Senate Rural and Regional Affairs and Transport References Committee

Questions on Notice – Monday, 6 August 2012
BRISBANE, QLD

Inquiry into the effect on Australian pineapple growers of importing fresh pineapple from Malaysia

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Rural and Regional Affairs and Transport References Committee

Inquiry into the effect on Australian pineapple growers of importing fresh pineapples from Malaysia

Question Taken on Notice by Growcom

Brisbane Hearing – Monday, 6 August 2012

Dr Gambley: My question is not so much whether it is causing disease on other plant hosts in Malaysia or Hawaii; it is whether it is able to survive on those plants. With plant diseases, there is the primary host where the disease causes the problem – in this case, pineapples – but there is often a whole range of other hosts which the bacteria can survive on in the absence of the pineapple. This is what concerns us. We believe that the risk has been evaluated on the fact that this bacteria only survives on pineapple. We feel that that is not true and that not enough specific studies have been conducted to truly understand what the host range of the bacteria is and therefore how to evaluate that risk properly.

Chair: We had an unexplained event in the Melbourne Botanic Gardens a few years ago with another disease. What other plants do we import that could carry this in?

Dr Gambley: There could possibly be ornamentals. I have not had a chance to review what we import and what, of those plant species, would be a high-risk alternative host. I can find that out.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 2]

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Response:

A list of known imported ornamental species is not easily obtained and is most likely subject to confidentiality agreements. What is known is the list of ornamental species with current import permits. This is publically available through the AQIS ICON database (http://www.aqis.gov.au/icon32/asp/ex_querycontent.asp). For confirmation of which species are actually imported and distributed, please seek advice from the Nursery Industry.

As pineapple is a member of the Bromeiliaceae family, it is possible that several bromeliad species could be hosts of *Erwinia chrysanthemi* (Dickeya spp., pineapple strain). Thus trade in the nursery industry could provide a mechanism for establishment and dispersal of this disease in Australia if it was introduced.

A list of Bromeliad species which are permitted to enter Australia as nursery stock is provided below. These species are permitted to enter from any country based on the following import conditions: C700, C7301, C7302 and C7303.

Table 1. A list of species that are permitted entry subject to conditions C7301, C7302, C7300.

Acanthostachys anassoides	Acanthostachys pitcairnioides	Acanthostachys strobilacea
Aechmea 'Blue Tango'	Aechmea 'Del Mar'	Aechmea 'Inca'
Aechmea abbreviata	Aechmea aciculosa	Aechmea aculeatosepala
Aechmea aguadocensis	Aechmea alba	Aechmea alegrensis
Aechmea allenii	Aechmea alopecurus	Aechmea amazonica
Aechmea amicorum	Aechmea ampla	Aechmea andersonii
Aechmea angustifolia	Aechmea anomala	Aechmea apocalyptica
Aechmea aquilega	Aechmea aquilegia	Aechmea aquilegia var. aquilegia
Aechmea araneosa	Aechmea arenaria	Aechmea aripensis
Aechmea augusta	Aechmea azurea	Aechmea bahiana
Aechmea bambusoides	Aechmea barleei	Aechmea beeriana
Aechmea biflora	Aechmea blanchetiana	Aechmea blanchetii
Aechmea blumenavii	Aechmea bracteata	Aechmea brassicoides
Aechmea brevicollis	Aechmea bromeliifolia	Aechmea burle-marxii
Aechmea caesia	Aechmea callichroma	Aechmea calyculata
Aechmea campanulata	Aechmea candida	Aechmea capixabae
Aechmea carvalhoi	Aechmea castanea	Aechmea castelnavii
Aechmea cathcartii	Aechmea caudata	Aechmea cephaloides
Aechmea chantinii	Aechmea chiriquensis	Aechmea chlorophylla
Aechmea chromatica	Aechmea coelestis	Aechmea colombiana
Aechmea columnaris	Aechmea comata	Aechmea conifera
Aechmea conspicuiarmata	Aechmea constantinii	Aechmea contracta
Aechmea cornui	Aechmea correia-arauji	Aechmea correia-araujoi
Aechmea corymbosa	Aechmea cucullata	Aechmea cylindrata
Aechmea cymospaniculata	Aechmea dactylina	Aechmea dichlamydea
Aechmea dichlamydea var. Trinitensis	Aechmea discordiae	Aechmea disjuncta
Aechmea distans	Aechmea distichantha	Aechmea drakeana
Aechmea echinata	Aechmea egleriana	Aechmea emmerichiae
Aechmea entringeri	Aechmea eurycorymbus	Aechmea farinosa
Aechmea fasciata	Aechmea fasciata var. purpurea	Aechmea fasciata x cucullata
Aechmea fendleri	Aechmea filicaulis	Aechmea flavorosea
Aechmea floribunda	Aechmea fosteriana	Aechmea fraseri
Aechmea friedrichsthalii	Aechmea froesii	Aechmea fuerstenbergii
Aechmea fulgens	Aechmea fulgens var.	Aechmea fulgens x ramose

	discolor	
Aechmea gamosepala	Aechmea gentryi	Aechmea germinyana
Aechmea gigantean	Aechmea glomerata	Aechmea guaratubensis
Aechmea gurkeniana	Aechmea haltonii	Aechmea hoppii
Aechmea immersea	Aechmea inermis	Aechmea involucrata
Aechmea isabellina	Aechmea jungurudoensis	Aechmea kentii
Aechmea kertesziae	Aechmea kienastii	Aechmea kleinii
Aechmea kuntzeana	Aechmea lamarchei	Aechmea lanata
Aechmea lasseri	Aechmea laxiflora	Aechmea legrelliana
Aechmea leptantha	Aechmea leucocarpa	Aechmea leucolepis
Aechmea lilacinantha	Aechmea lindenii	Aechmea lindenii var. lindenii
Aechmea lindenii var. makoyana	Aechmea lingulata	Aechmea longifolia
Aechmea longisepala	Aechmea lueddemanniana	Aechmea lymanii
Aechmea macracantha	Aechmea macrochlamys	Aechmea maculata
Aechmea magdalenae	Aechmea manzanaresiana	Aechmea mariae-reginae
Aechmea megalantha	Aechmea melinonii	Aechmea mertensii
Aechmea mexicana	Aechmea micrantha	Aechmea milsteiniana
Aechmea miniata	Aechmea miniata var. discolor	Aechmea mollis
Aechmea moorei	Aechmea mulfordii	Aechmea multiceps
Aechmea multiflora	Aechmea muricata	Aechmea nallyi
Aechmea napoensis	Aechmea nidularioides	Aechmea nudicaulis
Aechmea nudicaulis var. aureo-rosea	Aechmea nudicaulis var. nudicaulis	Aechmea nudicaulis var. rubrifolia
Aechmea oligosepala	Aechmea oligosphaera	Aechmea organensis
Aechmea orlandiana	Aechmea ornata var. hoehneana	Aechmea ornata var. nationalis
Aechmea ortgiesii	Aechmea pabstii	Aechmea pallida
Aechmea paniculata	Aechmea paniculigera	Aechmea paradoxa
Aechmea parviflora	Aechmea patentissima	Aechmea patriciae
Aechmea pectinata	Aechmea penduliflora	Aechmea perforata
Aechmea perforate	Aechmea phanerophlebia	Aechmea pimenti-velosoi
Aechmea pineliana	Aechmea pineliana var. minuta	Aechmea pineliana var. pineliana
Aechmea pittieri	Aechmea platynema	Aechmea podantha
Aechmea poitaei	Aechmea politii	Aechmea polyantha
Aechmea porteoides	Aechmea pubescens	Aechmea purpureo-rosea
Aechmea pyramidalis	Aechmea racinae	Aechmea ramosa
Aechmea recurvata	Aechmea recurvata var. benrathii	Aechmea recurvata var. Ortgiesii

Aechmea regularis	Aechmea remotiflora	Aechmea retusa
Aechmea roberto-seidelii	Aechmea rodriguesiana	Aechmea roeseliae
Aechmea romeroi	Aechmea rosea	Aechmea rubens
Aechmea rubrolilacina	Aechmea schiedeana	Aechmea schultesiana
Aechmea seideliana	Aechmea seidelii	Aechmea serrata
Aechmea servitensis	Aechmea setigera	Aechmea 'Sister Smoothie P'
Aechmea skotakii	Aechmea smithiorum	Aechmea spectabilis
Aechmea sphaerocephala	Aechmea squarrosa	Aechmea stephanophora
Aechmea streptocalycoides	Aechmea strobilacea	Aechmea strobilina
Aechmea suaveolens	Aechmea sulcata	Aechmea tayoensis
Aechmea tessmannii	Aechmea tillandsioides	Aechmea tocantina
Aechmea tonduzii	Aechmea triangularis	Aechmea triticina
Aechmea vallerandi	Aechmea vanhoutteana	Aechmea veitchii
Aechmea victoriana	Aechmea victoriana var. discolor	Aechmea vriesioides
Aechmea warasii	Aechmea weberbaueri	Aechmea weberi
Aechmea weilbachii	Aechmea werdermannii	Aechmea williamsii
Aechmea winkleri	Aechmea wittmackiana	Aechmea woronowii
Aechmea xiphophylla	Aechmea zebrine	Agallostachys chrysantha
Agallostachys guyanensis	Alcantarea benzingii	Alcantarea brasiliana
Alcantarea burle-marxii	Alcantarea distractila	Alcantarea duarteana
Alcantarea edmundoi	Alcantarea extensa	Alcantarea farneyi
Alcantarea geniculata	Alcantarea glaziouana	Alcantarea 'Grace'
Alcantarea hatschbachii	Alcantarea heloisae	Alcantarea imperialis
Alcantarea longibracteata	Alcantarea lurida	Alcantarea mucilaginosa
Alcantarea nahoumii	Alcantarea nevaresii	Alcantarea nigripetala
Alcantarea odorata	Alcantarea paniculata	Alcantarea patriae
Alcantarea 'Pinegrove Orange'	Alcantarea regina	Alcantarea roberto-kautskyi
Alcantarea simplicisticha	Alcantarea tortuosa	Alcantarea turgida
Alcantarea vasconcelosiana	Alcantarea vinicolor	Alcantarea 'Visconde de Maua'
Allardtia cyanea	Allardtia potockii	Allardtia roezlii
Ananas ananas	Ananas ananassoides	Ananas bracteatus
Ananas comosus	Ananas duckei	Ananas fritzmuelleri
Ananas lucidus	Ananas macrodontes	Ananas microstachys
Ananas monstrosus	Ananas muricatus	Ananas nanus
Ananas parguazensis	Ananas sagenaria	Ananas sativus
Ananas sylvestris	Ananassa sagenaria	Andrea spectabilis
Androlepis skinneri	Anoplophytum binoti	Anoplophytum didistichum
Anoplophytum incanum	Anoplophytum lineare	Anoplophytum longebracteatum
Anoplophytum rollissonii	Anoplophytum	Anoplophytum stramineum

