Height

Cassytha glabella

<https://flora.tmag.tas.gov.au/treatments/lauraceae/>

Cyperus mirus

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Cyperus~mirus>

Juncus continuus

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Juncus~continuus>

Juncus mollis

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Juncus~mollis>

Juncus remotiflorus

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Juncus~remotiflorus>

Lomandra fluviatilis

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Lomandra~fluviatilis>

Microtis sp.

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=gn&name=Microtis>

(note this is based on averages across candidates)

Senecio bathurstianus

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Senecio~bathurstianus>

Sphaeromorphaea australis

<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Sphaeromorphaea~australis>

dispersal syndrome decisions:

undefined removed, multiple all same = collapase into 1

multiple conflicting = below

if zoo and then nested zoos, go with nested

if no clear mode (esp if 3 or more), and can’t resolve via online searces, then = mixed

ballistic myrmechory recoded as myrmechory

Acacia stricta, zoochory and myrmechory, collapsed to latter

Aristida ramose – 4 epizoo (one also had myrme), 2 zoo, = epizoo

Austrostipa scabra – zoo and epizoo, = epizoo

Bill scandens – 12 endozoo, 1 epi, 2 zoo = endozoo

Bolboschoenus caldwellii – endozoo 2, baro 1; both do occur, went with former

Both decipiens – anemo and epizoo, went former due to no mammals

Cardamine lila – 1 ballistic, 8 zoochory – latter

Cassytha – 1 zoochory rest endo, collapse into endo

Commersonia – epi and mryme = latter as many ants

Dichelachne rara – 4 epizoo, one zoo, one myrme = epizoo

Drosera – 4 anemo, 4 baro, 2 zoo = mixed

Einadia nutans – 2 zoo and 2 endozoo = latter

Eleocharis – hyrdo and epizoo – former

Eragrostis elongata – baro and epizoo – latter

Eragrostis parviflora – 3 baro one epizoo - former

Euchiton – 9 anemo, one baro = former

Euphorbia drummondii – 4 baro, one zoo = former

Gompholob = 3 mryrme, one baro = former

Gonocarpus – two baro, one zoo – former

Goodenia bellidifolia – one zoo, 2 myrme – latter

Goodenia ovata – one zoo, 3 myrme – latter

Hovea – zoo and myrme – latter

Hypericum – 5 anemo, one zoo one baro - former

Juncus homalocaulis – 2 baro, 1 anemo, 1 epizoo = mixed

Juncus procerus – epizoo and baro = former

Juncus – anemo, epi, baro - mixed

Lachnagr aem – 3 epizoo, 3 anemo = former

Maireana – anemo and endozoo = former

Mitrasacme – baro and zoo = former

Opercularia aspera – 3 myrme one zoo = former

Senecio linearifolius – 5 anemo 1 hydro = former

Panicum effusum – 2 baro, 5 anemo = latter

Parsonsia – 5 anemo, 1 endozoo = former

Paspalidium aversum – 1 baro 1 epizoo = latter

Plantago varia – 2 baro, one epizoo = former

Poa lab – 4 epizoo, 1 baro = former

Polygala japonica – myrme, zoo, anemo = mixed

Pomaderris ferruginea – zoo and myrme = latter

Poma lanigera = 2 myrme, 1 zoo = former

Pultenaea – 1 zoo 1 myrme = latter

Ranunucluis – 2 baro, 1 zoo, 1 myrme, 3 epizoo – mixed

Sporobolus elongatus – baro and epizoo = latter

Syncarpia glomulifera – baro and anemo = latter

Thelymitra = 1 baro 3 anemo = latter

Tricoryne – 1 endozoo, 3 baro = latter

Wahlenbergia capillaris – 2 baro, 2 zoo, 2 anemo = mixed

MISSING SPECIES:

Asterolasia correifolia – myrmechory

<https://www.researchgate.net/profile/Tony-Auld/publication/228457191_The_ecology_of_the_Rutaceae_in_the_Sydney_region_of_south-eastern_Australia_Poorly_known_ecology_of_a_neglected_family/links/00b7d52855319910e0000000/The-ecology-of-the-Rutaceae-in-the-Sydney-region-of-south-eastern-Australia-Poorly-known-ecology-of-a-neglected-family.pdf>

