



ALLIGATOR WEED

Alternanthera philoxeroides

What does it look like?

This perennial herb forms dense floating mats on water and can invade pasture. Its opposing leaves are waxy green and its green-brown or reddish, hollow stems root at nodes. The tips are upright with white clover-like flowers.

Why is it a problem?

If it's the main pasture cover it causes photosensitivity in stock, and it blocks drains increasing sedimentation and flooding. It replaces most other herbaceous species on water and land.

How do I get rid of it?

* Do not use these chemicals over water. Aquatic sites will require mechanical control only – ensure all machinery is thoroughly cleaned before moving offsite.

- Spray 5g metsulfuron-methyl (600g/kg e.g. Escort®) + 10ml penetrant per 10 litres water spring and autumn; or
- Spray with product containing dicamba (80g/litre) (e.g. Banvine or Kamba 500) at 50mls + penetrant per 10 litres water.



WANDERING JEW

Tradescantia fluminensis

Also known as: wandering willie

What does it look like?

This plant has fleshy, dark green, shiny leaves that are 3-6cm long, oval with pointed tips on hairless, creeping stems. It produces white flowers with three petals from spring to summer.

Why is it a problem?

It is shade tolerant and forms dense mats on the forest floor, smothering vegetation and preventing native regeneration. It may cause dermatitis in dogs.

How do I get rid of it?

- Cover the area with black plastic for 6-12 months; or
- Spray with 60ml triclopyr (300g/l e.g. Grazon®) + 10ml penetrant per 10 litres water.

Contact us:

For further information contact Northland Regional Council
Private Bag 9021, Whāngārei Mail Centre, Whāngārei 0148
P: 09 438 4639 | F: 09 438 0012 | Freephone: 0800 002 004
24/7 Environmental Hotline: 0800 504 639
Website: www.nrc.govt.nz | E-mail: mailroom@nrc.govt.nz
Facebook: www.facebook.com/NorthlandRegionalCouncil
Twitter: www.twitter.com/NRCExpress

PLANT PESTS

Ground cover plants



Ground cover plants

- > African club moss
- > Alligator weed
- > Giant reed
- > Green goddess Arum
- > Mistflower
- > Pampas grass
- > Periwinkle
- > Tuber ladder fern
- > Wandering jew
- > Wild ginger

Putting Northland first



GIANT REED

Arundo donax

What does it look like?

This large clump-forming perennial looks like a leafy bamboo. Leaves are grey-green striped and the flower-heads are feathery. It has a dense root mass, short rhizomes and can grow to 5m tall.

Why is it a problem?

Giant reed smothers and shades out vegetation, displacing all other species. It can block streams and drains causing flooding.

How do I get rid of it?

- Cut shoots at ground level and inject 10ml undiluted amitrole into stems; or
- Cut off and spray regrowth before it reaches 60cm tall with 150ml haloxyfop (e.g. Gallant®) + 100ml amitrole + 20ml crop oil per 10 litres water (it may require 4-6 treatments).



GREEN GODDESS ARUM

Zantedeschia aethiopica var. green goddess

What does it look like?

This persistent plant forms robust, evergreen, clumps up to 1.5m tall. The leaves are large, arrow-shaped and fairly fleshy. The upright funnel-shaped flowers are white, tipped with green (August-January but occasionally at other times of the year). The central spike becomes fleshy when the seeds are ripe.

Why is it a problem?

All parts of the plant are poisonous to humans, pets and livestock. It smothers the ground, preventing the regeneration of native flora, particularly in wetlands. Seeds are spread by birds, flowing water and animals. Rhizomes are spread by dumping of garden waste.

How do I get rid of it?

Chemical control is best done in late summer when wet areas are dry as this chemical must not be used over water. Follow-up treatment is essential.

- Cut off at ground level and spray stumps with 1g metsulfuron-methyl (600g/kg e.g. Escort) per 1 litre water; or
- Spray with 5g metsulfuron-methyl + penetrant per 10 litres water.



PAMPAS GRASS

Cortaderia selloana, C. jubata

Also known as: cutty grass

What does it look like?

This tall (up to 4m), clump-forming grass has sharp-edged leaves which are blueish-green above with a dark green underside. Only the mid vein is visible and does not continue to the leaf-base. There is no white powder on the leaf base – only native species have this – and dead leaf-bases dry, curl and look like wood shavings. Flower heads appear in autumn and are fluffy, erect and white or pinkish on *C. selloana* or purplish on *C. jubata*. Native species flower in spring.

Why is it a problem?

Pampas forms dense clumps on disturbed sites and out-competes and smothers natives and impedes access. It can create a fire-risk and provides habitat for pest animals such as rats, rabbits and and possums.

How do I get rid of it?

- Spray 100ml glyphosate (e.g. Round-up®) + 20ml penetrant per 10 litres water; or
- Spray 150ml haloxyfop (100g/litre e.g. Gallant®) per 10 litres water; or
- Weed-wipe year round with 200ml glyphosate + 2ml penetrant per litre water.



PERIWINKLE

Vinca major

What does it look like?

This prostrate, scrambling, hairless, evergreen perennial forms dense mats of long running stems with roots at the nodes. The leaves are dark green and glossy with pointed tips. It has violet tubular flowers all year round.