	sprengelianum	
Anoplophytum strictum	Anoplophytum vittatum	Araeococcus chlorocarpus
Araeococcus flagellifolius	Araeococcus goeldianus	Araeococcus micranthus
Araeococcus parviflorus	Araeococcus pectinatus	Aregelia carcharodon
Aregelia compacta	Aregelia concentrica	Aregelia coriacea
Aregelia cruenta	Aregelia cyanea	Aregelia eleutheropetala
Aregelia farinosa	Aregelia indecora	Aregelia laurentii
Aregelia leucophoea	Aregelia longebracteata	Aregelia macahensis
Aregelia marmorata	Aregelia rubrospinosa	Aregelia sarmentosa
Aregelia spectabilis	Billbergia 'Alakai'	Billbergia albo-rosea
Billbergia alfonsi-joannis	Billbergia amoena	Billbergia angustifolia
Billbergia aurantiaca	Billbergia 'Berry Blast'	Billbergia bifrons
Billbergia bivittata	Billbergia bradeana	Billbergia brasiliensis
Billbergia buchholtzii	Billbergia chantinii	Billbergia chiapensis
Billbergia chlorantha	Billbergia chlorosticta	Billbergia commixta
Billbergia cruenta	Billbergia cylindrostachya	Billbergia decora
Billbergia distachia	Billbergia distachia x amoena	Billbergia elegans
Billbergia eloiseae	Billbergia euphemiae	Billbergia fasciata
Billbergia filicaulis	Billbergia forgetiana	Billbergia fosteriana
Billbergia horrida	Billbergia iridifolia	Billbergia kuhlmannii
Billbergia lanuginosa	Billbergia latifolia	Billbergia leptopoda
Billbergia lietzei	Billbergia lutea	Billbergia lymanii
Billbergia macrocalyx	Billbergia macrolepis	Billbergia macrostachya
Billbergia magnifica	Billbergia manarae	Billbergia marmornata
Billbergia maxima	Billbergia meyeri	Billbergia minarum
Billbergia morelii	Billbergia musaica	Billbergia nana
Billbergia nudicaulis	Billbergia nutans	Billbergia nutans x amoena
Billbergia oblonga	Billbergia oxypetala	Billbergia oxysepala
Billbergia pallidiflora	Billbergia paniculata	Billbergia parviflora
Billbergia 'Pipeline'	Billbergia porteana	Billbergia 'Purple Cow'
Billbergia purpureo-rosea	Billbergia pyramidalis	Billbergia pyramidata
Billbergia quadricolor	Billbergia reichardtii	Billbergia richteriana
Billbergia rosea	Billbergia rubicunda	Billbergia sanderiana
Billbergia saundersii	Billbergia seideliii	Billbergia spacelata
Billbergia speciosa	Billbergia stenopetala	Billbergia stipularis
Billbergia stipulata	Billbergia tessmannii	Billbergia tillandsioides
Billbergia tweedieana	Billbergia velascana	Billbergia venezuelana
Billbergia violacea	Billbergia viridiflora	Billbergia vittata
Billbergia 'Watermelon Man'	Billbergia zebrina	Brocchinia acuminata

Brocchinia cordylinoides	Brocchinia gilmartiniae	Brocchinia micrantha
Brocchinia oliva-estevae	Brocchinia reducta	Brocchinia secunda
Brocchinia tatei	Bromelia agavifolia	Bromelia albo-rosea
Bromelia angustifolia	Bromelia antiacantha	Bromelia aurea
Bromelia balansae	Bromelia bracteata	Bromelia chrysantha
Bromelia clandestina	Bromelia concentrica	Bromelia crassa
Bromelia cruenta	Bromelia daguensis	Bromelia denticulata
Bromelia discolor	Bromelia epiphytica	Bromelia flemingii
Bromelia fosteriana	Bromelia grandiflora	Bromelia humilis
Bromelia interior	Bromelia karatas	Bromelia lagopus
Bromelia latifolia	Bromelia lindleyana	Bromelia lutea
Bromelia macrodosa	Bromelia marmorata	Bromelia moensis
Bromelia morreniana	Bromelia muricata	Bromelia muricata
Bromelia neoregelia	Bromelia nidus-puellae	Bromelia nudicaulis var. caraguata
Bromelia paniculata	Bromelia paniculigera	Bromelia pauciflora
Bromelia pinguin	Bromelia plumieri	Bromelia poeppigii
Bromelia sagenaria	Bromelia scarlatina	Bromelia serra
Bromelia sphacelata	Bromelia strobilina	Bromelia sylvestris
Bromelia sylvicola	Bromelia urbaniana	Canistropsis albiflora
Canistropsis billbergioides	Canistropsis burchellii	Canistropsis correia-araujoi
Canistropsis marceloi	Canistropsis microps	Canistropsis seidelii
Canistropsis simulans	Canistrum aurantiacum	Canistrum auratum
Canistrum 'Black Sands'	Canistrum cyathiforme	Canistrum 'Flare'
Canistrum fosterianum	Canistrum guzmanioides	Canistrum lindenii
Canistrum minutum	Canistrum montanum	Canistrum roseum
Canistrum seidelianum	Canistrum triangulare	Canistrum x Aechmea
Caraguata acorifolia	Caraguata andreana	Caraguata cardinalis
Caraguata devansayana	Caraguata fuerstenbergiana	Caraguata gloriosa
Caraguata hygrometrica	Caraguata latifolia	Caraguata latifolia var. clavata
Caraguata lingulata	Caraguata magnifica	Caraguata mosquerae
Caraguata musaica	Caraguata osyana	Caraguata sanguinea
Caraguata schlumbergerii	Caraguata splendens	Caraguata straminea
Caraguata vanvolxemii	Caraguata virens	Caraguata zahnii
Catopsis alba	Catopsis berteroniana	Catopsis compacta
Catopsis floribunda	Catopsis gracilis	Catopsis hahnii
Catopsis juncifolia	Catopsis lundelliana	Catopsis mexicana
Catopsis micrantha	Catopsis minimiflora	Catopsis morreniana
Catopsis nitida	Catopsis nutans	Catopsis oerstediana
Catopsis paniculata	Catopsis pedicellata	Catopsis pendula
Catopsis penduliflora	Catopsis sessiliflora	Catopsis subulata
Chevaliera cariocae	Chevaliera germinyana	Chevaliera gigantea

Chevaliera sphaerocephala	Chevaliera stephanophora	Chevaliera strobilacea
Chevalieria germinyana	Cochliopetalum stamineum	Cottendorfia albicans
Cottendorfia rusbyi	Cryptanthus acaulis	Cryptanthus arelii
Cryptanthus argyrophyllus	Cryptanthus bahianus	Cryptanthus beuckeri
Cryptanthus bivittatus	Cryptanthus bromelioides	Cryptanthus burle-marxii
Cryptanthus caulescens	Cryptanthus chinensis	Cryptanthus colnagoi
Cryptanthus coriaceus	Cryptanthus correia-araujoi	Cryptanthus crassifolius
Cryptanthus delicatus	Cryptanthus diamantinensis	Cryptanthus dianae
Cryptanthus dorothyae	Cryptanthus exaltatus	Cryptanthus fosterianus
Cryptanthus giganteus	Cryptanthus glaziouii	Cryptanthus glaziovii
Cryptanthus grazielae	Cryptanthus lacerdae	Cryptanthus leopoldo-horstii
Cryptanthus lutherianus	Cryptanthus marginatus	Cryptanthus maritimus
Cryptanthus morrenianus	Cryptanthus osiris	Cryptanthus pickelii
Cryptanthus praetextus	Cryptanthus pseudopetiolatus	Cryptanthus pseudoscaposus
Cryptanthus pumilus	Cryptanthus sanctaluciae	Cryptanthus sinuosus
Cryptanthus ubairensis	Cryptanthus warasii	Cryptanthus warren-loosei
Cryptanthus x Neoregalia	Cryptanthus zonatus	Deinacanthon urbanianum
Dendropogon usneoides	Deuterocohnia brevifolia	Deuterocohnia brevispicata
Deuterocohnia longipetala	Deuterocohnia lorentziana	Deuterocohnia lotteae
Deuterocohnia schreiteri	Diaphoranthema capillaris	Diaphoranthema squamulosa
Diaphoranthema virescens	Disteganthus basilateralis	Disteganthus moensi
Distiacanthus morrenianus	Dyckia altissima	Dyckia argentea
Dyckia brevifolia	Dyckia brevifolia x fosteriana	Dyckia choristaminea
Dyckia cinerea	Dyckia deltoidea	Dyckia densiflora
Dyckia distachya	Dyckia encholirioides	Dyckia estevesii
Dyckia ferox	Dyckia floribunda	Dyckia fosteriana
Dyckia frigida	Dyckia goehringii	Dyckia goiana
Dyckia ibiramensis	Dyckia leptostachya	Dyckia lindevaldae
Dyckia macedoi	Dyckia maritima	Dyckia marnier-lapostollei
Dyckia microcalyx	Dyckia niederleinii	Dyckia platyphylla
Dyckia rariflora	Dyckia remotiflora	Dyckia tuberosa

Dyckia velascana	Edmundoa ambigua	Edmundoa lindenii
Edmundoa perplexa	Encholirion jonghii	Encholirion ynghii
Encholirium bradeanum	Encholirium heloisae	Encholirium jonghii
Encholirium magalhaesii	Encholirium subsecundum	Fascicularia bicolor
Fascicularia pitcairniifolia	Fosterella albicans	Fosterella chiquitana
Fosterella elata	Fosterella fuentesii	Fosterella gracilis
Fosterella latifolia	Fosterella micrantha	Fosterella penduliflora
Fosterella rusbyi	Fosterella schidosperma	Fosterella spectabilis
Fosterella villosula	Fosterella weberbaueri	Fosterella weddelliana
Gravisia brassicoides	Gravisia rubens	Greigia sphacelata
Guzmania acorifolia	Guzmania acuminata	Guzmania 'Ada'
Guzmania albescens	Guzmania alborosea	Guzmania alcantareoides
Guzmania 'Alisha'	Guzmania altsonii	Guzmania amplectens
Guzmania andreana	Guzmania andreettae	Guzmania angustifolia
Guzmania armeniaca	Guzmania 'Audrey'	Guzmania 'Augusta'
Guzmania 'Bailee'	Guzmania barbiei	Guzmania bergii
Guzmania berteroniana	Guzmania besseae	Guzmania bicolor
Guzmania bipartita	Guzmania bismarckii	Guzmania blassii
Guzmania 'Britt'	Guzmania butcheri	Guzmania cabrerae
Guzmania calamifloia	Guzmania calamifolia	Guzmania capitulata
Guzmania capituligera	Guzmania cardinalis	Guzmania cerifera
Guzmania 'Charleston'	Guzmania 'Chiara'	Guzmania 'Cindy'
Guzmania circinnata	Guzmania claviformis	Guzmania 'Colibri'
Guzmania columnaris	Guzmania compacta	Guzmania complanata
Guzmania condensata	Guzmania condorensis	Guzmania confusa
Guzmania conglomerata	Guzmania conifera	Guzmania costaricensis
Guzmania crateriflora	Guzmania crispa	Guzmania cryptantha
Guzmania 'Daniel'	Guzmania danielii	Guzmania delicatula
Guzmania desautelsii	Guzmania devansayana	Guzmania 'Diana'
Guzmania dielsii	Guzmania diffusa	Guzmania dissitiflora
Guzmania donnellsmithii	Guzmania eduardii	Guzmania elvallensis
Guzmania erythrolepis	Guzmania 'Etude'	Guzmania filiorum
Guzmania 'Fire Dragon'	Guzmania 'Fortuna'	Guzmania fuerstenbergiana
Guzmania garciaensis	Guzmania gloriosa	Guzmania 'Graaf van Hoorn'
Guzmania gracilior	Guzmania gracilis	Guzmania guatemalensis
Guzmania harlingii	Guzmania herrerae	Guzmania herthae
Guzmania hirtzii	Guzmania 'Hope'	Guzmania 'Hoppy'
Guzmania 'Hot Lips'	Guzmania hygrometrica	Guzmania imperialis
Guzmania jaramilloi	Guzmania 'Kapoho Fire'	Guzmania kareniae
Guzmania 'Karley'	Guzmania 'Kay'	Guzmania kentii

