



Forest & Bird

TE REO O TE TAIAO | *Giving Nature a Voice*

YOUR WEED CONTROL GUIDE

Our gardens & reserves are suffering from out of control invasive weeds which may be in your backyard, business, local park or bush area.

We'd love your help.

Please be a good neighbour and rid your backyard of weeds which can spread and harm your environment. Get free tips, tools, and training from your local group.

These are some of the environmental weeds which have a habit of spreading widely, growing vigorously and destroying our precious natural environment.

Five minutes work this week, save hours of work next year.

How To Use This Guide

The weeds are listed in alphabetical order within categories: trees, shrubs, climbers, palms, and ground covers. Indicated for each weed are codes for adverse effects and options for organic and herbicide control. The codes are explained in the key on page 2. Some of these weeds are really difficult to kill so repeated effort may be required.

Environmental weeds have been found in your neighbourhood.

Are they growing on your property? Someone may have ticked them to help you get started. Can you check your backyard or reserve?

Go to www.forestandbird.org.nz/weedguide for more information.

Key: How To Interpret The Codes

Organic Control

- O1** Dig out including roots (bulbs/nuts/corms/tubers, etc) if small enough
- O2** Keep stems/roots off ground eg hang in a tree, or they may regrow or sprout new roots
- O3** Bag up seeds/seed pods and dispose of in rubbish or bury deeply
- O4** Deadhead flowers before fruiting/seeding to avoid seed dispersal
- O5** Fell/Cut – no need to paint stump if >100mm diameter
- O6** Fell/Cut and cover stump with thick black polythene to exclude light, cover polythene and entire root zone with 150mm deep mulch for 12 months
- O7** Place in sealed black weed bags for 12 months or more to decompose
- O8** Leave cut vines in trees to die, don't pull down
- O9** Use hook on long pole to retrieve seed pods before they open
- O10** Keep hedges well-trimmed to prevent fruiting

Is your property is looking pretty good?

If you have your own property under good pest plant control, how about joining a weedbusting or restoration group in your area and help rid your neighbourhood or local reserve of pest plants



Adverse Effect:

HOW DOES THIS PLANT ADVERSELY AFFECT OUR ENVIRONMENT?

- A1** Climbs up trees and shrubs and smothers them
- A2** Seeds blown a long distance by wind and can spread to offshore islands
- A3** Seeds eaten by birds and dispersed a long distance into other gardens and bush areas
- A4** Will regrow from small fragments
- A5** Health risk – eg injury from spines, breathing issues, allergies
- A6** Forms a dense ground cover which stops regeneration of native plants
- A7** Irritant sap
- A8** Sours soil preventing regrowth of many natives



Herbicide Control

OPTIONS FOR USING THE MIN. AMOUNT OF THE RIGHT HERBICIDE

- H1** Fell/cut stump and paint with **glyphosate gel**
- H2** Fell/Cut and paint stump with 1-2mm layer **double strength glyphosate gel** ensuring rim of stump is pasted
- H3** Fell/Cut and paint stump with 1-2mm layer of **metsulfuron gel** ensuring rim of stump is pasted
- H4** Cut and spray stump with **metsulfuron** 5g per litre and penetrant 1ml per litre of water
- H5** Paint stem for 30cm with **metsulfuron gel** and cut above the painted stem
- H6** Scrape 30cm of stem with a saw blade and paint this area with **pictoram gel**
- H7** Ring bark, paint edges of ring bark with **metsulfuron gel**. Avoid using metsulfuron near any fern species
- H8** Foliage spray with **glyphosate** 20ml per litre, with penetrant 1ml per litre
- H9** Foliage spray with **metsulfuron** 0.5g per litre, with penetrant 1ml per litre
- H10** Foliage spray with **triclopyr** (600g/l) 6ml per litre with penetrant 1ml per litre
- H11** Cut stems above waist height, wait for regrowth, then spray with **metsulfuron** 0.5g per litre with penetrant 1ml per litre
- H12** Drill and inject large trees with **glyphosate** at 500ml per litre if safe to do so - See guidelines for killing standing trees (may require a contractor). Drill 18mm holes (tangentially angled downwards) in a spiral up the trunk. For 50mm stems one hole. For 100mm – two holes. Larger stems – 150mm apart
- H13** Drill and inject large trees with **metsulfuron** 10g per litre if safe to do so- see guidelines for killing standard trees (may require a contractor). Drill 18mm holes (tangentially angled downwards) in a spiral up the trunk. For 50mm stems one hole. For 100mm – two holes. Larger stems – 150mm apart.
- H14** Trees are best poisoned a few weeks before felling to prevent regrowth from small branches
- H15** Paint both the stump and cut stem if cut stems cannot be kept off ground
- H16** **Pictoram gel** is ineffective on this species
- H17** Place cut leaves over the top of painted stems to keep rain off
- H18** Before spraying pull weeds away from valued trees eg tree ferns
- H19** Paint stem for 30cm with **double strength glyphosate gel** and leave to die, scrape larger stems with saw blade first
- H20** Cut and spray stump tubers with **metsulfuron** 0.5g/L + **penetrant** 1ml per litre of water
- H21** Ring bark and paint edges of ring bark with **double strength glyphosate gel**



