomas Kelly, *The Soil, Climate and Capabilities of Taranaki* [1866]), nomen nudum.

Syn. *Phormium tenax* 'Tara Rika' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Tararika' (*Flax Commissioners*, 8-9 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Tupurupuru' (Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 6 [1988]).

***Phormium tenax* 'Taringa Hoiho' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are medium green colour, narrow and pointed, turning out at the tips.

***Phormium tenax* 'Taroa'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56*, 704 [1926]), nomen nudum.

***Phormium tenax* 'Tawai Kakako'**

(*Flax Commissioners*, 69-71 [1871]) . Not described, but listed as being a "dark color when first scraped . . .".

***Phormium tenax* 'Teheke' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves of medium length, fairly wide and of a yellow green colour.

***Phormium tenax* 'Te Mata'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 19 [1988]). Described as being "very tall, up to 3 m. Overall bush has a pinkish bronze appearance, as the young leaves have a crimson coloured veining along the bronze leaf. Red margin and keel. No korari".

***Phormium tenax* 'Tepuna'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

***Phormium tenax* 'Te Tatua'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 16 [1988]). Described as having "short, straight, strong, pointed medium green blades. Bright red orange keel and margins. Plenty of very tall korari with short flower heads".

***Phormium tenax* 'Tiheru'**

(*Flax Commissioners*, 69-71 [1871]) . Not described, but listed as having a breaking strain of 98%.

***Phormium tenax* Tihore Group**

(C J and L F Selwyn, *Annals of the Diocese of New Zealand*, 241 [1947]). Described as being that group of plants whose fibre is of such quality that it "requires only to be rent with the hand and nails, without scraping, and is prepared with the greatest ease".

Syn. *Phormium tenax* 'Tihore' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Taihore' (*Flax Commissioners*, 69-71 [1871]) . Described as being "very strong", "best fibre" and "best variety".

Syn. *Phormium tenax* 'Takiri' (*Flax Commissioners*, 8-9 [1870]), nomen nudum.

***Phormium tenax* 'Tika'**

(Johannes Andersen, *Transactions N.Z. Institute Vol. 56*, 704 [1926]). Described as being "ordinary varieties".

***Phormium tenax* 'Tipareouni'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Tipuna'**

(*Flax Commissioners*, 8-9 [1870]), nomen nudum.

NOTES: This may be the same as *Phormium tenax* 'Tepuna'.

***Phormium tenax* 'Tito-o-moe-wai'**

(*Flax Commissioners*, 8-9 [1870]). Described as having a "long red edged leaf, the point of which falls over".

Syn. *Phormium tenax* 'Titoonewai' (E Best, *Forest Lore of the Maori*, 101 [1942], nomen nudum.

***Phormium tenax* 'Tituao'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Tuau'**

(*Flax Commissioners*, 71 [1871]). Described as being a "coarse plant".

***Phormium tenax* 'Tuawhitu'**

(*Flax Commissioners*, 71 [1871]). Described as having leaves that are "tapering, thin texture, bronzy color, lined and smeared at the upper end, narrow, dark red edge".

***Phormium tenax* 'Tukura'**

(E Best, *Transactions N.Z. Institute Vol. 41*, 231-286 [1909]). Not described, but listed as being a swamp growing variety.

***Phormium tenax* 'Tumara'**

(*Flax Commissioners*, 8-9 [1870]). Described as being "dark green, red edge, and a kind of wave on the leaf".

***Phormium tenax* 'Turepo'**

(*Flax Commissioners*, 71 [1871]). Described as being a "small yellow variety, grows in wet swamps, has a white silky fibre; brown edge and keel".

***Phormium tenax* 'Turingawari'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 8 [1988]). Described as being "a tall soft, bendy flax. Margin and keel reddish brown with light shading on tips of young leaves".

***Phormium tenax* 'Tutae-manu'**

(E Best, *Transactions N.Z. Institute Vol. 31*, 625-657 [1899]). Described as being a "very poor fibre".

***Phormium tenax* 'Tutaewheke'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 11 [1988]). Described as being "medium to tall, with rather bendy blades. Black keel and margins on older blades, with dark, streaky bronze colorings on upperside. Tawny red margins and veining in the young leaves. The young bush has a yellow-bronze appearance".

***Phormium tenax* 'Tutai Wiki'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]), nomen nudum.

***Phormium tenax* 'Uhiroa'**

(*Flax Commissioners*, 71 [1871]), nomen nudum.