Guzmania 'Kodiak'	Guzmania kraenzliniana	Guzmania 'Lance'
Guzmania lindenii	Guzmania lingulata	Guzmania lingulata var. cardinalis
Guzmania lingulata var. flammea	Guzmania lingulata var. lingulata	Guzmania lingulata x wittmackii
Guzmania 'Lolita'	Guzmania longibracteata	Guzmania longipetala
Guzmania macropoda	Guzmania maculata	Guzmania madisonii
Guzmania 'Marilyn'	Guzmania 'Matador'	Guzmania megastachya
Guzmania melinonis	Guzmania membranacea	Guzmania minor
Guzmania 'Mirtha'	Guzmania 'Misha'	Guzmania 'Monarch'
Guzmania 'Monica'	Guzmania monostachia	Guzmania morreniana
Guzmania mosquerae	Guzmania mucronata	Guzmania multiflora
Guzmania musaica	Guzmania 'Neon'	Guzmania nicaraguensis
Guzmania 'Olive'	Guzmania 'Optima'	Guzmania ororiensis
Guzmania osyana	Guzmania paniculata	Guzmania panniculata
Guzmania 'Passion'	Guzmania patula	Guzmania pennellii
Guzmania 'Penny Wise'	Guzmania pleiosticha	Guzmania plicatifolia
Guzmania pseudodissitiflora	Guzmania 'Puna Gold'	Guzmania pungens
Guzmania puyoensis	Guzmania rauhiana	Guzmania remyi
Guzmania retusa	Guzmania rhonhofiana	Guzmania 'Rileigh''
Guzmania roezlii	Guzmania rosea	Guzmania 'Rosie'
Guzmania rubrolutea	Guzmania 'Saffron'	Guzmania 'Sangria'
Guzmania sanguinea	Guzmania 'Sasha'	Guzmania 'Savannah'
Guzmania scherzeriana	Guzmania septata	Guzmania 'Sheila'
Guzmania sibundoyorum	Guzmania skotakii	Guzmania 'Snowball'
Guzmania sodiroana	Guzmania spectabilis	Guzmania sprucei
Guzmania squarrosa	Guzmania stenostachya	Guzmania straminea
Guzmania stricta	Guzmania subcorymbosa	Guzmania superba
Guzmania 'Sylvia'	Guzmania testudinis	Guzmania testundinis
Guzmania teucamae	Guzmania teuscheri	Guzmania thyrsoidea
Guzmania 'Tori'	Guzmania 'Trisha'	Guzmania undulatobracteata
Guzmania vanvolxemii	Guzmania variegata	Guzmania variegata x bipartita
Guzmania vinacea	Guzmania 'Viola'	Guzmania viridiflora
Guzmania vittata	Guzmania weberbaueri	Guzmania wittmackii
Guzmania xanthobractea	Guzmania zahnii	Hechtia argentea
Hechtia besseriana	Hechtia carnae	Hechtia cordylinoides
Hechtia epigyna	Hechtia glomerata	Hechtia lottiae
Hechtia macdougallii	Hechtia marnier-lapostollei	Hechtia pringlei
Hechtia rosea	Hechtia roseana	Hechtia stenopetala

Hechtia texensis	Hechtia tillandsioides	Hepetis angustifolia
Hepetis arcuata	Hepetis atrorubens	Hepetis brittoniana
Hepetis brongniartiana	Hepetis burchellii	Hepetis caldasiana
Hepetis carioana	Hepetis funckiana	Hepetis gracilis
Hepetis hemsleyana	Hepetis imbricata	Hepetis klabochiana
Hepetis latifolia	Hepetis lehmannii	Hepetis lindeni
Hepetis maidifolia	Hepetis nigra	Hepetis oerstediana
Hepetis paniculata	Hepetis petiolata	Hepetis platyphylla
Hepetis pulverulenta	Hepetis pungens	Hepetis pyramidata
Hepetis recurvata	Hepetis spectabilis	Hepetis splendens
Hepetis staminea	Hepetis straminea	Hepetis subpetiolata
Hepetis tabuliformis	Hepetis taenipetala	Hepetis undulata
Hepetis xanthocalyx	Hohenbergia antillana	Hohenbergia augusta
Hohenbergia blanchetii	Hohenbergia bracteata	Hohenbergia burle-marxii
Hohenbergia castellanosii	Hohenbergia catingae	Hohenbergia correia-araujoi
Hohenbergia disjuncta	Hohenbergia distans	Hohenbergia edmundoi
Hohenbergia erythrostachys	Hohenbergia ferruginea	Hohenbergia flava
Hohenbergia glomerata	Hohenbergia guatemalensis	Hohenbergia inermis
Hohenbergia lanata	Hohenbergia laxiflora	Hohenbergia legrelliana
Hohenbergia leopoldo-horstii	Hohenbergia membranostrobilus	Hohenbergia multiceps
Hohenbergia nudicaulis	Hohenbergia oligosphaera	Hohenbergia pabstii
Hohenbergia paniculigera	Hohenbergia penduliflora	Hohenbergia pennae
Hohenbergia platynema	Hohenbergia portoricensis	Hohenbergia proctorii
Hohenbergia ramageana	Hohenbergia ridleyi	Hohenbergia rosea
Hohenbergia salzmannii	Hohenbergia stellata	Hohenbergia undulatifolia
Hohenbergia utriculosa	Hohenbergia vestita	Hohenbergiopsis guatemalensis
Hoplophytum augustum	Hoplophytum bracteatum	Hoplophytum cyaneum
Hoplophytum lanuginosum	Hoplophytum nudicaule	Hoplophytum paniculatum
Hoplophytum platynema	Hoplophytum purpureo-roseum	Hoplophytum spicatum
Hoplophytum suaveolens	Hoplophytum unispicatum	Karatas acanthocrater
Karatas carcharodon	Karatas coriacea	Karatas cruenta
Karatas denticulata	Karatas ferdinando-coburgii	Karatas laurentii
Karatas leucophoea	Karatas macracantha	Karatas marmoratum
Karatas nidus-puellae	Karatas plumieri	Karatas princeps
Karatas sarmentosa	Karatas spectabilis	Lamprococcus campanulatus

Lamprococcus chlorocarpus	Lamprococcus corallinus	Lamprococcus farinosus
Lamproconus maidifolius	Lamproconus undulatus	Lamproconus warszcewiczii
Libonia marmornata	Lindmania albicans	Lindmania gracilis
Lindmania penduliflora	Lindmania schidosperma	Lindmania weberbaueri
Lymania corallina	Lymania smithii	Massangea morreniana
Massangea musaica	Mezobromelia bicolor	Mezobromelia capituligera
Mezobromelia hospitalis	Mezobromelia lyman-smithii	Mezobromelia magdalenae
Mezobromelia pleiosticha	Navia arida	Navia brevifolia
Navia igneosicola	Navia splendens	Neoglaziovia concolor
Neoglaziovia variegata	Neoregelia abendrothae	Neoregelia aculeatosepala
Neoregelia aculeatospala	Neoregelia albiflora	Neoregelia alvimii
Neoregelia amandae	Neoregelia ampullacea	Neoregelia angustibracteolata
Neoregelia angustifolia	Neoregelia angusustibracteolata	Neoregelia atroviridifolia
Neoregelia azevedoi	Neoregelia bahiana	Neoregelia binoti
Neoregelia binotii	Neoregelia bragarum	Neoregelia brevifolia
Neoregelia brigadeirensis	Neoregelia brownii	Neoregelia burle-marxii
Neoregelia camorimiana	Neoregelia capixaba	Neoregelia carcharodon
Neoregelia carinata	Neoregelia carolinae	Neoregelia cathcartii
Neoregelia chlorosticta	Neoregelia coimbrae	Neoregelia compacta
Neoregelia concentrica	Neoregelia coriacea	Neoregelia correia-araujii
Neoregelia correia-araujoi	Neoregelia crispata	Neoregelia cruenta
Neoregelia cyanea	Neoregelia dactyloflammans	Neoregelia dayvidiana
Neoregelia diamantinensis	Neoregelia diversifolia	Neoregelia doeringiana
Neoregelia dungsiana	Neoregelia eleutheropetala	Neoregelia elmoreana
Neoregelia eltoniana	Neoregelia farinosa	Neoregelia fluminensis
Neoregelia fosteriana	Neoregelia gavionensis	Neoregelia gigas
Neoregelia guttata	Neoregelia hatschbachii	Neoregelia hoehneana
Neoregelia ibitipocensis	Neoregelia ilhana	Neoregelia indecora
Neoregelia inexspectata	Neoregelia intermedia	Neoregelia johannis
Neoregelia johnsoniae	Neoregelia kautskyi	Neoregelia kerryae
Neoregelia kerryi	Neoregelia kuhlmannii	Neoregelia lactea
Neoregelia laevis	Neoregelia leprosa	Neoregelia leucophloea
Neoregelia leucophoea	Neoregelia leviana	Neoregelia lilliputiana
Neoregelia lillyae	Neoregelia long	Neoregelia longebracteata
Neoregelia	Neoregelia longisepala	Neoregelia lymaniana

longipedicellata		
Neoregelia macahensis	Neoregelia macrosepala	Neoregelia maculata
Neoregelia macwilliamsii	Neoregelia macwilliansii	Neoregelia magdalenae
Neoregelia makoyana	Neoregelia marcelli	Neoregelia marceloi
Neoregelia margaretae	Neoregelia marmorata	Neoregelia martinellii
Neoregelia mcwilliamsii	Neoregelia meeana	Neoregelia megalodonta
Neoregelia melanodonta	Neoregelia menescalii	Neoregelia mooreana
Neoregelia morreniana	Neoregelia mucugensis	Neoregelia myrmecophila
Neoregelia nevaresii	Neoregelia nivea	Neoregelia odorata
Neoregelia olens	Neoregelia oligantha	Neoregelia ossifragi
Neoregelia pabstiana	Neoregelia paratiensis	Neoregelia pascoaliana
Neoregelia pascoliana	Neoregelia pauciflora	Neoregelia paulistana
Neoregelia pendula	Neoregelia pernambucana	Neoregelia peruviana
Neoregelia petropolitana	Neoregelia pineliana	Neoregelia pontualii
Neoregelia princeps	Neoregelia punctatissima	Neoregelia retrorsa
Neoregelia richteri	Neoregelia roethii	Neoregelia rosea
Neoregelia rothinessa	Neoregelia rubrifolia	Neoregelia rubrospinosa
Neoregelia rubrovittata	Neoregelia ruschii	Neoregelia sanguinea
Neoregelia sapiatibensis	Neoregelia sarmentosa	Neoregelia schubertii
Neoregelia seideliana	Neoregelia silvimontana	Neoregelia silvomontana
Neoregelia simulans	Neoregelia smithii	Neoregelia spectabilis
Neoregelia spiralipetala	Neoregelia stolonifera	Neoregelia tarapotoensis
Neoregelia tenebrosa	Neoregelia tigrina	Neoregelia tristis
Neoregelia uleana	Neoregelia viridolineata	Neoregelia wilsoniana
Neoregelia wurdackii	Neoregelia x hybrid	Neoregelia x morrisoniana
Neoregelia zaslawskyi	Neoregelia zonata	Neumannia arcuata
Neumannia atrorubens	Neumannia imbricata	Neumannia lindenii
Neumannia maídifolia	Neumannia nigra	Neumannia petiolata
Nidularium acanthocrater	Nidularium agavifolium	Nidularium albiflorum
Nidularium altimontanum	Nidularium amazonicum	Nidularium ambiguum
Nidularium ampullaceum	Nidularium angustibracteatum	Nidularium angustifolium
Nidularium antoineanum	Nidularium atalaiaense	Nidularium azureum
Nidularium bicolor	Nidularium billbergioides	Nidularium bivittatum
Nidularium burchellii	Nidularium campo-alegrensis	Nidularium campos-portoi
Nidularium carcharodon	Nidularium	Nidularium carolinae

