

Climbing Plants

- Banana Passionfruit
- Cathedral Bells
- Climbing Spindleberry
- Blue Morning Glory
- Climbing Asparagus

Introduction

Many pest plants in the Bay of Plenty are climbing or creeping vines which are very destructive to native vegetation, particularly regenerating native forest.

Climbing plants smother other vegetation, eventually killing it by excluding light.

Progressive Control Pest Plants

- Banana passionfruit
- Cathedral bells
- Climbing spindleberry

In the Bay of Plenty region these plants are classified as **Progressive Control Pest Plants.** (Refer to Environment Bay of Plenty's Regional Pest Management Strategy.)

Land occupiers are required to control them on their properties. Assistance may be available from Environment Bay of Plenty by way of approved programmes.

They are banned from sale, propagation and distribution within the Bay of Plenty.

- Jasmine
- Mignonette/Madeira Vine
- Mile-a-minute vine
- Moth Plant

Banana Passionfruit

Banana passionfruit (Passiflora tripartita var. mollissima, P.tripartita var. azuayensis, P.tarminiana) is a vigorous, high-climbing vine often overtopping and smothering trees in native forest and scrub.

It is a native to tropical South America, and was introduced to New Zealand for its edible fruit and as an ornamental garden plant. Banana passionfruit was first recorded as naturalised in New Zealand in 1958.



Banana passionfruit

- Japanese Honeysuckle
- Smilax
- Bindweed
- Climbing Dock

Sustainable

Options

Pest Plant Control

Description

Banana passionfruit is an evergreen climber that can grow to a height of 10 metres. The dark green leaves are three lobed, serrated, with soft, downy undersides. It has large, pink, hanging, star-shaped flowers, each with a purplish blue crown. The fruit is golden yellow when ripe. Inside is a sweet, orange pulp, filled with black seeds which are readily dispersed by rats, possums and birds.

Control Manual

Pull seedlings. Dig or grub established plants.

Herbicide

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

• Triclopyr (e.g. Grazon®) 60 ml / 10 litres water

Stump Swabbing

- Vigilant® gel
 Cut the stem as close as possible to ground level and apply the gel to the cut surface.
- **Glyphosate** (e.g. Roundup®) 1 part glyphosate to 5 parts water. Cut the stem about 50 cm above ground level.

Sustainable Options

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Apply mixture liberally to freshly cut surfaces covering the top and sides of the stem to ground level.

Whichever control method is used follow up control of seedlings may be required.

Cathedral Bells

Cathedral bells (Cobaea scandens), a native of Central and South America was introduced to New Zealand as an ornamental garden plant and was first recorded as naturalised in 1946. Although frost tender, it flourishes in the Bay of Plenty.

Description

Cathedral bells has purplish stems and light, oval green leaves. Large purple lantern-like flowers appear from spring to autumn, followed by oval fruit 6-10 cm long, which explode during summer to release winged seeds. Seeds spread only a short distance by wind and further by soil or water movement. Spread from vine fragments is also possible.



Cathedral Bells

Control

Manual Pull seedlings. Dig or grub established plants.

Herbicide

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

Triclopyr (e.g. Grazon®) 60 ml / 10 litres water

Stump Swabbing

- Vigilant® gel Cut the stem as close as possible to ground level and apply the gel to the cut surface.
- **Glyphosate** (e.g. Roundup®) 1 part glyphosate to 5 parts water. Cut the stem about 50 cm above ground level. Apply mixture liberally to freshly cut surfaces covering the top and sides of the stem to ground level.

Whichever control method is used follow up control of seedlings may be required.

Climbing Spindleberry

Climbing spindleberry (Celastrus orbiculatus) is a serious threat to native plant communities and forestry plantations. It is highly invasive because of its high reproductive rate, long range dispersal, ability to root sucker and rapid growth rate. Also known as oriental bittersweet, climbing spindleberry is a native to Japan, Korea and northern China. It was first recorded as naturalised in New Zealand in 1981.

Description

Climbing spindleberry is a deciduous woody climber, which grows to 12 m high with stems 10 cm in diameter. Leaves are alternate, variable in shape and are 5-10 cm long.