NOTES: Possibly a synonym of *Phormium tenax* 'Huhiroa'.

***Phormium tenax* 'Variegatum'**

(*Gardeners Chronicle*, 506 [1864]), nomen nudum.

Syn. *Phormium tenax* 'Variegata' (E A Carriere, *Revue Horticole*, 86 [1878]).

***Phormium tenax* 'Veitchianum'**

(G Nicholson, *The Illustrated Dictionary of Gardening Vol. 5*, 106 [1886]). Described as being "a fine form, with shorter and narrower leaves, which are of a bright pea-green, and have broad stripes of a creamy-white, extending the entire length of each leaf".

Syn. *Phormium* 'Veitchianum' (L H Bailey, *The Standard Cyclopaedia of Horticulture Vol. 3*, 2595 [1922]).

***Phormium tenax* 'Waihinere'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 20 [1988]). Described as having "tall, rather bendy, blue green blades. Dark brownish margin and keel".

***Phormium tenax* 'Wararika'**

(Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 116 [1870]), nomen nudum.

Syn. *Phormium tenax* 'Wara Rika' (Major V C Heaphy, *Transactions N.Z. Institute Vol. 2*, 117 [1870]). Not described, but listed as containing a stiff fibre.

***Phormium tenax* 'Wharanui'**

(*Flax Commissioners*, 8-9 [1870]). Described as having a "much wider leaf (than *Phormium tenax* 'Tapoto') with a red margin".

Syn. *Phormium tenax* 'Waranui' (*Flax Commissioners*, 71 [1871]), nomen nudum.

***Phormium tenax* 'Whararahi'**

(E Best, *Forest Lore of the Maori*, 101 [1942]), nomen nudum.

***Phormium tenax* 'Whareongaonga'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection*, 16 [1988]). Described as being of "short to medium height. Straight, strong, narrow, tapered, yellow green blades. Orange margin and keel. Very few, small flower heads".

***Phormium tenax* 'Wharerohi' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. Described by Gregory (Sue Scheele pers. notes) as having leaves that are thick and of medium length.

***Phormium tenax* 'Williamsii Variegatum'**

(*Duncan and Davies Nursery Catalogue* [1923] as *Phormium tenax* 'Williamsii Variegata'). Detailed botanical description in Metcalf (1972).

Syn. *Phormium tenax* 'Williamsii' (*Duncan and Davies Nursery Catalogue* [c.1928-30] as *Phormium tenax williamsii*).

***Phormium tenax* 'Wini'**

(E Best, *Forest Lore of the Maori*, 101 [1942]). Described as having "dark-edged leaves".

***Phormium tenax* 'Yellow Queen'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 271 [1972]). Includes a detailed botanical description.

***Phormium* 'Thumbelina'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Includes a detailed botanical description.

Syn. *Phormium tenax* 'Thumbelina' (*Duncan and Davies Nursery Catalogue* [1974]).

Syn. *Phormium* 'Thumberlina' Hort. (An orthographic error).

***Phormium* 'Tom Thumb' Hort.**

NOTES: This plant forms an open spreading clump with leaves up to 70 cm X 12-21 mm, green-brown with margin and back of mid-rib black. Introduced by Mr J Burton of Hamilton.

Syn. *Phormium* 'Thom Thumb' Hort. (An orthographic error).

***Phormium* 'Yellow Breaker' Hort.**

NOTES: This plant has erect stiff foliage up to 1-1.2 m high. The main leaf colour is yellow (10A) with green (139C) stripes along the blade that vary in width between 1-8 mm. A sport from *Phormium* 'Yellow Wave' selected and introduced by Mr A Turnbull, Talisman Nurseries Ltd., Otaki in 1990.

***Phormium* 'Yellow Wave'**

(L J Metcalf, *The Cultivation of New Zealand Trees and Shrubs*, 254 [1987]). Includes a detailed botanical description. Selected from a batch of *Phormium* Rainbow Hybrid seedlings by Mr F Jury and distributed by Mr O Gibson (both from Waitara).

INVALID AND ILLEGITIMATE CULTIVAR NAMES IN *PHORMIUM*

***Phormium* 'Bobby Dazzler'**

(*New Zealand Gardener*, 5 [Jan.1990]), nomen nudum.