	cariacicaense	
Nidularium chlorostictum	Nidularium compacta	Nidularium compactum
Nidularium concentricum	Nidularium coriaceum	Nidularium cruentum
Nidularium cyaneum	Nidularium deleonii	Nidularium denticulatum
Nidularium denticulatum var simplex	Nidularium eleutheropetalum	Nidularium eximum
Nidularium farinosum	Nidularium ferdinando-coburgii	Nidularium fernando-coburgii
Nidularium ferrugineum	Nidularium fragrans	Nidularium fulgens
Nidularium guyanense	Nidularium humile	Nidularium innocentii
Nidularium itatiaiae	Nidularium johannis	Nidularium karatas
Nidularium kautskyanum	Nidularium laurentii	Nidularium laurentii var. immaculatum
Nidularium leucophoeum	Nidularium linehamii	Nidularium longibracteatum
Nidularium longiflorum	Nidularium macahense	Nidularium macahensis
Nidularium mangaratibense	Nidularium marmoratum	Nidularium meeanum
Nidularium meyendorfii	Nidularium microps	Nidularium minutum
Nidularium picinguabensis	Nidularium pinelianum	Nidularium procerum
Nidularium procerum var kermesianum	Nidularium punctatissimum	Nidularium purpureum
Nidularium regelioides	Nidularium rosulatum	Nidularium rubens
Nidularium rutilans	Nidularium sarmentosum	Nidularium scheremetiewii
Nidularium serratum	Nidularium simulans	Nidularium spectabile
Nidularium splendens	Nidularium tenuisepalum	Nidulariumbahianum
Nidulariumbeuckeri	Nidulariumbinotii	Nidulariumlindenii
Nidulariummacracanthum	Nidulariummooreanum	Nidulariummyrmecophilum
Nidulariumsuperbum	Nidulariumtigrinum	Nidulariumtricolor
Nidulariumwawreanum	Nidulariumweberi	Obromelia bicolor
Obromelia capituligera	Obromelia hospitalis	Obromelia lyman-smithii
Obromelia magdalenae	Ochagavia carnea	Ochagavia lindleyana
Ochagavia litoralis	Orthopetalum inerme	Orthopetalum pulverulentum
Orthopetalum stamineum	Orthophytum albopictum	Orthophytum alvimii
Orthophytum burle-marxii	Orthophytum disjunctum	Orthophytum estevesii
Orthophytum foliosum	Orthophytum fosterianum	Orthophytum gurkenii
Orthophytum lanuginosum	Orthophytum lemei	Orthophytum leprosum
Orthophytum lucidum	Orthophytum magalhaesii	Orthophytum maracasense
Orthophytum navioides	Orthophytum pulverulentum	Orthophytum rubrum

Orthophytum sanctum	Orthophytum saxicola	Orthophytum sucrei
Orthophytum vagans	Orthophytum waltoniae	Pepinea sanguinea
Pepinia aphelandriflora	Pepinia caricifolia	Pepinia corallina
Pepinia cuatrecasana	Pepinia fimbriatobracteata	Pepinia fulgens
Pepinia occidentalis	Pepinia patentiflora	Pepinia recurvata
Pepinia sanguinea	Pepinia sprucei	Phlomostachys atrorubens
Phlomostachys densiflora	Phlomostachys funckiana	Phlomostachys funkiana
Phlomostachys imbricata	Phytarrhiza anceps	Phytarrhiza crocata
Phytarrhiza lindenii var. genuina	Phytarrhiza linearis	Phytarrhiza monadelpha
Phytarrhiza purpurea	Phytarrhiza rubra	Pironneava floribunda
Pironneava glomerata	Pironneava morreniana	Pironneava platynema
Pironneava roseo-coerulea	Pitcairnia albiflos	Pitcairnia albomarginata
Pitcairnia altensteinii	Pitcairnia andreana	Pitcairnia angustifolia
Pitcairnia aphelandriflora	Pitcairnia archeri	Pitcairnia arcuata
Pitcairnia atrorubens	Pitcairnia aureobrunnea	Pitcairnia auriculata
Pitcairnia biattenuata	Pitcairnia bifrons	Pitcairnia bracteata
Pitcairnia brittoniana	Pitcairnia bromeliifolia	Pitcairnia brongniartiana
Pitcairnia burchellii	Pitcairnia burle-marxii	Pitcairnia calcicola
Pitcairnia caldasiana	Pitcairnia canaliculata	Pitcairnia cardenasii
Pitcairnia caricifolia	Pitcairnia carinata	Pitcairnia carioana
Pitcairnia chiapensis	Pitcairnia chilensis	Pitcairnia chiriquensis
Pitcairnia chrysantha	Pitcairnia coarctata	Pitcairnia coerulea
Pitcairnia commutata	Pitcairnia concolor	Pitcairnia condorensis
Pitcairnia corallina	Pitcairnia cuatrecasana	Pitcairnia cubensis
Pitcairnia decidua	Pitcairnia dracaenoides	Pitcairnia echinata
Pitcairnia encholirioides	Pitcairnia erratica	Pitcairnia excelsa
Pitcairnia feliciana	Pitcairnia ferrell-ingramiae	Pitcairnia flammea
Pitcairnia flavescens	Pitcairnia flaviflora	Pitcairnia floccosa
Pitcairnia folgens	Pitcairnia fonckiae	Pitcairnia fruticetorum
Pitcairnia fulgens	Pitcairnia funckiae	Pitcairnia funckiana
Pitcairnia funkiae	Pitcairnia furfuracea	Pitcairnia geotropa
Pitcairnia gireoudiana	Pitcairnia gracilis	Pitcairnia grafii
Pitcairnia gravisiana	Pitcairnia guyanensis	Pitcairnia halophila
Pitcairnia harrylutheri	Pitcairnia heerdeae	Pitcairnia hemsleyana
Pitcairnia heterophylla	Pitcairnia hitchcockiana	Pitcairnia imbricata
Pitcairnia inermis	Pitcairnia inermis var. flava	Pitcairnia integrifolia
Pitcairnia intermedia	Pitcairnia klabochiana	Pitcairnia laevis

Pitcairnia lamarcheana	Pitcairnia lanosisepala	Pitcairnia lanuginosa
Pitcairnia latifolia	Pitcairnia lehmannii	Pitcairnia leprieurii
Pitcairnia lindenii	Pitcairnia longicauda	Pitcairnia longifolia
Pitcairnia lutheri	Pitcairnia lymanii	Pitcairnia lymansmithiana
Pitcairnia macrocalyx	Pitcairnia macrochlamys	Pitcairnia macrophylla
Pitcairnia maidifolia	Pitcairnia maizaifolia	Pitcairnia manabiana
Pitcairnia megastachya	Pitcairnia melanopoda	Pitcairnia micotrinensis
Pitcairnia microcalyx	Pitcairnia modesta	Pitcairnia nigra
Pitcairnia oblanceolata	Pitcairnia occidentialis	Pitcairnia oerstediana
Pitcairnia olivaestevae	Pitcairnia orchidifolia	Pitcairnia orgyalis
Pitcairnia ovandensis	Pitcairnia oxapampae	Pitcairnia pallidiflavens
Pitcairnia palmoides	Pitcairnia paniculata	Pitcairnia patentiflora
Pitcairnia petiolata	Pitcairnia phelpsiae	Pitcairnia platyphylla
Pitcairnia polyanthoides	Pitcairnia pruinosa	Pitcairnia pulchella
Pitcairnia pulverulenta	Pitcairnia pungens	Pitcairnia pyramidata
Pitcairnia quetameensis	Pitcairnia racemosa	Pitcairnia ramosa
Pitcairnia recurvata	Pitcairnia redouteana	Pitcairnia riparia
Pitcairnia rubro-nigriflora	Pitcairnia samuelssonii	Pitcairnia sanctaecrucis
Pitcairnia saxicola	Pitcairnia scandens	Pitcairnia secunda
Pitcairnia sessiliflora	Pitcairnia skinneri	Pitcairnia smithiorum
Pitcairnia speciosa	Pitcairnia speciosissima	Pitcairnia spectabilis
Pitcairnia sphaerocephala	Pitcairnia spicata	Pitcairnia splendens
Pitcairnia sprucei	Pitcairnia staminea	Pitcairnia stevensonii
Pitcairnia straminea	Pitcairnia subpetiolata	Pitcairnia sulphurea
Pitcairnia tabuliformis	Pitcairnia taenipetala	Pitcairnia tarapotensis
Pitcairnia tomentosa	Pitcairnia undulata	Pitcairnia undulatifolia
Pitcairnia unilateralis	Pitcairnia vargasiana	Pitcairnia venusta
Pitcairnia villetaensis	Pitcairnia volubilis	Pitcairnia wendlandii
Pitcairnia werckleana	Pitcairnia xanthocalyx	Pitcairnia yaupi-bajaensis
Pitcairnia zeifolia	Pityrophyllum andreanum	Pityrophyllum erubescens
Platyaechmea anomala	Platyaechmea chantinii	Platyaechmea retusa
Platyaechmea romeroi	Platyaechmea tillandsioides	Platyaechmea zebrina
Platystachys anceps	Platystachys bulbosa	Platystachys cinerascens
Platystachys cyanae	Platystachys digitata	Platystachys ehrenbergii
Platystachys erythraea	Platystachys filifolia	Platystachys floribunda
Platystachys havanensis	Platystachys inanis	Platystachys kunthiana
Platystachys latifolia	Platystachys moritziana	Platystachys pruinosa
Platystachys purpurea	Platystachys scoparia	Platystachys tortilis
Platystachys utriculata	Platystachys viridiflora	Pogospermum floribundum
Portea alatisepala	Portea filifera	Portea fosteriana
Portea grandiflora	Portea kermesina	Portea leptantha

Portea petropolitana	Portea silveirae	Pothuava allenii
Pothuava involucrata	Pothuava kleinii	Pothuava nudicaulis
Pothuava spicata	Pothuava tonduzii	Pourretia achupalla
Pourretia alpestris	Pourretia bondplandiana	Pourretia bonplandiana
Pourretia coarctata	Pourretia coerulea	Pourretia floccosa
Pourretia hanisiana	Pourretia inermis	Pourretia nivosa
Pourretia paniculata	Pourretia pyramidata	Prantleia leprosa
Pseudananas macrodontes	Pseudananas sagenarius	Puya achupalla
Puya alpestris	Puya altensteinii	Puya berteroniana
Puya boliviensis	Puya bonplandiana	Puya chilensis
Puya coarctata	Puya coerulea	Puya copiapina
Puya dasylirioides	Puya ferruginea	Puya floccosa
Puya fuifuracea	Puya funkiana	Puya gaudichaudii
Puya gigantea	Puya guianensis	Puya harmsii
Puya hromadnikii	Puya humilis	Puya lanata
Puya laxa	Puya maidifolia	Puya maydifolia
Puya medica	Puya mirabilis	Puya pearcei
Puya pectinata	Puya phelpsiae	Puya quetameensis
Puya raimondii	Puya recurvata	Puya roezlii
Puya rubricaulis	Puya ruiziana	Puya sanctae
Puya serranoensis	Puya spathacea	Puya suberosa
Puya tuberosa	Puya vallo-grandensis	Puya venusta
Puya warszewiczii	Puya whytei	Quesnelia arvensis
Quesnelia augusto-coburgii	Quesnelia columbiana	Quesnelia conquistensis
Quesnelia edmundoi	Quesnelia effusa	Quesnelia humilis
Quesnelia imbricata	Quesnelia indecora	Quesnelia lateralis
Quesnelia liboniana	Quesnelia marmorata	Quesnelia quesneliana
Quesnelia seideliana	Quesnelia testudo	Racinaea adpressa
Racinaea adscendens	Racinaea aeris-incola	Racinaea blassii
Racinaea commixa	Racinaea contorta	Racinaea crispa
Racinaea flexuosa	Racinaea fraseri	Racinaea insularis
Racinaea jenmanii	Racinaea kessleri	Racinaea macrantha
Racinaea multiflora	Racinaea pallidoflavens	Racinaea parviflora
Racinaea pectinata	Racinaea penduliflora	Racinaea pendulispica
Racinaea penlandii	Racinaea pugiformis	Racinaea quadripinnata
Racinaea ropalocarpa	Racinaea rothschuiana	Racinaea sanctae-martae
Racinaea schumanniana	Racinaea spiculosa	Racinaea tenuispica
Racinaea tetrantha	Racinaea trapeziformis	Racinaea undulifolia
Racinaea wuelfinghoffii	Renealmia disticha	Renealmia monostachia
Renealmia occidentalis var. longipes	Renealmia paniculata	Renealmia recurvata
Renealmia usneoides	Rhodostachys	Ronnbergia brasiliensis