Cotoneaster
Cotoneaster glaucophyllus

A3
 O1 O6
 H3 H4 H9 H13



Loquat
Eryobotria japonica

A3
 O1 O6
 H3 H7 H9 H12



Monkey Apple
Syzygium smithii (Acmena)

A3
 O1 O6 O10
 H3 H4 H7 H9 H13



Privet - Chinese
Ligustrum sinensis

A3 A4
 O1 O2 O6
 H4 H9 H13 H15



Privet - Tree
Ligustrum lucidum

A3
 O1 O2 O6
 H3 H4 H9 H13



Wattle - Sydney Golden + Others
Acacia species

A3 A8
 O1 O5
 H2 H8 H12 H21



Willow - Crack, Grey
Salix fragilis

A4
 O1 O2
 H1 H8 H12 H14 H15



Woolly Nightshade
Solanum mauritianum

A3 A5 A8
 O1 O3 O4 O6
 H2 H6 H19



Evergreen Buckthorn
Rhamnus alaternus

A3
 O1 O6
 H3 H4 H7 H9 H13



Gorse
Ulex species

A5
 O1
 H1 H3 H4 H9 H10



Japanese Spindleberry
Euonymus japonicus

A3
 O1 O2 O6
 H3 H9 H15



Queen of the Night
Cestrum nocturnum

A3
 O1 O2 O6
 H1 H15 H19



TREES

SHRUBS



Banana Passionfruit
Passiflora tripartita

- A1
- O1 O3 O7 O8
- H3 H9



Blue Morning Glory
Ipomoea indica

- A1
- O1 O2 O7 O8
- H3 H9 H11



Climbing/Bushy Asparagus
Asparagus scandens/asparagoides

- A1 A3
- O1 O2 O7 O8
- H8 H18



Elaeagnus
Elaeagnus x reflexa

- A1 A3 A5 A6
- O1 O2 O6 O8
- H3 H4 H9 H13 H15



Ivy
Hedera helix

- A1 A7
- O1 O2 O7 O8
- H2 H3 H9



Japanese Honeysuckle
Lonicera japonica

- A1
- O1 O2 O7
- H3 H9



Jasmine
Jasminum polyanthum

- A1 A6
- O1 O2 O7
- H3 H9 H11



Madeira Vine
Anredera cordifolia

- A1 A4
- O1 O2 O3 O7 O8
- H3



Moth Plant
Araujia hortorum

- A1 A2 A7
- O1 O2 O3 O9
- H3 H5 H9



Bangalow Palm
Archontophoenix cunninghamiana

- A3
- O1 O2 O3 O4 O6
- H1 H8 H12



Chinese Windmill Palm
Trachycarpus fortunei

- A3
- O1 O2 O3 O4 O6
- H1 H8 H12



Phoenix Palm
Phoenix canariensis

- A3 A5
- O1 O2 O3 O4 O6
- H1 H8 H12



CLIMBERS

PALMS



Agapanthus
Agapanthus praecox

- A6
- O1 O2 O4 O6 O7
- H10



Arum Lily, Green Goddess
Zantedeschia aethiopica

- A3 A6
- O1 O2 O3
- H3 H9 H10 H17



Bamboo
Phyllostachys species

- A6
- O1 O2
- H2 H8 H16



Bears Breeches
Acanthus mollis

- A6
- O1 O2 O4 O7
- H3 H9 H10 H17



Giant Reed
Arundo donax

- A6
- O1 O2
- H2 H8 H16



Ginger - Wild
Hedychium gardnerianum

- A3 A4 A6
- O1 O2 O3
- H3 H9 H17 H20



Kikuyu Grass
Pennisetum clandestinum

- A6
- O1
- H8



Montbretia
Crococsmia X crocosmiiflora

- A3 A4
- O1 O2 O3 O7
- H8



Palm Grass
Setaria palmifolia

- A6
- O1 O2 O3 O7
- H8



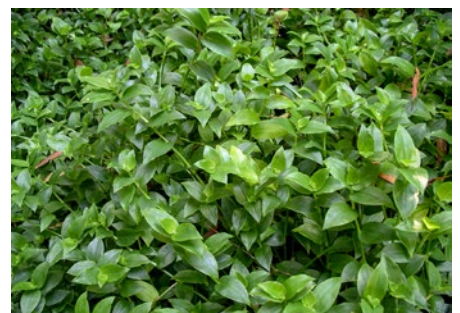
Pampas Grass
Cortaderia selloana, C.jubata

- A2 A6
- O1 O2 O4
- H1 H8



Plectranthus
Plectranthus ciliatus

- A4 A6
- O1 O2 O7
- H8