Why is it a problem?

It forms dense carpets smothering and preventing native regeneration.

How do I get rid of it?

- Small areas may be covered with weed mat for 6-12 months; or
- Weed wipe year round with 500ml glyphosate (360g/l e.g. Round-up®) + 2ml penetrant per 1 litre water; or
- Spray with 200ml glyphosate + 1g metsulfuron-methyl (600g/kg e.g. Escort®) per 10 litres water. Avoid using within the drip-line of susceptible species.



TUBER LADDER FERN

Nephrolepis cordifolia

Also known as: Chinese ladder fern, tuber sword fern

What does it look like?

This is an erect fern with dense, feather-like fronds up to 1m tall. It has round potato-like tubers up to 2cm, attached to the roots.

Why is it a problem?

It forms dense mats crowding out other vegetation and provides habitat for pest animals like rats.

How do I get rid of it?

- Weed wipe with 2g metsulfuron-methyl (600g/kg e.g. Escort®) per 1 litre water; or
- Spray 1g metsulfuron-methyl per 10 litres water. Leave sprayed sites 3-4 months to allow herbicide to carry into the tubers before clearing or replanting.



WILD GINGER

Hedychium gardnerianum

Also known as: kahili ginger, ginger lily

What does it look like?

This pest plant can form deep beds of dense, many-branched rhizomes. The stems have no branches and are erect, growing up to 2m tall with large, green, shiny, alternate lance-shaped leaves. Flower heads are 25-45cm tall with fragrant, lemon-yellow flowers and red stamens in autumn.

Why is it a problem?

It is shade tolerant, long-lived and fast growing. The dense leaves and rhizomes block light and smother native plants preventing regeneration. It spreads easily from fragments of rhizome and birds spread the seeds.

How do I get rid of it?

- Cut the stem and paint the stump with 1g metsulfuron-methyl (600g/kg e.g. Escort®) per 1 litre water; or
- Spray 5g metsulfuron-methyl + 10ml penetrant (e.g. organosilicone) per 10 litres water.

This information brochure provides details on some of the common ground cover pest plants you'll find in Northland, what to look for, why these plants are a problem and methods to get rid of them.

More information on these and other pest plants is also available at: www.nrc.govt.nz/pestmanagement, www.weedbusters.org.nz, www.arc.govt.nz, www.ebop.govt.nz

CONTROL METHODS

There is a range of methods available to control pest plants. The following recommendations – which are only a sample of those available – are based on safe-use methods that have proven effective.

- Physical removal of the plant and all fragments to a land fill is the best organic method.
- Slashing, mowing or otherwise removing plant material and then treating the stumps or regrowth reduces the amount chemicals needed. Apply chemical within 15 minutes of cutting.
- Spray is recommended for large areas. For gun and hose or aerial rates contact your local biosecurity officer.
- Penetrant aids the uptake of herbicides – there is a range available, e.g. Pulse®, Boost®, Freeway, Dewdrop, Kiwi Buddy Uptake crop oil, etc.

Caution: when using any herbicide or pesticide **PLEASE READ THE LABEL THOROUGHLY** and follow all instructions and safety requirements.



AFRICAN CLUB MOSS

Selaginella kraussiana

Also known as: selaginella

What does it look like?

This carpet-forming, creeping fern has irregularly branching stems with aerial roots.

Why is it a problem?

It forms dense carpets smothering and preventing native regeneration.

How do I get rid of it?

- Spray with 100ml glyphosate (360g/l e.g. Round-up®) + 20ml penetrant per 10 litres water.



MEXICAN DEVIL | MISTFLOWER

Ageratina adenophora

Also known as: Eupatorium,
Eupatorium adenophorum,
Eupatorium glandulosum

Ageratina riparia

Also known as: mistweed,
river Eupatorium,
Eupatorium riparium

What does it look like?

Mexican devil is an erect multi-stemmed herb to sub-shrub that grows to 1-2m tall with a perennial fibrous rootstock. Stems often die back in winter and are densely covered in stalked sticky hairs. They are usually purple, become woody with age, have branches in opposite pairs, and often have galls which are formed by a parasitic fly. Leaves are diamond shaped with irregular, round-toothed edges, and are in opposite pairs along the stems.

Mistflower is an erect or sprawling many-stemmed herb or sub-shrub to 0.5-1.5m with a perennial fibrous rootstock. Stems are usually purple and are covered in purple-striped non-sticky hairs. Branches



are in opposite pairs, and occasionally die back in winter. Its willow-like leaves are in opposite pairs and are coarsely serrated except near their base.

Both species have clusters of small, white flowers from August to December.

Why is it a problem?

Both species form dense colonies, preventing the seedlings of native species from establishing in a wide range of habitats. Mistflower can impede water flow in drains, causing flooding.

How do I get rid of it?

- Weed wipe (all year round) with 333ml glyphosate (360g/l e.g. Round-up®) per litre water, or 2g metsulfuron-methyl (600g/kg e.g. Escort®) per litre; or
- Cut stems and paint with 5g metsulfuron-methyl per litre water; or
- Spray with 200ml glyphosate + 10mls penetrant per 10 litres water; or
- Spray 5g metsulfuron per 10 litres water. Add 10mls penetrant in winter. Spray lightly so it does not run off.