	urbaniana	
Ronnbergia carvalhoi	Ronnbergia columbiana	Ronnbergia deleonii
Ronnbergia explodens	Ronnbergia hathewayi	Ronnbergia maidifolia
Ronnbergia morreniana	Ronnbergia nidularioides	Ronnbergia petersii
Schidospermum sanseviera	Schlumbergeria morreniana	Strepsia usneoides
Streptocalyx colombianus	Streptocalyx floribundus	Streptocalyx hoppii
Streptocalyx laxiflora	Streptocalyx platynema	Streptocalyx williamsii
Thecophyllum capitatum	Thecophyllum crassiflorum	Thecophyllum discolor
Thecophyllum gloriosum	Thecophyllum irazuense	Thecophyllum latissimum
Thecophyllum lehmannianum	Thecophyllum mosquerae	Thecophyllum ororiense
Thecophyllum pittieri	Thecophyllum sceptrum	Thecophyllum squarrosum
Thecophyllum standleyi	Thecophyllum vittatum	Thecophyllum werckleanum
Thecophyllum wittmackii	Tillandsia araujei	Tillandsia abbreviata
Tillandsia abdita	Tillandsia acaulis	Tillandsia achyrostachys
Tillandsia acostae	Tillandsia acosta-solisii	Tillandsia adamsii
Tillandsia adpressa	Tillandsia adpressiflora	Tillandsia adscendens
Tillandsia aeranthos	Tillandsia aeris-incola	Tillandsia aguascalientensis
Tillandsia aguascalientes	Tillandsia aizoides	Tillandsia alberi
Tillandsia albertiana	Tillandsia albida	Tillandsia alfredo-laui
Tillandsia alta	Tillandsia alvareziae	Tillandsia amazonica
Tillandsia amethystina	Tillandsia amicorum	Tillandsia amoena
Tillandsia ampla	Tillandsia anceps	Tillandsia andicola
Tillandsia andreana	Tillandsia andreettae	Tillandsia andrieuxii
Tillandsia 'Angela'	Tillandsia angulosa	Tillandsia apoloensis
Tillandsia appenii	Tillandsia araujei	Tillandsia arcuans
Tillandsia arcuans var. naundorffiae	Tillandsia arequitae	Tillandsia argentea
Tillandsia argentina	Tillandsia arguta	Tillandsia arhiza
Tillandsia ariza-juliae	Tillandsia arnoldiana	Tillandsia arroyoensis
Tillandsia aschersoniana	Tillandsia atenangoensis	Tillandsia atroviolacea
Tillandsia atroviridipetala	Tillandsia augusta	Tillandsia aurantiaca
Tillandsia aurea	Tillandsia aureobrunnea	Tillandsia australis

Tillandsia axillaris	Tillandsia azuayensis	Tillandsia azurea
Tillandsia bagua-grandensis	Tillandsia baileyi	Tillandsia bakeri
Tillandsia bakeriana	Tillandsia balbisiana	Tillandsia baliophylla
Tillandsia balsasensis	Tillandsia bandensis	Tillandsia bandensis var. intermedia
Tillandsia bangii	Tillandsia barbeyana	Tillandsia barclayana
Tillandsia barfussii	Tillandsia barthlottii	Tillandsia bartramii
Tillandsia bella	Tillandsia belloensis	Tillandsia bergeri
Tillandsia bergiana	Tillandsia bermejoensis	Tillandsia beutelspacheri
Tillandsia biflora	Tillandsia bismarckii	Tillandsia blanchetiana
Tillandsia bochilensis	Tillandsia boeghi	Tillandsia boliviensis
Tillandsia boqueronensis	Tillandsia botterii	Tillandsia bourgaei
Tillandsia brachycaulos	Tillandsia brachycaulos x bulbosa	Tillandsia brachyphylla
Tillandsia brachypoda	Tillandsia bradeana	Tillandsia brassicoides
Tillandsia brealitoensis	Tillandsia brenneri	Tillandsia brevi-bracteata
Tillandsia breviscapa	Tillandsia brittoniana	Tillandsia brunonis
Tillandsia bryoides	Tillandsia buchii	Tillandsia buchlohii
Tillandsia bulbosa	Tillandsia burle-marxii	Tillandsia buseri
Tillandsia butzii	Tillandsia caballosensis	Tillandsia cacticola
Tillandsia caerulea	Tillandsia caespitosa	Tillandsia cajamarcensis
Tillandsia calcicola	Tillandsia califanii	Tillandsia caliginosa
Tillandsia callichroma	Tillandsia calocephala	Tillandsia caloura
Tillandsia cambuquirensis	Tillandsia candelifera	Tillandsia candida
Tillandsia canescens	Tillandsia capillaris	Tillandsia capistranoensis
Tillandsia capitata	Tillandsia capitata x balbisiana	Tillandsia capituligera
Tillandsia caput-medusae	Tillandsia cardenasii	Tillandsia carinata var. constricta
Tillandsia carlos-hankii	Tillandsia carlsoniae	Tillandsia carminea
Tillandsia carnosa	Tillandsia castaneobulbosa	Tillandsia castellanii
Tillandsia cathcartii	Tillandsia catimbauensis	Tillandsia caulescens
Tillandsia cauliflora	Tillandsia cauligera	Tillandsia celata
Tillandsia cereicola	Tillandsia cerrateana	Tillandsia cespitosa
Tillandsia chaetophylla	Tillandsia chapeuensis	Tillandsia chartacea
Tillandsia chartacea var. peruviana	Tillandsia chiapensis	Tillandsia chilensis
Tillandsia chiletensis	Tillandsia chlorantha	Tillandsia chlorophylla
Tillandsia chontalensis	Tillandsia chrysostachys	Tillandsia churinensis
Tillandsia chusgonensis	Tillandsia cinerascens	Tillandsia circinnata
Tillandsia circinnatoides	Tillandsia citrina	Tillandsia clavata

Tillandsia clavigera	Tillandsia coalcomanensis	Tillandsia coarctata
Tillandsia coccinea	Tillandsia coccoensis	Tillandsia cochabambae
Tillandsia coerulea	Tillandsia coinaensis	Tillandsia colganii
Tillandsia colorata	Tillandsia columnaris	Tillandsia comarapaensis
Tillandsia comitanensis	Tillandsia commixa	Tillandsia compacta
Tillandsia complanata	Tillandsia compressa	Tillandsia concentrica
Tillandsia concolor	Tillandsia condensata	Tillandsia confertiflora
Tillandsia confinis	Tillandsia confusa var. minor	Tillandsia confusa var. saxatilis
Tillandsia conspersa	Tillandsia copalaensis	Tillandsia copalensis
Tillandsia copanensis	Tillandsia copynii	Tillandsia cordobensis
Tillandsia cornuta	Tillandsia correalei	Tillandsia cossonii
Tillandsia cotagaitensis	Tillandsia crassifolia	Tillandsia cretacea
Tillandsia crinita	Tillandsia crista-gallii	Tillandsia crocata
Tillandsia cruenta	Tillandsia cryptantha	Tillandsia cryptopoda
Tillandsia cubensis	Tillandsia cucaensis	Tillandsia cucullata
Tillandsia curvifolia	Tillandsia curvispica	Tillandsia cyanea
Tillandsia cygnea	Tillandsia dactylifera	Tillandsia dasyliriifolia
Tillandsia decomposita	Tillandsia decurvata	Tillandsia deflexa
Tillandsia delicata	Tillandsia demissa	Tillandsia denudata
Tillandsia denudata var. vivipara	Tillandsia dependens	Tillandsia deppeana
Tillandsia dexteri	Tillandsia diaguitensis	Tillandsia dianthoidea
Tillandsia didisticha	Tillandsia didistichoides	Tillandsia digitata
Tillandsia diguetii	Tillandsia dissitiflora	Tillandsia distachya
Tillandsia disticha	Tillandsia divaricata	Tillandsia dodsonii
Tillandsia domingensis	Tillandsia dorotheae	Tillandsia drepanophylla
Tillandsia dubia	Tillandsia dudleyi	Tillandsia dugesii
Tillandsia dura	Tillandsia durangensis	Tillandsia duratii
Tillandsia dyeriana	Tillandsia ecarinata	Tillandsia edithae
Tillandsia ehlersiana	Tillandsia ehrenbergii	Tillandsia eistetteri
Tillandsia eizii	Tillandsia ekmanii	Tillandsia elata
Tillandsia elizabethiae	Tillandsia elongata	Tillandsia eltoniana
Tillandsia eminens	Tillandsia ensiformis	Tillandsia erecta
Tillandsia erici	Tillandsia ericii	Tillandsia ermitae
Tillandsia ernesti	Tillandsia erubescens	Tillandsia erythraea
Tillandsia espinosae	Tillandsia esseriana	Tillandsia exaltata
Tillandsia excelsa	Tillandsia exserta	Tillandsia extensa
Tillandsia fasciculata	Tillandsia favillosa	Tillandsia 'Feather Belle'
Tillandsia feldhoffii	Tillandsia fendleri	Tillandsia fenestralis
Tillandsia ferreyrae	Tillandsia ferrisiana	Tillandsia festucoides
Tillandsia filifolia	Tillandsia filiformis	Tillandsia flabellata
Tillandsia flagellata	Tillandsia flagellifera	Tillandsia flammea