Cyperus mirus – no available info online. Austraits call gives 43 hydro, 1 epizoo, 6 baro, 2 anthro, 5 anemo, 2 zoo = hydro due to overwhelming majority

Dysphania littoralis – no available information online. Austraits call on other NSW species gives 6 barochory and 7 epizoochory = mixed

Isotoma fluviatilis – ditto. Austraits gives 2 epizoo, 2 zoo = epizoo

Juncus mollis – ditto. Austraits give 9 anemo, 1 anthro, 36 baro, 46 epizoo = mixed

Lomandra fluviatilis -d itto. 18 baro, 28 mryme, and many of the species are a mix of the two so = mixed

Microtis sp. <https://www.jstor.org/stable/23874134?seq=4> = anemo

Tricoryne simplex – ditto. 3 baro, 1 endozoo = baro

Initially zoochory, but make more specific

Brachyscome graminea – check via austraits just lists zoochory for many species

Cardamine lilacina <https://bioone.org/journals/annals-of-the-missouri-botanical-garden/volume-96/issue-2/2007047/Biogeography-and-Phylogeny-of-Cardamine-Brassicaceae1/10.3417/2007047.short> stickiness attached to animals indicated, so mixed (baro and epi)

Lepidosperma lineare- most likely ants (<https://academic.oup.com/aob/article/111/4/499/114060>) = myrme

Viola betonicifolia – becomes myrme (numerous online sources all say ants for viola)\_

Rules for growth habit

Where two or more habits listed, use the taller one

For combo ones listed as graminoid/herb, use graminoid

Tussock also becomes graminoid

If climber mentioned for something, use that over others, and also if woody specify as that

This is with exceptions though

Other cases:

Arthropodium minus has 9 herb to 1 graminoid = use former

Asterolasia correifolia has 7 shrub 1 tree = use former

Veronica calycina 10 herb to 1 shrub, use former

Tricoryne simplex has 8 herb to 1 graminoid, use former

Exocarpos strictus has 9 shrub to 4 tree, use former

Gonocarpus tetragynus has 9 herb and 1 subshrub, use former

Pomaderris lanigera 11 shrub and 2 tree, use former

For life history, if multi = take longer

Exceptions:

Dysphania littoralis has 6 annual, 1 biennial, 1 short lived perennial, 1 perennial = short lived

Photosynthesis

Arthropodium minus has a c3 and cam = former

Arthropodium strictum has 3 x c3 and cam = former

Austrostipa setacea is 3 c3 to 1 c4 = former

Bolboschoenus caldwellii is the same

So too Deyeuxia quadriseta

Dichelachne rara is 2 to 1 same

Diuris sulphurea 1 c3 and a cam – use former

Eleocharis acuta 2 c3 and 1 c4 = former

Lachnagrostis aemula is 5 c3 and 1 c4 = former

Poa labillardierei ditto

Rytidosperma bipartitum ditto

Rytidosperma racemosum is 3 to 1

Thelymitra pauciflora 2 c3 to 1 cam = former

Tricoryne elatior c3 and cam = former

Veronica calycina 2 c3 and a c4 = former

Missing ones:

|  |
| --- |
| Allocasuarina torulosa – c3, consensus across literature |
| Asterolasia correifolia – c3, consensus across literature |
| Cyperus mirus – c3 (<https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1095-8339.2011.01160.x>) |
| Dysphania littoralis – c3 based on austraits call of other species |
| Isotoma fluviatilis – ditto |
| Juncus mollis – ditto |
| Lomandra fluviatilis ditto |
| Microtis sp. – ditto |
| Tricoryne simplex ditto |

Fire

Resprouts and partial resprouting recoded to resprouting possible, and if even just one row of resprout, use that over killed