Flowers of climbing spindleberry have five petals and are greenishyellow in colour. Fruit is green, changing to bright yellow/orange upon maturity.



Climbing spindleberry

Control Manual

Owing to the extensive root system which sends up suckers, it is difficult to control plants manually.

Herbicide

Take care when foliar spraying not to overspray desirable plants.

• **Triclopyr** (e.g. Grazon®) 60 ml / 10 litres water plus 20 ml penetrant (e.g. Pulse®)

Stump Swabbing

- Vigilant® gel Cut the stem as close as possible to ground level and apply the gel to the cut surface.
- **Triclopyr** (e.g. Grazon®) 1 part triclopyr to 4 parts water plus 20 ml penetrant e.g. Pulse®). Cut the stem about 50 cm above ground level. Apply mixture liberally to freshly cut surfaces

covering the top and sides of the stem to ground level.

Whichever control method is used follow up control of seedlings and suckers will be required.

Regional Surveillance Pest Plants

- Blue Morning Glory
- Climbing Asparagus
- Jasmine
- Mignonette/Madeira Vine
- Mile-a-minute Vine
- Moth Plant

In the Bay of Plenty region these plants are classified as **Regional Surveillance Pest Plants.** (Refer to Environment Bay of Plenty's Regional Pest Management Strategy.)

Land occupiers are not required to control them but are encouraged to do so. Assistance may be available from Environment Bay of Plenty by way of approved programmes.

They are banned from sale, propagation and distribution within the Bay of Plenty.

Blue Morning Glory

Blue morning glory *(Ipomea indica)* is widespread in the tropical Pacific and the Americas. It was introduced as an ornamental garden plant in New Zealand and was first recorded as naturalised in 1950. Although attractive, blue morning glory has a rampant habit and regenerates vigorously from fragments when dumped in waste areas.

Plants have occasionally been found to produce viable seed.

Description

Blue morning glory is a highclimbing, fibrous-rooted, hairy perennial with twining and running stems. Leaves are heartshaped and usually three-lobed. The flowers are up to 10 cm across and are an intense purple or blue colour. They are funnel-shaped, typical of the *Convolvulus* family to which blue morning glory belongs.



Blue Morning Glory

Control Manual

Small plants may be dug out.

Herbicide

Large infestations may be foliar sprayed. If possible, it is best to cut the vines that are growing up into trees and bushes before spraying.

- Triclopyr (e.g. Grazon®) 60 ml / 10 litres water
- Glyphosate (e.g. Roundup®) 100 ml / 10 litres water + 20 ml penetrant (e.g. Pulse®)
- Banvine®
 120 ml / 10 litres water

Whichever control method is used follow up control of re-growth may be required.

Climbing Asparagus

Climbing asparagus (Asparagus scandens) is a native of South Africa and was introduced to New Zealand as an ornamental garden plant. It was first recorded as naturalised in 1959.



Climbing Asparagus

Control Manual

If the infestation is small, cut the plants back and carefully dig out all the roots and tubers. Tubers must be destroyed to prevent re-spouting or taken to an authorised refuse collection site. Do not deposit them in the greenwaste collection.

Herbicide

Large infestations may be foliar sprayed. If possible, it is best to cut the vines that are growing up into trees and bushes before spraying. In spring or summer cut the stems to about 60 cm above ground level and spray the remaining stems and foliage.

 Glyphosate (e.g. Roundup®) 200 ml / 10 litres water + 20 ml penetrant (e.g. Pulse®)

Repeat applications may be necessary to control seedlings.

Jasmine

Jasmine (Jasminum polyanthum) is a dense-growing climbing plant, now common throughout the Bay of Plenty. The plant climbs vigorously through other vegetation, forming roots where it touches the ground. Spread is mainly from vine fragments or from dumped garden refuse. Occasionally jasmine is spread via bird-borne seed.

Description

Jasmine has small pointed shiny leaves arranged in a very regular pattern. In summer the vine smothers itself in small, starry white flowers. Globular, glossy black fruits are occasionally produced.



Jasmine

Control Manual

Small infestations can be pulled or dug out, taking care to remove stems running along the ground. Careful disposal is required.

Herbicide

For foliar spraying the following herbicides are reasonably effective.Take care not to overspray desirable plants.