NOTES: Selected and introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga as a replacement for *Phormium* 'Dazzler' which is unstable and has a tendency to revert. The name is invalid because it was published without a description (ICNCP, Art. 39).

***Phormium* 'Coffee'**

(R Cheek, *Journal of Royal Horticultural Society Vol. 104 (3) 101-106 [1979]*). Described as having "leaves 1 m long, 3 cm wide, bronze, mid-rib red-brown". The name is illegitimate because it is the vernacular name of another plant (ICNCP, Art. 31).

***Phormium cookianum* 'Aureum'**

(Leslie D Foote *Native and Exotic Tree, Shrub and Plant Seeds* [1964-68] as *Phormium colensoi* 'Aureum'), nomen nudum.

NOTES: This name is invalid because it is a latin name published without a description after 1 January 1959 (ICNCP, Art. 36). A new cultivar name is therefore needed. Plants of this cultivar not seen.

***Phormium cookianum* 'Greensleeves' Hort.**

NOTES: Plants of this cultivar not seen. A selection of *Phormium cookianum* introduced by Allenton Nursery, Ashburton, around 1975.

***Phormium cookianum* 'Purpureum' Hort.**

NOTES: Plants of this cultivar not seen.

***Phormium cookianum* 'Wharariki'**

(Sue Scheele and Geoff Walls, *Harakeke: The Rene Orchiston Collection* [1988]).

NOTES: This name is illegitimate because it is a vernacular name for *Phormium cookianum* (ICNCP, Art. 31).

Syn. *Phormium tenax* 'Wharariki' (*Flax Commissioners, 8-9* [1870]). Described as being "very tall broad and tall in its leaf".

***Phormium* 'Goldie' Hort.**

NOTES: Plants of this cultivar not seen.

***Phormium* 'Gold Spire' Hort.**

NOTES: Plants of this cultivar not seen.

***Phormium* 'Pink Panther' Hort.**

NOTES: Plants of this cultivar not seen.

***Phormium* 'Red Witch' Hort.**

NOTES: Plants of this cultivar not seen. Raised by Mr F Jury, Waitara.

***Phormium* 'Scarlet O'Hara' Hort.**

NOTES: Described by Mr H Redgrove in the *Golden Times* (Feb. 1982, Gardening Column) as being a "small flax with bright pink foliage all over save for narrow bronze edges". This name is invalid because it was published in a nontechnical newspaper (ICNCP, Art. 36, Note 1).

***Phormium* 'Sea Jade' Hort.**

NOTES: Plants of this cultivar not seen. Introduced by Duncan and Davies Nursery.

***Phormium* 'Shady Lady' Hort.**

NOTES: Plants of this cultivar not seen. Introduced by Mrs M Jones, New Zealand Flax Hybridisers, Tauranga in 1979.

Syn. *Phormium* 'Shy Lady' Hort.

***Phormium tenax* 'Aoraki' Hort.**

NOTES: Grown in the private collection of the late Mr V Gregory, of Northland. No description given by Mr V Gregory (Sue Scheele pers. notes).

Plants of this cultivar not seen.

***Phormium tenax* 'Bronze'**

(E McClintock and A Leiser, *An Annotated Checklist of Woody Ornamental Plants of California, Oregon and Washington* [1979]), nomen nudum.

NOTES: This name is invalid because it was published without a description (ICNCP, Art. 39).

***Phormium tenax* 'Golden'**

(E McClintock and A Leiser, *An annotated checklist of woody ornamental plants of California, Oregon and Washington* [1979]), nomen nudum.

NOTES: This name is invalid because it was published without a description (ICNCP, Art. 39).

***Phormium tenax* 'Nanum Purpureum'**

(R Cheek, *Journal of the Royal Horticultural Society Vol. 104 (3) 101-106* [1979]). Described as having "leaves 0.3 m long, 1 cm wide, bronzy purple".

NOTES: This name is invalid because it is a Latin name published after 1 January 1959 (ICNCP, Art. 27). A new cultivar name is therefore needed.

***Phormium tenax* 'Red Dwarf'**

(E McClintock and A Leiser, *An Annotated Checklist of Woody Ornamental Plants of California, Oregon and Washington* [1979]), nomen nudum.

NOTES: This name is invalid because it was published without a description (ICNCP, Art. 39).