Fire missing:

|  |
| --- |
| Cyperus mirus – couldn’t score due to lack of info. Calling Austraits for other nsw cyperus |
| Gave highly mixed results |
| Dysphania littoralis – aside from D. kalpari, all species killed, so use that |
| Echinochloa telmatophila - few other species in austraits, most are no response, leaves as n/a |
| Isotoma fluviatilis – mainly resprout via austraits |
| Juncus mollis – strong majority resprout, so added that |
| Microtis sp. – all others resprout |
| Paspalum vaginatum- austraits others resprout |

**PERSISTERS**

Height

Arthropodium sp. South-east Highlands (N.G.Walsh 811) – duck river measurement

Brachyscome triloba - duck river measurement

Cassinia Sifton - duck river measurement

Cassytha paniculate - duck river measurement

Dendrophthoe vitellina – omitted

Muellerina eucalyptoides – omitted

Amyema miquelli – omitted

Amyema gaudichaudii - omitted

Einadia polygonoides - duck river measurement

Einadia trigonos - duck river measurement

Kennedia rubicunda - duck river measurement

Lagenophora sublyrata - duck river measurement

Lobelia purpurascens - duck river measurement

Macrozamia spiralis - duck river measurement

Opercularia diphylla - duck river measurement

Oxalis thompsoniae - <https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Oxalis~thompsoniae>

Polymeria calycina

Pultenaea villosa - duck river measurement

Sarcopetalum harveyanum - duck river measurement

Xanthorrhoea minor - duck river measurement

Dispersal syndrome

Acacia longifola – 3 myrme 1 zoo = former

Acacia parra – 1 myrme 1 zoo = former

Acacia ulicifolia – 2 zoo 2 myrme 1 baro = myrme

Adiantum aethiopicum – 1 baro 3 anemo = latter

Alternanthera denticulata = 2 hydro, 1 anemo = former

Amyema miquelii – 1 zoo, 2 endozoo = latter

Angophora floribunda = baro, anemo, zoo = mixed

Anthosachne scabra – 12 epizoo, 1 zoo, 1 myrme = epizoo

Aristida vagans – 2 epi 2 zoo, 1 myrme = epizoo

Asperula conferta – 2 baro, 1 zoo = former

Austrostipa rudis – 3 epizoo, 1 myrme, 1 maro = epizoo

Bossiaea prostrata – 2 myrme 1 zoo = former

Bothriochloa macra – 3 epizoo 1 zoo = former

Breynia oblongifolia – 2 myrme, 1 zoo, 1 endozoo = myrme

Bursaria spinosa – 2 anemo, 1 hydro = former

Caesia parviflora – 3 myrme 1 zoo = former

Callistemon linearis – 2 anemo, 1 hydro = former

Calotis cuneifolia – 2 zoo 1 epizoo = latter

Calotis lappulacea– 2 zoo 1 epizoo = latter

Carex inversa – 5 zoo and 3 baro – endozoo see <https://www.nzpcn.org.nz/flora/species/carex-inversa/?download=pdf>

Casuarina glauca – 4 aenmo, 1 hydro = former

Centella asiatica = epizoo and baro – latter (multiple online sources)