Tordon Gold®
 100 ml / 10 litres water +
 20 ml penetrant (e.g. Pulse®)

- Metsulfuron-methyl (e.g. Escort®, Meturon®)
 5 g / 10 litres water + 10 ml penetrant (e.g Pulse®)
- Triclopyr (e.g. Grazon®) 60 ml / 10 litres water (summer only)

Follow up applications will be necessary to achieve complete control. For advice on the control of large infestations, please contact an Environment Bay of Plenty pest plant officer.

Mignonette Vine

Mignonette vine *(Anredera cordifolia)* smothers other plants and is difficult to control. Also known as Madeira vine, it is native to tropical South America and is widespread throughout urban and coastal areas of the Bay of Plenty. It was first recorded as naturalised in New Zealand in 1940.

Description

Mignonette vine is an evergreen climber growing from a fleshy rhizome. It has bright green, heart-shaped, shiny leaves. Wart-like tubers are produced on aerial stems and are a key to identifying the plant. It has masses of fragrant, cream flowers from March to May. The plant spreads via the tubers which detach very easily.



Mignonette Vine

Control Manual

Small infestations can be dug out, ensuring that all tubers are removed. The tubers must be destroyed to prevent re-sprouting or taken to an authorised refuse site. Do not deposit them in the greenwaste collection.

Herbicide

For foliar spraying the following herbicide is reasonably effective. Take care not to overspray desirable plants.

• **Triclopyr** (e.g. Grazon®) 60 ml/10 litres water

Follow up applications will be necessary as new plants appear from tubers.

Mile-a-Minute Vine

Mile-a-minute vine (*Dipogon lignosus*), a native of South Africa, was first recorded as naturalised in New Zealand in 1871. It has sometimes been used by gardeners to cover unsightly structures and in Australia is known as lavatory vine.

Description

As its name suggests, mile-a-minute vine is a vigorous climber with twining stems producing a dense mass of foliage which may smoother other plants.

The leaves are divided into three large leaflets which are delta shaped and pointed at the tip. The small clusters of pea-like flowers are usually pink to reddish purple but may be lavender or white.



Mile-a-Minute Vine

Flowering can occur over a long period from late winter to summer. The flowers are followed by small pea-like pods about 35 mm long and containing three to five seeds. The pods burst when mature, releasing the seeds.

Seeds are not dispersed great distances but the dumping of garden rubbish often results in the spread of the plant.

Control

Manual Pull seedlings or dig out mature plants.

Herbicide

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

 Versatill® 100 ml/10 litres water + 20 ml penetrant (e.g. Pulse®)

Stump Swabbing

- Vigilant® gel Cut the stems as close as possible to the ground and apply gel to the cut surface.
- Glyphosate (e.g. Roundup®) 1 part glyphosate to 5 parts water. Cut the stem as close as possible to the ground. Apply mixture liberally to freshly cut surfaces, covering the top and sides of the stem to ground level.

Moth Plant

Moth plant (Araujia sericifera) is very invasive in urban, coastal, scrubland communities and orchard shelterbelts. A poisonous plant, the milky white sap causes dermatitis in humans. Moth plant is a native to southern Brazil and Argentina and was first recorded as naturalised in New Zealand in 1888. It is also known as cruel plant as moths, bees and butterflies are often trapped by the sticky secretion within the flowers.



Moth plant

Description

Moth plant is a slender evergreen vine growing to six metres high. Leaves are opposite with a dark green upper side and paler underside. Clusters of tubular creamy flowers are produced from December to May, producing occasional spongy, fist-sized fruit. These contain up to 500 seeds per fruit and are wind-borne after emerging from split, drying pods. Seeds have a high rate of viability.

Control Manual

Pull seedlings. Dig or grub established plants before seed pods are produced in the late summer.

Herbicide

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

 Metsulfuron-methyl/ glysophate mix

5 g metsulfuron-methyl e.g. Escort®, Meturon®) + 200 ml glyphosate (e.g. Roundup®)

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+ 10 ml penetrant (e.g. Pulse®) per 10 litres water.

Note: Use carefully as this spray will kill most plants and may also damage neighbouring plant through root absorption from the soil. Follow up control of seedlings may be required.