Tillandsia flavobracteata	Tillandsia flexuosa	Tillandsia floribunda
Tillandsia fluminensis	Tillandsia foliosa	Tillandsia fournieri
Tillandsia fragrans	Tillandsia frank-hasei	Tillandsia fraseri
Tillandsia fresnilloensis	Tillandsia friesii	Tillandsia fuchsia
Tillandsia fuchsii	Tillandsia funckiana	Tillandsia funebris
Tillandsia fusca	Tillandsia gardneri	Tillandsia gayi
Tillandsia geissei	Tillandsia geminiflora	Tillandsia genseri
Tillandsia gerdae	Tillandsia gigantea	Tillandsia gilliesii
Tillandsia glabrior	Tillandsia gladioliflora	Tillandsia glauca
Tillandsia glaucophylla	Tillandsia glaziovii	Tillandsia globosa
Tillandsia glutinosa	Tillandsia goniorachis	Tillandsia goyazensis
Tillandsia gracilis	Tillandsia gradata	Tillandsia graebeneri
Tillandsia graminifolia	Tillandsia grandis	Tillandsia grandispica
Tillandsia graomogolensis	Tillandsia graomogulensis	Tillandsia grazielae
Tillandsia grisea	Tillandsia gruberi	Tillandsia guatemalensis
Tillandsia guelzii	Tillandsia guenther-nolleri	Tillandsia guerreroensis
Tillandsia gutteana	Tillandsia gymnobotrya	Tillandsia hahnii
Tillandsia hamaleana	Tillandsia hammeri	Tillandsia harmsiana
Tillandsia harrisii	Tillandsia hartwegiana	Tillandsia hasei
Tillandsia hegeri	Tillandsia helmutii	Tillandsia heterandra
Tillandsia heteromorpha	Tillandsia heterophylla	Tillandsia heubergeri
Tillandsia hieronymi	Tillandsia hildae	Tillandsia hintoniana
Tillandsia hirta	Tillandsia hitchcockiana	Tillandsia hondurensis
Tillandsia horstii	Tillandsia hotteana	Tillandsia houzeavii
Tillandsia hromadnikiana	Tillandsia huajuapanensis	Tillandsia huarazensis
Tillandsia humilis	Tillandsia hystricina	Tillandsia ignesiae
Tillandsia imperialis	Tillandsia imporaensis	Tillandsia inanis
Tillandsia incana	Tillandsia incarnata	Tillandsia incurva
Tillandsia incurvata	Tillandsia inflata	Tillandsia insignis
Tillandsia insularis	Tillandsia intermedia	Tillandsia intumescens var. brevilamina
Tillandsia ionantha	Tillandsia ionantha x bourgaei	Tillandsia ionantha x stricta
Tillandsia ionochroma	Tillandsia itatiaiae	Tillandsia ixioides
Tillandsia jalisco-monticola	Tillandsia jonghei	Tillandsia jucunda
Tillandsia juerg-rutschmannii	Tillandsia juncea	Tillandsia juncifolia
Tillandsia juruana	Tillandsia kalmbacheri	Tillandsia kammii
Tillandsia karwinskyana	Tillandsia kautskyi	Tillandsia kegeliana
Tillandsia kirchhoffiana	Tillandsia kirchoffiana	Tillandsia kirschnekii
Tillandsia klausii	Tillandsia koehresiana	Tillandsia kolbii

Tillandsia krahnii	Tillandsia krameri	Tillandsia krukoffiana
Tillandsia kruseana	Tillandsia kuehhasii	Tillandsia kunthiana
Tillandsia kurt-horstii	Tillandsia kuzmae	Tillandsia lajensis
Tillandsia lambrostachya	Tillandsia lampropoda	Tillandsia lanata
Tillandsia lancifolia	Tillandsia landbecki	Tillandsia langlasseana
Tillandsia langlassei	Tillandsia langsdorffii	Tillandsia lanuginosa
Tillandsia lateritia	Tillandsia latifolia	Tillandsia laui
Tillandsia lautneri	Tillandsia laxa	Tillandsia laxissima
Tillandsia leiboldiana	Tillandsia leiochlamys	Tillandsia leonamiana
Tillandsia lepidosepala	Tillandsia leucolepis	Tillandsia lilacina
Tillandsia limae	Tillandsia limbata	Tillandsia limonensis
Tillandsia lindenii	Tillandsia linearis	Tillandsia lineatifolia
Tillandsia lingulata	Tillandsia lithophila	Tillandsia loliacea
Tillandsia longebracteata	Tillandsia longicaulis	Tillandsia longiflora
Tillandsia longifolia	Tillandsia lopezii	Tillandsia lorentziana
Tillandsia lorentzii	Tillandsia lotteae	Tillandsia lubbersii
Tillandsia lucida	Tillandsia lutheri	Tillandsia lydiae
Tillandsia lymanii	Tillandsia macbrideana	Tillandsia macdougallii
Tillandsia macrochlamys	Tillandsia macrodactylon	Tillandsia macropetala
Tillandsia maculata	Tillandsia macvaughii	Tillandsia magna
Tillandsia magnusiana	Tillandsia makoyana	Tillandsia makrinii
Tillandsia mallemontii	Tillandsia malyi	Tillandsia malzinei
Tillandsia mandonii	Tillandsia marabascoensis	Tillandsia marconae
Tillandsia marnieri-lapostollei	Tillandsia matudae	Tillandsia mauryana
Tillandsia maxima	Tillandsia mazatlanensis	Tillandsia megastachya
Tillandsia melanopus	Tillandsia mereliana	Tillandsia meridionalis
Tillandsia micans	Tillandsia micrantha	Tillandsia milagrensis
Tillandsia mima	Tillandsia minasgeraisensis	Tillandsia minor
Tillandsia mirabilis	Tillandsia mitlaensis	Tillandsia mixtecorum
Tillandsia modesta	Tillandsia mollis	Tillandsia monadelpha
Tillandsia monobotrya	Tillandsia monstrum	Tillandsia montana
Tillandsia mooreana	Tillandsia moritziana	Tillandsia moronesensis
Tillandsia morreniana	Tillandsia morrenii	Tillandsia moscosoi
Tillandsia mucronata	Tillandsia muhriae	Tillandsia multicaulis
Tillandsia murorum	Tillandsia musaica	Tillandsia myosura
Tillandsia myriantha	Tillandsia myriophylla	Tillandsia nana
Tillandsia nappii var. darwinii	Tillandsia narthecioides	Tillandsia naundorffiae
Tillandsia neglecta	Tillandsia nervata	Tillandsia nervisepala
Tillandsia nidus	Tillandsia nolleriana	Tillandsia novakii
Tillandsia nuptialis	Tillandsia nutans	Tillandsia nuttalliana

Tillandsia nuyooensis	Tillandsia oaxacana	Tillandsia oblivata
Tillandsia occulta	Tillandsia oerstediana	Tillandsia oliganetha
Tillandsia oligantha	Tillandsia olmosana	Tillandsia oranensis
Tillandsia orbicularis	Tillandsia organensis	Tillandsia orizabensis
Tillandsia orogenes	Tillandsia oropezana	Tillandsia oroyensis
Tillandsia ortgiesiana	Tillandsia orthiantha	Tillandsia oxapampae
Tillandsia oxysepala	Tillandsia pachychlamys	Tillandsia pacifica
Tillandsia paleacea	Tillandsia pallidoflavens	Tillandsia palmasolana
Tillandsia pamelae	Tillandsia pampasensis	Tillandsia paniculata
Tillandsia paraensis	Tillandsia paraibica	Tillandsia paraisoensis
Tillandsia parryi	Tillandsia parviflora	Tillandsia pastuchoffiana
Tillandsia patula	Tillandsia paucifolia	Tillandsia pectinata
Tillandsia pedicellata	Tillandsia peiranoi	Tillandsia penascoensis
Tillandsia pendula	Tillandsia pendulispica	Tillandsia penlandii
Tillandsia pentasticha	Tillandsia pereziana	Tillandsia peruviana
Tillandsia petraea	Tillandsia pfeufferi	Tillandsia pfisteri
Tillandsia phyllostachys	Tillandsia pilosa	Tillandsia pinifolia
Tillandsia piurensis	Tillandsia plagiotropica	Tillandsia platyphylla
Tillandsia platyrhachis	Tillandsia platyrhachis x cyanea	Tillandsia platzmannii
Tillandsia plumosa	Tillandsia poenulata	Tillandsia pohliana
Tillandsia polita	Tillandsia polyphylla	Tillandsia polystachia
Tillandsia polystachia var. alba	Tillandsia polzii	Tillandsia pomacochae
Tillandsia ponderosa	Tillandsia porongoensis	Tillandsia porphyrocraspeda
Tillandsia portillae	Tillandsia praschekii	Tillandsia pretiosa
Tillandsia prodigiosa	Tillandsia propagulifera	Tillandsia propinqua
Tillandsia pruinosa	Tillandsia pseudobaileyi	Tillandsia pseudocardenasii
Tillandsia pseudomacbrideana	Tillandsia pseudomicans	Tillandsia pseudosetacea
Tillandsia psittacina	Tillandsia pucaraensis	Tillandsia pueblensis
Tillandsia pugiformis	Tillandsia pulchella	Tillandsia pulchella var. rosea
Tillandsia pumila	Tillandsia punctulata	Tillandsia pungens
Tillandsia purpurascens	Tillandsia purpurea	Tillandsia pusilla
Tillandsia pyramidata	Tillandsia quadripinnata	Tillandsia quaquaflorifera
Tillandsia queroensis	Tillandsia raackii	Tillandsia ramellae
Tillandsia ramosa	Tillandsia rauhii	Tillandsia rauschii
Tillandsia reclinata	Tillandsia rectangula	Tillandsia rectifolia
Tillandsia recurvata var.	Tillandsia recurvifolia	Tillandsia reducta

majuscula		
Tillandsia regina	Tillandsia regnellii	Tillandsia reichenbachii
Tillandsia remota	Tillandsia restrepoana	Tillandsia retorta
Tillandsia retrorsa	Tillandsia rettigiana	Tillandsia reuteri
Tillandsia rhodocephala	Tillandsia rhodochlamys	Tillandsia rhododactyla
Tillandsia rhomboidea	Tillandsia ringens	Tillandsia robusta
Tillandsia rodrigueziana	Tillandsia roezlii	Tillandsia roland-gosselinii
Tillandsia romeroi	Tillandsia ropalocarpa	Tillandsia rosacea
Tillandsia roseiflora	Tillandsia roseoscapa	Tillandsia rothii
Tillandsia rothschuhiana	Tillandsia rotundata	Tillandsia rubella
Tillandsia rubentifolia	Tillandsia rubra	Tillandsia rubrispica
Tillandsia rubroviolacea	Tillandsia rudolfii	Tillandsia rupicola
Tillandsia rusbyi	Tillandsia sagasteguii	Tillandsia salmonea
Tillandsia samaipatensis	Tillandsia sanctae-crucis	Tillandsia sanctae-martae
Tillandsia sanguinea	Tillandsia santiago-tuxtlensis	Tillandsia santosiae
Tillandsia saxicola	Tillandsia scalarifolia	Tillandsia scaligera
Tillandsia scaposa	Tillandsia sceptriformis	Tillandsia schatzlii
Tillandsia schenckiana	Tillandsia schiedeana	Tillandsia schlechtendalii
Tillandsia schreiteri	Tillandsia schusteri	Tillandsia scoparia
Tillandsia scopus	Tillandsia secunda	Tillandsia seideliana
Tillandsia seleriana	Tillandsia selleana	Tillandsia selloa
Tillandsia serrata	Tillandsia sessemocinoi	Tillandsia setacea
Tillandsia sierrajuarezensis	Tillandsia simplex	Tillandsia simulata
Tillandsia singularis	Tillandsia sintenisii	Tillandsia socialis
Tillandsia somnians	Tillandsia soratensis	Tillandsia sparsiflora
Tillandsia sphaerocephala	Tillandsia spiculosa	Tillandsia spinosa
Tillandsia spiraliflora	Tillandsia spiralipetala	Tillandsia splendens
Tillandsia sprengeliana	Tillandsia spuria	Tillandsia squamulosa
Tillandsia standleyi	Tillandsia staticeflora	Tillandsia stellifera
Tillandsia stenostachya	Tillandsia stenoura	Tillandsia stolpi
Tillandsia straminea	Tillandsia streptocarpa	Tillandsia streptophylla
Tillandsia stricta	Tillandsia stricta x albertiana	Tillandsia strobilantha
Tillandsia subconcolor	Tillandsia sublaxa	Tillandsia subteres
Tillandsia subulata	Tillandsia subulifera	Tillandsia sucrei
Tillandsia suescana	Tillandsia superba	Tillandsia superinsignis
Tillandsia supermexicana	Tillandsia surinamensis	Tillandsia takizawae
Tillandsia taxcoensis	Tillandsia tectorum	Tillandsia teloloapanensis
Tillandsia tenebra	Tillandsia tenuifolia	Tillandsia tenuispica