Centipeda minima – 2 epizoo 1 hydro = former

Chloris truncata – 5 anemo, 1 baro, 1 zoo 2 epizoo = anemo

Commelina cyanea – 2 baro, 1 zoo = former

Correa reflex – 4 zoo, 2 myrme, 3 ballistic myrme = myrme

Cotula australis – baro, zoo, anemo = mixed

Crassula sieberiana – 5 anemo 2 baro = former

Cymbopogon refractus – 3 epizoo, 1 anemo,1 myrme = former

Daviesia ulicifolia – 3 myrme 1 zoo = former

Denhamia silvestris – 3 myrme 1 endozoo = former

Desmodium rhytidophyllum – 3 epizoo 2 endozoo = former

Desmodium varians – 3 epizoo, 1 zoo 1 myrme, 1 baro = epizoo

Dianella caerulea – 3 endozoo 1 zoo = former

Dianella longifolia – 3 endozoo, 1 epizoo 1 zoo = former

Dianella reovluta – 6 endozoo 1 epizoo 1 zoo = former

Dichelachne micrantha – 5 epizoo, 2 zoo, 1 myrme, 1 anemo = epizoo

Dichondra repens – 3 baro 1 zoo = former

Dillwynia sieberi – 3 myrme 1 zoo = former

Dodonaea triquetra – 2 myrme 1 anemo = former

Echinopogon caespitosus – 1 epizoo 1 zoo 1 baro = epizoo

Echinopogon ovatus – 6 epizoo, 1 zoo, 1 myrme, 1 anemo – epizoo

Entolasia marginata – 1 anemo 1 epizoo = mixed

Entolasia stricta – 1 baro, 1 anemo, 2 epizoo = mixed

Eragrostis brownii – 3 baro, 1 anemo, 1 epizoo = baro

Eragrostis leptostachya – 1 baro 1 epizoo = mixed

Eriochloa pseudoacrotricha – 1 anemo 1 epizoo = mixed

Eucalyptus eugenioides – 1 baro 1 anemo – mixed

Eucalyptus fibrosa - 1 baro 1 anemo – mixed

Eucalyptus globoidea – 3 baro 1 anemo = baro

Eucalyptus longifolia - 1 baro 1 anemo – mixed

Eucalyptus moluccana - 1 baro 1 anemo – mixed

Exocarpos cupressiformis – 5 endozoo, 1 zoo = endo

Gahnia aspera – 1 zoo, 1 endo 1 baro = endozoo

Gahnia melanocarpa = 1 baro 1 endozoo = endozoo (online sources)

Geranium solanderi = 1 anemo 2 epizoo = epizoo

Glochiidon ferdinandi – 1 baro 1 endozoo = mixed

Glycine clandestine – 4 baro, 2 zoo = baro

Glycine microphylla – 1 zoo , 1 myrme 1 baro = mryme

Glycine tabacina – 1 myrme, 3 zoo, 2 baro = mryme

Hakea sericea – 4 anemo, 1 baro = anemo

Hardenbergia violacea – 5 myrme 3 zoo = myrme

Hibbertia aspera – 2 myrme 1 zoo = myrme

Homalanthus populifolius – 1 endo 1 zoo = endo

Hydrocotyle sibthorpioides – 1 zoo 1 baro = baro

Hypericum gramineum – 6 baro, 3 anemo, 1 zoo = baro

Hypoxis hygrometrica – 3 baro 1 anemo = baro

Indigofera australis – 3 baro 1 zoo = baro

Isolepis cernua – 4 epizoo 1 baro = epizoo

Juncus bufonius – 5 baro, 1 anemo, 1 epizoo, 1 anthro = baro

Juncus planifolius – 2 baro 1 epizoo = baro

Juncus subsecundus – 2 anemo 3 baro 2 epizoo = mixed

Juncus usitatus – 2 anemo 2 baro 1 epizoo = mixed

Kennedia rubicunda – 2 mryme 1 baro 1 zoo = myrme

Kunzea ambigua – 1 myrme 1 anemo = mixed

Lachnagrostis filiformis – 8 anemo, 1 epizoo 1 baro = former

Lepidsoperma laterale – 6 myrme 3 zoo = myrme

Leucopogon affinis – 9 endozoo 1 myrme 1 zoo = endozoo

Leucopogon juniperinus – 1 myrme 1 zoo 1 endozoo 1 baro = endozoo (online info)

Linum marginale – 1 baro 1 zoo = mixed

Lissanthe strigosa – 1 zoo 1 endo = latter

Lobelia anceps – 2 baro 2 zoo = mixed

Lomandra filiformis – 5 myrme 1 baro = former

Lomandra longifolia – 6 myrme 3 baro = former

Lomandra multiflora – 2 myrme 1 baro = former

Lythrum hyssopifolia – 1 baro 1 anemo 1 epizoo = mixed

Macrozamia spiralis – 1 baro 1 epizoo = baro (see <https://www.biodiversitylibrary.org/part/48121>)