Triclopyr (e.g. Grazon®)
 60 ml / 10 litres water +
 10 ml penetrant (e.g. Pulse®)

Note: A less effective spray than the metsulfuron/ glyphosate mix but may cause less damage to other plants. Best applied in spring or early summer before seed pods appear.

Stump Swabbing This is the most effective method.

- Vigilant® gel Cut the stem about 50 cm above ground level and apply gel to the sides of the stem down to ground level.
- Glyphosate (e.g. Roundup®)

 part glyphosate to 5 parts water. Cut the stem about 50 cm above ground level.
 Apply mixture liberally to freshly cut surfaces covering the top and sides of the stem to ground level.

Whichever control method is used follow up control of seedlings may be required.

Note: If seed pods are present remove them and dispose of them carefully with the household rubbish.

National Accord Pest Plants

- Japanese Honeysuckle
- Smilax

These plants are not included in Environment Bay of Plenty's **Regional Pest Management Strategy** but they often invade areas of native vegetation.

Land occupiers are encouraged to control these weeds on their properties.

They are banned from sale, propagation and distribution in New Zealand.

Japanese Honeysuckle

Japanese honeysuckle (Lonicera japonica) occurs primarily in disturbed habitats such as roadsides, shrublands, secondary forest, wastelands and farm hedges. The sheer weight of accumulated vines can topple host trees or shrubs. It is a native to East Asia and was first recorded as naturalised in New Zealand in 1926.



Japanese honeysuckle

Description

Japanese honeysuckle is a trailing or twining woody vine that can grow to more than 10 metres in length. Young stems are often hairy while older stems are hollow with brownish bark. Leaves are oval in shape.

Flowers are tube-like and fragrant and white to yellow in colour. Fruit is small and black.

Control Manual

Small populations can be controlled by careful hand pulling, grubbing with a hoe or shovel and by the removal of the trailing vines. **Herbicide**

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

Versatill® 100 ml / 10 litres water + 20 ml penetrant (e.g. Pulse®)

Caution: Versatill is a selective herbicide that will not damage many native plants but is harmful to others. Check the label before use.

Stump Swabbing

- Vigilant® gel Cut the stem as close to the ground as possible and apply gel to the cut surface.
- Glyphosate (e.g. Roundup®)

 part glyphosate to 5 parts water. Cut the stem as close as possible to the ground.
 Apply mixture liberally to freshly cut surfaces covering the top and sides of the stem to ground level.

Whichever control method is used, follow up control may be required.

Smilax

Smilax (Asparagus asparagoides) is a common weed of coastal Bay of Plenty. Its smothering effect is a threat to native plant communities.

A native of South Africa, Smilax was introduced to New Zealand as an ornamental garden plant. It was recorded as naturalised in New Zealand in 1905.

Description

Smilax is a scrambling, slightly woody winter perennial vine. This plant has slender stems which can climb to three metres high. The flowers are small, greenish-white and appear from July-August. Small berries appear in the summer which are red and sticky.

Smilax spreads either by birds, which eat the berries and distribute the seeds in their droppings, or by humans deliberately planting smilax and dumping garden refuse on roadsides, waste ground or forest margins.



Smilax

Control Manual

Smilax can be grubbed out when controlling small scattered infestations. When disposing of the vegetation, make sure that the tubers are not composted, as they will re-sprout. Dispose of at an authorised refuse collection site.

Herbicide

Smilax may be controlled with herbicide while actively growing during the cooler months.

Cut the vines to within 1.5 metres of ground level and spray the remaining foliage.

Glyphosate (e.g. Roundup®)
 150 ml/10 litres water +
 20 ml penetrant (e.g. Pulse®)

Seedlings will have to be controlled until the soil seed-bank is exhausted.

Other Climbing Pest Plants

- Bindweed (Convolvulus)
- Climbing Dock

These plants are not included in Environment Bay of Plenty's **Regional Pest Management Strategy** but are invasive weeds of high nuisance value in many situations.

Land occupiers are encouraged to control these plants on their properties.