Tillandsia tephrophylla	Tillandsia tequendamae	Tillandsia teres
Tillandsia tetrantha	Tillandsia thyrsigera	Tillandsia tillandsioides
Tillandsia tillii	Tillandsia tomasellii	Tillandsia tomekii
Tillandsia tomentosa	Tillandsia tonalaensis	Tillandsia toropiensis
Tillandsia tortilis	Tillandsia tovarensis	Tillandsia trapeziformis
Tillandsia trauneri	Tillandsia triangularis	Tillandsia trichoides
Tillandsia tricholepis	Tillandsia tricolor	Tillandsia trigalensis
Tillandsia triglochinoides	Tillandsia trinitensis	Tillandsia turquinensis
Tillandsia ulrici	Tillandsia umbellata	Tillandsia undulatobracteata
Tillandsia undulifolia	Tillandsia unilateralis	Tillandsia unispicata
Tillandsia urbaniana	Tillandsia usneoides	Tillandsia utriculata
Tillandsia uyucensis	Tillandsia valenzuelana	Tillandsia variabilis
Tillandsia velickiana	Tillandsia velutina	Tillandsia ventanaensis
Tillandsia venusta	Tillandsia verapazana	Tillandsia vernicosa
Tillandsia vestita	Tillandsia vicentina	Tillandsia violascens
Tillandsia virescens	Tillandsia viridiflora	Tillandsia viscidula
Tillandsia vittata	Tillandsia wagneriana	Tillandsia walteri
Tillandsia walter-richteri	Tillandsia walter-tillii	Tillandsia walter-tillii
Tillandsia weberi	Tillandsia weddellii	Tillandsia welzii
Tillandsia werdermannii	Tillandsia werneriana	Tillandsia williamsii
Tillandsia winkleri	Tillandsia wuelfinghoffii	Tillandsia wurdackii
Tillandsia x floridana	Tillandsia x smalliana	Tillandsia x wisdomiana
Tillandsia xerographica	Tillandsia xiphioides	Tillandsia xiphophylla
Tillandsia xiphostachys	Tillandsia yaconorensis	Tillandsia yuncharaensis
Tillandsia yunckeri	Tillandsia yutaninoensis	Tillandsia zacualpanensis
Tillandsia zamorensis	Tillandsia zaragozaensis	Tillandsia zecheri
Tillandsia zoquensis	Ursulaea macvaughii	Ursulaea tuitensis
Viridantha ignesiae	Viridantha lepidosepala	Viridantha tortilis
Vriesea aerisincola	Vriesea 'Afterglow'	Vriesea agostiniana
Vriesea albiflora	Vriesea albo-rubrobracteata	Vriesea aloifolia
Vriesea alta	Vriesea altodaserrae	Vriesea altomacaensis
Vriesea amadoi	Vriesea amazonica	Vriesea amethystina
Vriesea ampla	Vriesea anceps	Vriesea andreettae
Vriesea 'Annie'	Vriesea appariciana	Vriesea appenii
Vriesea arachnoidea	Vriesea 'Astrid'	Vriesea atra
Vriesea atropurpurea	Vriesea aurea	Vriesea bahiana
Vriesea barclayana	Vriesea barilletii	Vriesea belloi
Vriesea bibeatricis	Vriesea bicolor	Vriesea billbergioides

Vriesea bituminosa	Vriesea blackburniana	Vriesea bleherae
Vriesea bleheri	Vriesea boeghii	Vriesea botofogensis
Vriesea bracteosa	Vriesea brassicoides	Vriesea 'Brentwood'
Vriesea breviscapa	Vriesea brusquensis	Vriesea burgeri
Vriesea cacuminis	Vriesea caespitosa	Vriesea capitata
Vriesea capituligera	Vriesea capixabae	Vriesea cardinalis x poelmanii x psitacinae
Vriesea carinata	Vriesea carinata var. constricta	Vriesea 'Carly'
Vriesea castaneobulbosa	Vriesea cathcartii	Vriesea cereicola
Vriesea chapadensis	Vriesea 'Charlotte'	Vriesea chlorantha
Vriesea chontalensis	Vriesea chrysostachys	Vriesea citrina
Vriesea corcovadensis	Vriesea correia-araujoi	Vriesea costae
Vriesea crassiflora	Vriesea croceana	Vriesea cryptantha
Vriesea curvispica	Vriesea cylindrica	Vriesea 'Davine'
Vriesea delicatula	Vriesea densiflora	Vriesea diamantinensis
Vriesea didistichoides	Vriesea discolor	Vriesea dissitiflora
Vriesea dubia	Vriesea duvaliana	Vriesea elata
Vriesea 'Ella'	Vriesea ensiformis	Vriesea erici
Vriesea erythrodactylon	Vriesea espinosae	Vriesea 'Evita'
Vriesea fenestralis	Vriesea fenestrata	Vriesea flammea
Vriesea flava	Vriesea fontourae	Vriesea fosteriana
Vriesea fosteriana x rubra	Vriesea fradensis	Vriesea fragrans
Vriesea friburgensis	Vriesea gamba	Vriesea garlippiana
Vriesea gastiniana	Vriesea geniculata	Vriesea gigantea
Vriesea gladioliflora	Vriesea glaucophylla	Vriesea glaziouana
Vriesea glutinosa	Vriesea goniorachis	Vriesea goniorhachis
Vriesea gracilior	Vriesea gracilis	Vriesea gradata
Vriesea grandiflora	Vriesea gruberi	Vriesea guttata
Vriesea hainesiorum	Vriesea hamata	Vriesea harmsiana
Vriesea harrylutheri	Vriesea hasei	Vriesea heliconioides
Vriesea heterandra	Vriesea heterostachys	Vriesea hieroglyphica
Vriesea hillegeeriana	Vriesea hitchcockiana	Vriesea hoehneana
Vriesea hospitalis	Vriesea hydrophora	Vriesea hygrometrica
Vriesea imperialis	Vriesea incurva	Vriesea incurvata
Vriesea inflata	Vriesea irazuensis	Vriesea itatiaiae
Vriesea jimenezii	Vriesea 'Jolanda'	Vriesea jonghei
Vriesea joyae	Vriesea kathyae	Vriesea killipiana
Vriesea koideae	Vriesea kupperiana	Vriesea lancifolia
Vriesea languida	Vriesea latissima	Vriesea leucophylla
Vriesea 'Lia'	Vriesea limonensis	Vriesea lindenii
Vriesea longicaulis	Vriesea longiscapa	Vriesea lopezii
Vriesea lubbersii	Vriesea lutheri	Vriesea lutheriana
Vriesea macrantha	Vriesea macrochlamys	Vriesea macropetala
Vriesea maculate	Vriesea magdalenae	Vriesea malzinei
Vriesea maxoniana	Vriesea mesiana	Vriesea michaelii

Vriesea minarum	Vriesea 'Ming'	Vriesea minor
Vriesea minuta	Vriesea monstrum	Vriesea morreniana
Vriesea morrenii	Vriesea muelleri	Vriesea musaica
Vriesea nanuzae	Vriesea naundorffiae	Vriesea neoglutinosa
Vriesea nephrolepis	Vriesea noblickii	Vriesea notata
Vriesea 'Nova Queen'	Vriesea odorata	Vriesea oligantha
Vriesea olmosana	Vriesea ororiensis	Vriesea ospinae
Vriesea pabstii	Vriesea pachychlamys	Vriesea pachyspatha
Vriesea paniculata	Vriesea 'Paragon'	Vriesea paraibica
Vriesea paratiensis	Vriesea pardalina	Vriesea pastuchoffiana
Vriesea patula	Vriesea pauciflora	Vriesea pauperrima
Vriesea penduliflora	Vriesea penduliscapa	Vriesea pereziana
Vriesea petraea	Vriesea phillipocoburgii	Vriesea pinottii
Vriesea platynema	Vriesea platzmannii	Vriesea pleiosticha
Vriesea plurifolia	Vriesea poenulata	Vriesea princeps
Vriesea procera	Vriesea prodigiosa	Vriesea pseudoatra
Vriesea pseudoligantha	Vriesea psittacina	Vriesea 'Queen'
Vriesea racinae	Vriesea rafaelii	Vriesea ramosa
Vriesea ranifera	Vriesea rauhii	Vriesea recurvata
Vriesea regina	Vriesea regnellii	Vriesea reitzii
Vriesea revoluta	Vriesea ringens	Vriesea robertoseidelii
Vriesea robusta	Vriesea rodigasiana	Vriesea roethii
Vriesea roezlii	Vriesea rostrum-aquilae	Vriesea rubra
Vriesea rubrobracteata	Vriesea rubyae	Vriesea rugosa
Vriesea ruschii	Vriesea sagasteguii	Vriesea sanctae-crucis
Vriesea 'Sandrine'	Vriesea sanguinolenta	Vriesea saundersii
Vriesea sazimae	Vriesea scalaris	Vriesea sceptrum
Vriesea schenckiana	Vriesea schlechtendalii	Vriesea schunkii
Vriesea schwackeana	Vriesea seideliana	Vriesea serrana
Vriesea setacea	Vriesea silvana	Vriesea simplex
Vriesea simulans	Vriesea sincorana	Vriesea sparsiflora
Vriesea speckmaieri	Vriesea splendens	Vriesea squamosa
Vriesea stenostachya	Vriesea streptophylla	Vriesea stricta
Vriesea strobeliae	Vriesea sucrei	Vriesea taritubensis
Vriesea tenuifolia	Vriesea tequendamae	Vriesea thyrsoidea
Vriesea tijucana	Vriesea tillandsioides	Vriesea tillii
Vriesea triangularis	Vriesea tricolor hortus	Vriesea triligulata
Vriesea truffautiana	Vriesea tuerckheimii	Vriesea unilateralis
Vriesea utriculata	Vriesea uxoris	Vriesea vagans
Vriesea vellozicola	Vriesea vietoris	Vriesea 'Vigeri'
Vriesea vigeri x poelmanii	Vriesea vinicolor	Vriesea viridis
Vriesea vittata	Vriesea 'Vogue'	Vriesea warmingii

Vriesea wawranea	Vriesea 'Werner Rauh'	Vriesea woodsoniana
Vriesea wuelfinghoffii	Vriesea x mariae	Vriesea x poelmanii
Vriesea x retroflexa	Vriesea xiphion	Vriesea zamorensis
Vriesea zonata	Wallisia lindenii	Werauhia ampla
Werauhia bicolor	Werauhia capitata	Werauhia gigantea
Werauhia gladioliflora	Werauhia hainesiorum	Werauhia haplostachya
Werauhia hygrometrica	Werauhia insignis	Werauhia kathyae
Werauhia kupperiana	Werauhia latissima	Werauhia leucophylla
Werauhia marnier-lapostollei	Werauhia nephrolepis	Werauhia notata
Werauhia ororiensis	Werauhia ringens	Werauhia sanguinolenta
Werauhia sintenisii	Werauhia uxoris	Werauhia vietoris
Werauhia vittata	Werauhia werckleana	Werauhia woodsoniana
Willrussellia feliciana	Wittrockia amazonica	Wittrockia cyathiformis
Wittrockia gigantea	Wittrockia minuta	Wittrockia smithii
Wittrockia spiralipetala	Wittrockia superba	Wittrockia tenuisepala
X Canmea	X Niduregelia fraudulenta	X Niduregelia lyman-smithii

Table 2. A list of permitted species susceptible to methyl bromide fumigation and permitted entry subject to alternative conditions C7301, C7303, C7300.

