

# WEED CONTROL GUIDE

For residents, businesses and community groups

## WHY THIS GUIDE?

Pest plants are creating havoc in our natural spaces – bush reserves, coastal areas, and walkways.

These are some of the introduced plants which have a habit of spreading widely, growing vigorously and displacing or smothering our own

precious native vegetation. \*Not all these plants are legally declared pest plants. Home owners and community groups are encouraged to get to know these weeds and help eradicate them from their gardens and our reserves.

## HOW DOES THIS GUIDE WORK?

Each featured plant has its listed adverse effect, and options for control with or without herbicide use. The codes are linked to a key on page 2. Some of these plants are really hard to kill so repeated effort can be required. This guide is by no means a comprehensive list of the pest plants out there!



### Cotoneaster

*Cotoneaster glaucophyllus*

Tree

Adverse effect: A3

Control: M1, M6, H2, H4, H9, H13



### Monkey apple

*Syzygium smithii (Acmena)*

Tree

Adverse effect: A3

Control: M1, M6, M10, H1, H4, H7, H9, H13



### Privet - Tree

*Ligustrum lucidum*

Tree

Adverse effect: A3

Control: M1, M2, M6, H2, H3, H4, H9, H13



### Loquat\*

*Eryobotria japonica*

Tree

Adverse effect: A3

Control: M1, M6, H1, H7, H9, H12



### Privet - Chinese

*Ligustrum sinensis*

Tree

Adverse effect: A3

Control: M1, M2, M6, H2, H3, H4, H9, H13, H15



### Queen of the night

*Cestrum nocturnum*

Shrub

Adverse effect: A3

Control: M1, M2, M6, H1, H5, H15

# CONTROL KEY

## ADVERSE EFFECT: WHY IS THIS PLANT A PROBLEM?

- 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

## MECHANICAL/ORGANIC CONTROL

- M1** Dig out including roots (bulbs/nuts/corms/tubers, etc) if small enough
- M2** Keep stems/roots off ground eg hang in a tree, or it may regrow or sprout new roots
- M3** Bag up seeds/seed pods and dispose of in rubbish or bury deeply
- M4** Deadhead flowers before fruiting/seeding to avoid seed dispersal
- M5** Fell/Cut – no need to paint stump if >100mm diameter
- M6** 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
- M7** Place in sealed black weed bags for 12 months or more to decompose
- M8** Leave cut vines in trees to die, don't pull down
- M9** Use hook on long pole to retrieve seed pods before they open
- M10** Keep hedges well-trimmed to prevent fruiting

## CONTROL METHODS USING HERBICIDE

- H1** Fell/Cut and paint stump with 1-2mm layer glyphosate gel or 50 -100% glyphosate solution ensuring rim of stump painted
- H2** Fell/Cut and paint stump with 1-2mm layer double strength glyphosate gel
- H3** Fell/Cut and paint stump with 1-2mm layer of metsulfuron gel
- H4** Cut and spray stump/tubers with metsulfuron 5g per litre and penetrant 1ml per litre of water
- H5** Paint stem for 30cm with picloram gel and leave to die, scrape larger stems with saw blade first (scrape and paint)
- H6** Paint stem for 30cm with picloram gel and cut above the painted area
- H7** Ring bark, paint edges of ring bark with picloram gel. Do not use picloram gel directly uphill of or under any desirable trees as this can kill even large trees
- 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 (may require a contractor)
- H13** Drill and inject large trees with metsulfuron 10g per litre if safe to do so (may require a contractor)
- H14** Trees are best killed 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** Picloram 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 per litre and penetrant 1ml per litre of water
- H21** Ring bark and paint edges of ring bark with double strength glyphosate gel.
- H22** Paint stem for 30cm with metsulfuron gel (see H5)