Tradescantia, Wandering Willie
Tradescantia fluminensis

- A4 A6
- O1 O2 O7
- H10



Control Methods



Composting Weed Bag / Ginger Barrel

Bag for onsite composting & barrel to break down by soaking.



Cut & Spray

Addition of marker dye helps show where you have been.



Backpack Sprayer

Use a long brass wand & brass cone nozzle (for a round, focussed spray) & anti drip filter.



Cut & Paint

Take care if cutting weed trees not to damage emerging natives. Stack carefully.



Ring Bark & Paint



Scrape & Paint



Drill & Inject



Dig Out & Hang in Tree

Herbicide Use Guidelines

- Keep herbicide use to a minimum
- Follow all precautions on product labels
- Before working on public land contact the relevant authority for guidance
- Know which herbicides can be used by volunteers in parks
- Know the pitfalls of herbicide use e.g. spray drift and damage to non-target plants. Take care around waterways and valuable trees
- A qualification e.g. Growsafe is required in order to use some herbicides
- Use marker dye (colour for spray) so you and others can see where you have been working
- Repeat applications may be needed
- Follow up every 3 months until you are sure you are successful – control may take years
- No single herbicide will kill all plants
- When stump is near valued trees consider using glyphosate as less toxic to surrounding species

This weed guide was developed by:

Forest & Bird
www.forestandbird.org.nz

Pest Free Kaipātiki
www.pestfreekaipatiki.org.nz

Restore Hibiscus & Bays
www.restorehb.org.nz

Chemicals In This Guide

Glyphosate

- Liquid eg Roundup. Mixes calculated using 360g/l
- Gel eg Cut'n'Paste gel, Bamboo Buster gel (double strength)
- The only approved herbicide around waterways

Metsulfuron

- Granules eg Escort. Formula calculations based on using 600g/kg product.
- Gel eg Metgel. Moves through the soil killing non target plants. Do not use around base of valuable trees or close to waterways

Marker Dye

- Eg Envirodye – bright blue colour can be added to spray mix or gel so you and others can see where you have been working

Picloram

- Gel eg Vigilant, Triumph. This herbicide has been largely removed from this edition of the weed guide, except for woolly nightshade control. Picloram has a high risk of damage to non target species. There are safer alternatives.

Triclopyr

- Eg Grazon 600 g/litre (Yates hydrocotyle killer is only 120g/litre). Effective on tradescantia and other broadleaf weeds. Will not kill grasses.