Aechmea chantinii	Aechmea retusa	Aechmea tessmannii
Alcantarea spp. (as listed in Table 1a)	Canistropsis spp. (as listed in Table 1a)	Cryptanthus maritimus
Dyckia fosteriana	Guzmania lindenii	Guzmania longipetala
Guzmania musaica	Guzmania weberbaueri	Hechtia marnier-lapostollei
Neoregelia ampullacea	Neoregelia mooreana	Neoregelia pauciflora
Nidularium spp. (as listed in Table 1a)	Racinaea crispa	Tillandsia albertiana x aeranthos
Tillandsia botterii	Tillandsia calothyrsus	Tillandsia capillaris
Tillandsia caulescens	Tillandsia chapeuensis	Tillandsia crispa
Tillandsia crocata	Tillandsia fasciculata x ionantha	Tillandsia guatemalensis
Tillandsia imperialis	Tillandsia kautskyi x sprengeliana	Tillandsia lampropoda
Tillandsia lucida	Tillandsia mallemontii	Tillandsia mitlaensis
Tillandsia ponderosa	Tillandsia punctulata	Tillandsia recurvata
Tillandsia seleriana	Tillandsia standleyi	Tillandsia straminea
Tillandsia tectorum	Tillandsia tricholepis	Tillandsia tricolor
Tillandsia usneoides x recurvata	Tillandsia vernicosa	Tillandsia violacea
Tillandsia yunckeri	Vriesea spp. (as listed in Table 1a)	Werauhia spp. (as listed in Table 1a)

Note: All Neoregelia hybrids are permitted; importation of Neoregelia hybrids must only have Neoregelia parentage and not include any other genus.Where a hybrid's parents are

listed as a permitted species on ICON, the hybrid may be imported without a separate ICON listing. These hybrids and varieties must be clearly labelled with the full parentage information e.g. Guzmania ‘AQIS’ (Guzmania permitted-species x Guzmania permitted-species).

Rural and Regional Affairs and Transport References Committee

Inquiry into the effect on Australian pineapple growers of importing fresh pineapples from Malaysia

Question Taken on Notice by Department of Agriculture, Fisheries and Forestry

Brisbane Hearing – Monday, 6 August 2012

Question 1

Dr Grant: In putting out a draft, the department of agriculture provides its assessment puts it out for public comment for consideration by others, who may have other science that they can bring to bear.

Senator Boswell: How many scientists were involved in the IRA process and who were they?

Dr Grant: A number of scientists become involved in risk analyses. We have a good number of scientists and we are doing a good number of scientific risk analyses at any one time.

Senator Boswell: I am only talking about Malaysian heart rot disease, not any other disease.

Dr Grant: The three people sitting at this table had a hand in that analysis.

Senator Boswell: And they were the only three.

Dr Grant: No.

Senator Boswell: The question was: who were they?

Dr Grant: I can provide that to you on notice, but I do not think it is all that relevant.

…..

Chair: Senator Boswell, just on a procedural matter, we do not want to set a precedent where we target individuals rather than a collective. You may, to assist the committee, tell us the number of people involved in the scientific assessment ahead of any consideration of who they were.

Senator Thorp: We might need to clarify whether you are talking about lab technicians –

Senator Nash: Yes, perhaps rather than just a number we could have some information around what that scientist actually does, if you do not want the names provided.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 32]

Question 2

Chair: When these guys went to Malaysia to do whatever they did, did you go? Who went?

Ms Gardner: There were two officers from DAFF.

Chair: I recall another trip which, I think, was on bananas where you went, but you did not go out into the field; you only went to the packing house. Did you go out into the field with this one?

Ms Gardner: The delegation visited plantations.

Senator Nash: What was the role and titles of the delegation?

Ms Gardner: They were from Plant Biosecurity, Horticulture, and they were looking at the risk analysis in Malaysia.

Senator Nash: I am happy for you to take on notice the actual roles and their qualifications to go to Malaysia.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 35]

Question 3

Senator Nash: I understand that, but it is different from what I was talking about. I am trying to get my head around the initial 2002 chrysanthemum 'winnie' or whatever it is. Importation at that time was allowed because it was believed that existed here in Australia. Has anything changed in relation to what you have just said about constantly monitoring? Has anything changed in those countries that would trigger the DAFF's interest in revisiting that? Have there been disease incursions since that time? Has there been a disease prevalence that was not there in 2002 that needs to be revisited?

Dr Grant: We believe that the measures that we are proposing cover any marginal changes that might occur because we are talking about a taxonomic change here.

Senator Nash: We are talking about Thailand and the Philippines – the ones that are existing. So you think anything that has changed – to use the layperson's phrase, not the department's phrase – in those countries over the period of the last 10 years will be turned up by the current regime. Is that what you are saying?

Mr Barbour: There has been no substantial change with regard to most of the pests and diseases that has warranted any change in the measures for imports from those other countries. There has of course been this discussion around whether *Erwinia chrysanthemi* or

dickeya species is in fact now something different and worthy of the quarantine measures, which this risk analysis assesses in some detail.

Senator Nash: Okay, but this import risk analysis only relates to Malaysia, doesn't it?

Mr Barbour: Any conclusions from this report that are relevant to another market would be imposed on that market.

Senator Nash: Would you mind taking on notice to give us a briefing note around all of that so we can just get a bit more clarity rather than taking it on the run in a very quick hearing?

Mr Barbour: Yes.

Senator Nash: That would be great. Thank you.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 45]

RESPONSES TO QUESTIONS ON NOTICE FROM SENATE HEARING
Rural and Regional Affairs and Transport References Committee
on the import of pineapples from Malaysia
6 August 2012
Queensland Parliament House
Brisbane

[*due to Senate Committee by 27 August 2012*]

(Questions confirmed and provided by Trish Carling, 15 August 2012)

Question 1

Dr Grant: In putting out a draft, the department of agriculture provides its assessment, puts it out for public comment for consideration by others, who may have other science that they can bring to bear.
Senator Boswell: How many scientists were involved in the IRA process and who were they?
Dr Grant: A number of scientists become involved in risk analyses. We have a good number of scientists and we are doing a good number of scientific risk analyses at any one time.
Senator Boswell: I am only talking about Malaysian heart rot disease, not any other disease.
Dr Grant: The three people sitting at this table had a hand in that analysis.
Senator Boswell: And they were the only three.
Dr Grant: No.
Senator Boswell: The question was: who were they?
Dr Grant: I can provide that to you on notice, but I do not think it is all that relevant.
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Chair: Senator Boswell, just on a procedural matter, we do not want to set a precedent where we target individuals rather than a collective. You may, to assist the committee, tell us the number of people involved in the scientific assessment ahead of any consideration of who they were.
Senator Thorp: We might need to clarify whether you are talking about lab technicians –
Senator Nash: Yes, perhaps rather than just a number we could have some information around what that scientist actually does, if you do not want the names provided.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 32]

Response

Fifteen scientists worked on the import risk analysis from the commencement of preliminary assessments in 2005 until the release of the provisional final IRA report in 2012.

This includes five scientists with a Ph D, two with a M Sc, one with a M Agr, four with a B Sc (Hons), one with a B App Sc (Hons) and two with a B Sc, in the fields of plant pathology, microbiology, molecular biology, entomology, mycology, pest and disease immunology and general plant sciences. These scientists have a range of backgrounds and experience in the plant sciences, risk analysis and import and export quarantine issues.

Question 2

Chair: When these guys went to Malaysia to do whatever they did, did you go? Who went?
Ms Gardner: There were two officers from DAFF.
Chair: I recall another trip which, I think, was on bananas where you went, but you did not go out into the field; you only went to the packing house. Did you go out into the field with this one?
Ms Gardner: The delegation visited plantations.
Senator Nash: What was the role and titles of the delegation?
Ms Gardner: They were from Plant Biosecurity, Horticulture, and they were looking at the risk analysis in Malaysia.
Senator Nash: I am happy for you to take on notice the actual roles and their qualifications to go to Malaysia.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 35]

Response

Two Department of Agriculture, Fisheries and Forestry (DAFF) officers visited pineapple plantations and processing and packing houses in Malaysia in 2010 with officers from Malaysia's National Plant Protection Organization – the Department of Agriculture. They were the Director (B Sc) and the Assistant Director (B App Sc (Hons)) of the Asia Section of Plant Biosecurity responsible for conducting the import risk analysis for pineapple fruit from Malaysia.

Question 3

Senator Nash: I understand that, but it is different from what I was talking about. I am trying to get my head around the initial 2002 chrysanthemum 'winnie' or whatever it is. Importation at that time was allowed because it was believed that existed here in Australia. Has anything changed in relation to what you have just said about constantly monitoring? Has anything changed in those countries that would trigger the DAFF's interest in revisiting that? Have there been disease incursions since that time? Has there been a disease prevalence that was not there in 2002 that needs to be revisited?
Dr Grant: We believe that the measures that we are proposing cover any marginal changes that might occur because we are talking about a taxonomic change here.
Senator Nash: We are talking about Thailand and the Philippines – the ones that are existing. So you think anything that has changed – to use the layperson's phrase, not the department's phrase – in those countries over the period of the last 10 years will be turned up by the current regime. Is that what you are saying?
Mr Barbour: There has been no substantial change with regard to most of the pests and diseases that has warranted any change in the measures for imports from those other countries. There has of course been this discussion around whether *Erwinia chrysanthemi* or dickeya species is in fact now something different and worthy of the quarantine measures, which this risk analysis assesses in some detail.
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Senator Nash: Would you mind taking on notice to give us a briefing note around all of that so we can just get a bit more clarity rather than taking it on the run in a very quick hearing?

Mr Barbour: Yes.
Senator Nash: That would be great. Thank you.

[Rural and Regional Affairs and Transport References Committee, Hansard Transcript, Monday, 6 August 2012, p. 45]

Response

In 2002, the bacterium *Erwinia chrysanthemi* was listed as being associated with pineapple fruit in Malaysia, the Philippines and the United States (Hawaii) in the *Import Risk Analysis (IRA) for the Importation of Fresh Pineapple Fruit: Final IRA Report*, which formed the basis of the policy for the importation of pineapples from Philippines, Thailand, Sri Lanka and the Solomon Islands. The bacterium was also recorded as present in Australia, it was not under official control in Australia, and there was no evidence to suggest that it was different to the *Erwinia chrysanthemi* that occurred in these other countries. Therefore it did not meet the internationally accepted definition and criteria of a quarantine pest.

The department continually reviews the pest and disease status of our trading partners and traded commodities. As part of this process evidence emerged that a pineapple specific strain of *Erwinia chrysanthemi* existed and that the strain may be better placed in the genus *Dickeya*. This was the first evidence that the *Erwinia chrysanthemi* potentially associated with pineapples in Hawaii, Malaysia, and the Philippines may be biologically different from that which occurs in Australia and, therefore, may be eligible to be considered as a quarantine pest.

As a precautionary measure, the IRA for pineapples from Malaysia was therefore conducted on the basis that *Erwinia chrysanthemi* (pineapple strain, *Dickeya* sp.) is a quarantine pest for Australia. The IRA assessed the probability of entry (introduction of the bacterium on the pathway of commercially produced, export quality pineapples for human consumption, with the crowns and basal leaves removed; and distribution of the bacterium in a viable state to a susceptible host) – as 'very low'. The IRA further assessed the establishment of the bacterium, should it gain access to a suitable environment as a consequence of transfer to such an environment, as 'high'. An assessment of 'high' is also identified for spread in Australia, if the establishment should occur. The assessment identifies the consequences to Australia, based on pathogenic specificity of the bacterium to pineapples, as 'moderate'.

Combining these risk classifications results in an overall risk assessment of 'very low', which meets Australia's appropriate level of protection. Therefore, the introduction of quarantine measures additional to those already specified for the proposed import of Malaysian pineapples, or for the existing trade in Philippine pineapples is not scientifically justified.