**Evergreen buckthorn**

*Rhamnus alaternus*

Shrub

Adverse effect: A3

Control: M1, M6, H2, H4, H7, H9, H13



**Willow - crack, grey**

*Salix fragilis*

Tree

Adverse effect: A4

Control: M1, M2, H1, H8, H12, H14, H15



**Climbing asparagus**

*Asparagus scandens*

Climber

Adverse effect: A1, A3

Control: M1, M2, M7, M8, H8, H18



**Gorse**

*Ulex species*

Shrub

Adverse effect: A5

Control: M1, H1, H3, H4, H9, H10



**Woolly nightshade, Tobacco plant**

*Solanum mauritianum*

Tree

Adverse effect: A3, A5, A8

Control: M1, M3, M4, M6, H2, H5



**Elaeagnus**

*Elaeagnus X reflexa*

Climber

Adverse effect: A1, A3, A5, A6

Control: M1, M2, M6, M8, H3, H4, H9, H13, H15



**Japanese spindleberry**

*Euonymus japonicus*

Shrub

Adverse effect: A3

Control: M1, M2, M6, H3, H9, H15



**Blue morning glory**

*Ipomoea indica*

Climber

Adverse effect: A1

Control: M1, M2, M8, M7, H3, H6, H9, H11



**Japanese honeysuckle**

*Lonicera japonica*

Climber

Adverse effect: A1

Control: M1, M2, M7, H3, H9



**Wattle - Sydney golden & others**

*Acacia longifolia*

Tree

Adverse effect: A3, A8

Control: M1, M5, H8, H12, H21



**Banana passionfruit**

*Passiflora tripartita*

Climber

Adverse effect: A1

Control: M1, M3, M7, M8, H3, H6, H9



**Ivy**

*Hedera helix*

Climber

Adverse effect: A1, A7

Control: M1, M7, M8, H3, H9





**Jasmine**

*Jasminum polyanthum*

Climber

Adverse effect: A1

Control: M1, M2, M7, H3, H9, H11



**Arum lily, green goddess**

*Zantedeschia aethiopica*

Adverse effect: A3, A6

Control: M1, M2, M3, H3, H9, H10, H17



**Montbretia**

*Crocosmia X crocosmiiflora*

Adverse effect: A3, A4

Control: M1, M2, M3, M7, H8



**Madeira vine**

*Anredia cordifolia*

Climber

Adverse effect: A1, A4

Control: M1, M2, M3, M7, M8, H3



**Bears breeches**

*Acanthus mollis*

Adverse effect: A6

Control: M1, M2, M4, M7, H3, H9, H10, H17



**Palm grass**

*Setaria palmifolia*

Adverse effect: A6

Control: M1, M2, M3, M7, H8



**Moth plant**

*Aurujia hortorum*

Climber

Adverse effect: A1, A2, A7

Control: M1, M2, M3, M9, H6, H9, H22



**Ginger - wild**

*Hedychium gardnerianum*

Adverse effect: A3, A6, A4

Control: M1, M2, M3, H9, H17, H20



**Pampas grass**

*Cortaderia selloana, C.jubata*

Adverse effect: A2, A6

Control: M1, M2, M4, H1, H8



**Agapanthus**

*Agapanthus praecox*

Adverse effect: A6

Control: M1, M2, M4, M6, M7, H10



**Kikuyu grass\***

*Pennisetum clandestinum*

Adverse effect: A6

Control: M1, H8



**Plectranthus**

*Plectranthus ciliatus*

Adverse effect: A4, A6

Control: M1, M2, M7, H8





**Tradescantia, wandering willie**  
*Tradescantia fluminensis*  
 Adverse effect: A4, A6  
 Control: M1, M2, M7, H10



**Chinese windmill palm\***  
*Trachycarpus fortuneii*  
 Palm  
 Adverse effect: A3  
 Control: M1, M2, M3, M4, M6, H1, H8, H12



**Giant reed**  
*Arundo donax*  
 Adverse effect: A6  
 Control: M1, M2, H2, H8, H16



**Bangalow palm\***  
*Archontophoenix cunninghamiana*  
 Palm  
 Adverse effect: A3  
 Control: M1, M2, M3, M4, M6, H1, H8, H12