Mentha diemenica – 3 zoo 1 baro = mixed

Microlaena stipoides – 3 epizoo, 1 baro, 1 anemo = epizoo

Myrsine variabilis – 3 endozoo, 1 zoo = former

Notelaea ovata – zoo = endozoo

Opercularia diphylla – 2 zoo 1 myrme = latter

Opercularia varia – 3 myrme 1 zoo = former

Olismenus hirtellus – 6 epizoo, 2 zoo, 2 baro = epizoo

Oxalis perennans – 2 baro 1 ballistic 1 anemo = mixed

Panicum simile – 2 anemo 2 epizoo = mixed

Paspalidium criniforme – 1 baro 1 epizoo = mixed

Paspalidium distans – 2 baro 1 anemo 1 epizoo = mixed

Pelargonium inodorum – 1 anemo 1 epizoo = mixed

Persicaria decipiens – 2 epizoo 1 endozoo = epizoo

Persicaria lapathifolia – 3 epizoo 1 endo – epizoo

Persoonia linearis – 3 endozoo 1 zoo = endo

Phragmites australis – 6 anemo, 3 hydro, 2 zoo, 1 epizoo = anemo

Phyllanthus gunnii – 1 ballistic 1 zoo = mixed

Pimelea linifolia – 3 myrme 2 zoo = myrme

Pittosporum revolutum – 1 myrme 1 zoo 1 endozoo = endozoo

Pittosporum undulatum – 2 endozoo, 3 zoo 1 myrme = endozoo

Plantago debilis – 2 baro 1 epizoo = baro

Plectrathus parvifolius – zoo = endozoo (online sources indicate birds)

Poa sieberiana – 1 anemo, 2 baro, 1 epizoo = mixed

Polymeria calycina – 1 baro, 1 anemo, 1 hydro, 1 epizoo = mixed

Polyscias sambucifolia – 3 endozoo, 2 zoo, 1 epizoo = endozoo

Poranthera microphylla – 3 ballistic myrmechory, 1 myrme, 2 zoo, 2 baro = myrme

Portulaca oleracea – 3 baro 1 epizoo = baro

Pteridium esculentum – 3 anemo 2 baro = anemo

Pterostylis nutans – 3 anemo 1 baro = former

Rubus parvifolius – 5 endozoo, zoo, 1 epizoo = endozoo

Rumex brownii – 6 epizoo 1 myrme = epizoo

Rytidosperma tenuius – 4 epizoo 1 myrme = epizoo

Sarcopetalum harveyanum – 5 endozoo 1 zoo = endozoo

Scaevola albida – 2 endozoo, 1 epizoo, 1 baro = mixed

Schoenus apogon – 3 zoo 1 baro = mixed (online sources)

Solenogyne bellioides – 1 anemo 1 zoo = anemo

Themeda triandra – 5 epizoo, 1 zoo, 1 anemo = epizoo

Thysanotus tuberosus – 2 myrme 1 baro = myrme

Triglochin striata – 4 hydro 1 baro = hydro

Triptilodiscus pygmaeus – 6 anemo 2 epizoo = anemo

Wahlenbergia gracilis – 2 anemo 1 zoo = anemo

Zieria smithii – 3 zoo, 1 ballistic, 2 ballistic myrme = myrme

Acacia pubescens – myrmecochory (<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Recovery-plans/downy-wattle-acacia-pubescens-recovery-plan.pdf>)

Callistemon linearifolius - austraits query of genus gives 12 anemo 1 hydro = former

Callistemon pinifolius - ditto

Callistemon salignus - ditto

Cassinia sifton - numerous sources online indicate wind dispersal for the genus

Eucalyptus resinifera - austraits call indicates mixed

Lagenophora sublyrata - austraits call – 1 anemo, 4 baro, 5 zoo = mixed

Melaleuca decora – austraits query 23 anemo = anemo

Melaleuca nodosa as above

Melaleuca styphelioides as above

Pittosporum multiflorum austraits query gives 9 endozoo, 2 myrme 4 zoo = endozoo

Growth habit exceptions:

Acacia brownii 10 shrub 1 tree, use shrub – it’s never a tree

Acacia ulicifolia 13 shrub 1 tree, use shrub – it’s never a tree

Breynia oblongifolia 12 shrub 1 tree, - use shrub – it’s never a tree

Chrysocephalum apiculatum – 18 herb one subshrub user former

Desmodium varians listed as a tree by one study, but this is an error

Geranium solanderi 12 herb 1 climber use former

Annotation of Muellerina eucalyptoides is a mistake, 6 shrub is correct

Pittosporum multiflorum 5 shrub 3 tree, but it’s a shrub

Senecio hispidulus 16 herb 1 subshrub use former

Life history

Centipeda minima 9 annual, 2 perennial and 1 short lived perennial, use latter as it’s a facultative perennial

Euchiton sphaericus 12 annual, 3 biennial 1 perennial use annual (online sources)

Juncus bufonius 12 annual 1 perennial use former; seems like only some varieties are perennial

Lythrum hyssopifolia 13 annual 1 perennial = short lived (online)

Pelargonium inodorum 5 annual, 2 perennial, 2 short lived = latter

Persicaria lapathifolia 5 annual, 3 biennial, 2 perennial = biennial

Poranthera microphylla 14 annual, 1 perennial, 1 short-lived = short lived

Photosynthetic

Alternanthera denticulata – 3 c3 1 c4 = former

Anthosachne scabra – 6 c3 1 c4 = former

Caesia parviflora c3 and cam = former

Carex inversa 5 c3 1 c4 = former

Dianella revoluta 2 c3 1 cam = former

Echinopogon ovatus 4 c3 1 c4 = former

Einadia hastata 3 c3 1 c4 = former

Geranium solanderi 3 c3 1 cam = former

Hypoxis hygrometrica 3 c3 1 cam = former

Isolepis cernua 4 c3 1 c4 = former

Lachnagrostis filiformis 6 c3 1 c4 = former

Lepidosperma lateral 7 c3 and 1c4 = former

Macrozamia spiralis c3 and cam = former

Mentha diemenica 3 c3 and 1 cam = former

Microlaena stipoides - 3 c3 and 1 c4 = former

Oxalis perennans - 2 c3 and 1 cam = former

Panicum simile - 1 c3 and 4 C4 = latter

Pelargonium inodorum c3 and cam = former

Persicaria decipiens – 2 c3 1 c4 = former

Persicaria lapathifolia – 3 c3 1 c4 = former

Phragmites australis – 5 c3 1 c4 = former

Poa sieberiana – 3 c3 1 c4 former

Portulaca oleracea – 2 c4 1 cam = former

Pterostylis nutans - 2 c3 1 cam = former

Rumex brownii – 1 c3 1 c4 = former

Rytidosperma fulvum – 4 c3 1 c4 = former

Rytidosperma setaceum – 6 c3 1 c4 = former

Rytidosperma tenuis – 3 c3 1 c4 = former

Schoenus apogon – 5 c3 1 c4 = former

Veronica plebeian c3 and c4 = former

Missing added: c3 for all based on literature

Acacia pubescens

Boronia polygalifolia

Callistemon linearifolius

Callistemon pinifolius

Cassinia sifton

Chorizema parviflorum

Eucalyptus resinifera

Eucalyptus tereticornis

Homalanthus populifolius

Lagenophora sublyrata

Lasiopetalum parviflorum

Melaleuca decora

Melaleuca styphelioides

Notelaea ovata

Pittosporum multiflorum

Pultenaea villosa

Fire

Callistemon linearifolius - resprouts (based on austraits call of other species)

Cassinia sifton fire\_killed (<https://bioone.org/journals/australian-systematic-botany/volume-30/issue-4/SB17033/A-revision-of-Cassinia-Asteraceae--Gnaphalieae-in-Australia-7/10.1071/SB17033.short>)

Cheilanthes sieberi resprouts \_austraits)

Lagenophora sublyrata ditto