***Phormium tenax* 'Red Pendula'**

(E McClintock and A Leiser, *An Annotated Checklist of Woody Ornamental Plants of California, Oregon and Washington* [1979]), nomen nudum.

NOTES: This name is invalid because it was published without a description (ICNCP, Art. 39).

***Phormium tenax* 'Toitoi'**

(E Best, *Forest Lore of the Maori, 101* [1942]), nomen nudum.

NOTES: This name is illegitimate because it is the vernacular name of another plant (ICNCP, Art. 31).

**BOTANICAL NAMES PUBLISHED IN *PHORMIUM*
J.R. ET G. FORST.**

Phormium aloides Linnaeus f., *Supplementum Plantarum Vegetabilium* . . . , 205 (1781).

NOTES: A synonym of *Lachenalia aloides* (Linnaeus f.) Ascherson et Graebner, *Synopsis der Mitteleuropaischen Flora* 3, 279 (1905).

Phormium bulbiferum Cyrillo, *Plantarum Rariorum Regni Neapolitani Fasc.1*, 35 (1788).

NOTES: A synonym of *Lachenalia bulbifera* (Cyrillo) Ascherson et Graebner, *Synopsis der Mitteleuropaischen Flora* 3, 279 (1905).

Phormium cookianum Le Jolis, *Bull. Soc. Hort. Cherb.*, 71 (1848) and *London Journal of Botany* 7, 536 (1848) = *Phormium colensoi* Hook. f., *Handbook N.Z. Flora*, 287 (1864).

NOTES: *Phormium colensoi* Hook. f. is treated by Moore and Edgar (1970) as a synonym of *Phormium cookianum*. The type needs to be viewed to determine to which subspecies it belongs.

Phormium cookianum Le Jolis **subsp. *cookianum***

Syn. *Phormium tenax* var. *cookii* E. Regel, *Gartenflora* xviii, t.632, 322 (1869).

NOTES: The illustration in Regel (1869) is of a plant with red tepals, as this is a distinguishing character of *Phormium cookianum* subsp. *cookianum*, the name is treated as a synonym of that subspecies.

Phormium cookianum subsp. ***hookeri*** (Gunn ex Hook. f.) Wardle, *N.Z.J.B. Vol. 17*, 189-196 (1979)≡ *Phormium hookeri* Gunn ex Hook. f., *Bot. Mag.*, 114, t.6973 (1888).

Phormium egmontiana (Nairn and Sons Nurserymen Catalogue, 3 [1889]), nomen nudum.

Phormium flaccidum (Matthews Nursery Catalogue of New Zealand Plants [c.1873]). Described as being "slender growing, pale green".

NOTES: Listed by Fraser and Hemsley (1917) as being from New Caledonia. This is in error for New Zealand and is most probably cited from Wien. (*Ill. Gart. Zeit.* 15, 448 [1890]). Bailey (1922) comments it is "presumably a form of the species (*P.cookianum*)". The use of the epithet "flaccidum" indicates that this may be a form of *Phormium cookianum*. Treated here as incertae sedis.

Phormium forsterianum Colenso, *London Journal of Botany* 3, 8 (1844), nomen nudum.

NOTES: This name has only been mentioned in reference to a specimen and is without a description, it is therefore illegitimate.

Phormium humile Hort. (Pepin, *Revue Horticole*, 51-52 [1853]).

NOTES: Listed as a synonym of *Dianella scabra* Hort.

Phormium hursthousii (Matthews Nursery Catalogue of New Zealand Plants [c.1873]). Described as being a "robust growing variety, black edges".

NOTES: Listed by Fraser and Hemsley (1917) as being from New Caledonia. This is in error for New Zealand and is most probably cited from Wien. (*Ill. Gart. Zeit.* 15, 448 [1890]). Treated here as incertae sedis.

Phormium pumilum Hort. (Pepin, *Revue Horticole* [1853]).

NOTES: A synonym of *Dianella scabra* Hort.

Phormium robustum (Matthews Nursery Catalogue of New Zealand Plants [c.1873]). Described as being "bright, shining green".

NOTES: Listed by Fraser and Hemsley (1917) as being from New Caledonia. This is an error for New Zealand. The use of the epithet "robustum" indicates that this may be a form of *Phormium tenax*. Treated here as incertae sedis.

Phormium tenax J.R. et G.Forst., *Char. Gen. Pl.*, t.24, 48 (1776). Detailed botanical description available in Moore and Edgar (1970).

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