Bindweed (Convolvulus)

There are three species of bindweed which are common in the Bay of Plenty and which are not native to New Zealand. All are invasive, are a nuisance in gardens and can smother small plants and shrubs in dense foliage. They are common on roadsides, bush margins, swamps and waste areas.

Description

Great bindweed *(Calystegia silvatica)* is a vigorous sprawling or climbing perennial, climbing to three metres or more. The leaves are arrow shaped up to 18 cm long.



Bindweed

The large, white, trumpet shaped flowers up to eight centimetres in diameter, are followed by four celled capsules containing smooth black seeds.

It has fleshy cream-coloured rhizomes which can spread for several metres under the soil surface and which send up new shoots from the nodes. The stems and leaves die back in the winter.

Pink bindweed (*Calystegia* sepium) is similar to great bindweed in most respects except that it is usually not as tall, has slightly smaller leaves and smaller pink flowers with a white stripe down the middle of each petal. The seeds are brown and triangular shaped. It has white or pink flowers with purplish central stripes. The rhizomes tend to grow more deeply than those of the other bindweeds.

Field bindweed is more common in arable and waste land. Field bindweed *(Convolvulus arvensis)* is similar but all parts of the plant are smaller again than those of pink bindweed.

There are also two native species of bindweed which should not be confused with the introduced ones. Shore bindweed *(Calystegia soldanella)* with fleshy, kidney shaped leaves and pink and white stripes is commonly found behind beaches. New Zealand bindweed *(Calystegia tuguriorum)* is similar to great bindweed but has very small white flowers and small leaves in comparison and is found in forest margins and scrub.

Control Manual

Plants can be pulled out, but take care to remove all the extensive underground rhizomes as any small pieces that are left in the ground will re-grow.

Herbicide

Large infestations may be foliar sprayed, taking care not to overspray desirable plants.

- Triclopyr (e.g. Grazon®) 60 ml / 10 litres water
- Tordon® Gold
 120 ml / 10 litres water

• Banvine® 120 ml / 10 litres water

Climbing Dock

Climbing dock (*Rumex sagittatus*) is a common and widespread plant pest of the Bay of Plenty, typically establishing along road edges and infesting coastal areas, shelter belts or waste areas. Climbing dock is native to South Africa and was introduced to New Zealand as an ornamental garden plant. It was first recorded as naturalised in 1935.

Description

Climbing dock is a climbing or scrambling perennial. It has kumara-like tubers up to 10 cm long and extensive rhizomes. The leaves are arrowhead shaped. The spikes or clusters of small, papery, pink-yellow flowers occur from November–March.

Climbing dock spreads via wind-dispersed seed, or by tubers and root fragments spreading through water and soil movement. Dumped garden refuse is a common means of dispersal.



Climbing dock

Control Manual

Small infestations can be pulled or dug out, taking care to remove all tubers in groups. Tubers must be or taken to an authorised refuse collect site. Do not deposit them in the greenwaste collection.

Herbicide

Large infestations may be foliar sprayed, taking care to not to overspray desirable plants.

- Metsulfuron-methyl (e.g. Escort®, Meturon®) 5 g / 10 litres water + 10 ml penetrant (e.g.Pulse®)
- **Glyphosate** (e.g Roundup®) 100 ml / 10 litres water.

Whichever control method is used follow applications may be required.

CAUTION: When using any herbicide READ THE LABEL thoroughly. Follow all instructions and safety requirements.

Separate Sustainable Options fact sheets are available for other climbing plants: Old Man's Beard PP03, Wild Kiwifruit PP18.

Information in this fact sheet regarding herbicides does not necessarily appear on the labels of the products concerned. Environment Bay of Plenty does not accept liability for any damage that may arise from use of chemicals at non-standard rates. Mention of product trade names implies neither endorsement of those products nor criticism of similar products not mentioned.



For further information and advice, contact your local pest plant officer at Environment Bay of Plenty:

Telephone: 0800 ENV BOP (368 267) Facsimile: 0800 ENV FAX (368 329) Pollution Hotline: 0800 73 83 93 Email: info@envbop.govt.nz Website: www.envbop.govt.nz Address: 5 Quay Street, P 0 Box 364, Whakatane, New Zealand

This fact sheet was prepared by Environment Bay of Plenty's Pest Plant Section

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