**Phoenix palm**  
*Phoenix canariensis*  
 Palm  
 Adverse effect: A3  
 Control: M1, M2, M3, M4, M6, H1, H8, H12



**Bamboo\***  
*Phyllostachys species*  
 Adverse effect: A6  
 Control: M1, M2, H2, H8, H16

## CONTROL METHODS



**Composting Weed Bags**  
 Available from Weedfree Trust, [info@weedfree.org.nz](mailto:info@weedfree.org.nz)  
 Ph 09 826-4276



**Cut and Spray**  
 Addition of marker dye helps work out where you have been



**Backpack Sprayer**  
 Use a long brass wand and brass cone nozzle and anti drip filter



**Cut and Paint**



**Ring Bark**



**Scrape and Paint**



**Drill and Fill**



**Dig out and hang in tree**

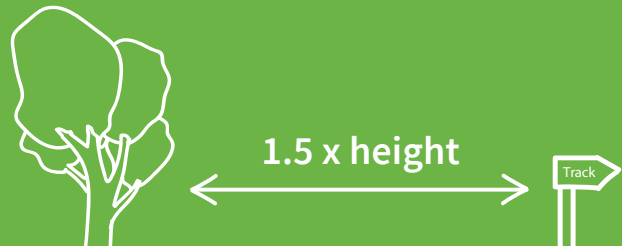
Video of control methods available at <http://youtu.be/dT0IAjHGgsI>

## HERBICIDE USE GUIDELINES

- Keep herbicide use to a minimum.
- Follow all precautions on product labels.
- Before working in reserves contact Auckland Council Parks for guidance.
- Know which herbicides can be used by volunteers in parks.
- Know the pitfalls of herbicide use eg spray drift and damage to non target plants
- A qualification eg Growsafe is required in order to use some herbicides.
- Use marker dye (colour for spray) so you know where you have been.
- Repeat applications may be needed.
- Follow up every 3 months until you are sure you are successful – may take years.
- No one herbicide will kill all plants.

### Guidelines for killing standing pest plant trees

For safety reasons trees should not be drilled or ring barked within 1.5x the height of the tree of any public space eg track, edge of bush.



## CHEMICALS IN THIS GUIDE

### Glyphosate

- liquid eg Roundup. Mixes calculated using 360g/l product. Effective on most grasses.
- gel eg CutnPaste gel, Bamboo Buster gel (double strength).

### 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.

### Marker Dye

- eg Envirodye – bright blue colour can be added to spray mix or gel helps a lot.

### Picloram

- gel eg Vigilant, Triumph. Moves through the soil killing non target plants - avoid using if rain forecast in next 12 hours. Ineffective on bamboo. Overused. Use other herbicides where possible.

### Triclopyr

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

### Penetrant

- organosilicone eg Satur8, Pulse. Weakens the protective layer on the leaf surface to assist penetration by chemicals.

## FOR MORE INFORMATION ON PEST PLANTS

Weedbusters

Naturespace

New Zealand Plant Conservation Network

Auckland Council Pest Plants

Forest & Bird

[www.weedbusters.org.nz](http://www.weedbusters.org.nz)

[www.naturespace.org.nz](http://www.naturespace.org.nz)

[www.nzpcn.org.nz](http://www.nzpcn.org.nz), very good site of plants found in NZ  
[pestplants.aucklandcouncil.govt.nz](http://pestplants.aucklandcouncil.govt.nz) or ph 301 01 01

[www.forestandbird.org.nz/pest-plants](http://www.forestandbird.org.nz/pest-plants)

### Do you have your own property under good pest plant control?

How about helping care for your local reserve. There are likely to be weedbusting groups in your area. Join one of these groups and help rid Auckland of pest plants. Phone Auckland Council on 301 0101.

This weed guide was developed by Forest & Bird ([forestandbird.org.nz](http://forestandbird.org.nz)) and Auckland Council.