

# environment

# of the Moreton Bay region

# Native Vines

Bower of Beauty (Pandorea jasminoides)



Brazilian Nightshade *(Solanum seaforthianum)* 

Moreton Bay



Native vines are an important part of our natural forests. They provide food, shelter, refuge and nesting sites for many different native animals.

Vigorous vines need large host trees on which to climb, and may damage smaller trees. Light climbers are unlikely to affect even small host plants. Scramblers (or trailing plants) trail over other plants without climbing high.



Mature large vines may form a substantial part of a forest canopy. Others may be restricted to trunks and branches of host trees. Some climbers act as groundcovers or shrubs in open areas, climb lightly in woodlands and open forests, but become thick-trunked lianas (vines) in rainforests.

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Tape Vine (Native) *(Stephania japonica)*  Native vines supply food (leaves, flowers and fruit) for native animals. A tangle of native vines may also provide shelter and nesting sites. Ringtail Possums often build their dreys (nest of leaves) here.

Many exotic vines have escaped cultivation to become weeds. Weed vines smother native bushland and displace our native plants. They should be replaced with native vines or other local native plants.

> Native Raspberry (Rubus rosifolius)

Climbing adaptations of vines help us to identify them. Some have **twining (or coiling) stems**. Some have **modified leaves or leaf stems** for holding onto hosts. The leaves may be totally modified to form **tendrils** that hold onto other plants. Root climbers attach, via roots, to the stems of host plants. Other climbers have **recurved (curving backwards) thorns,** on stems, branches or leaves, that attach to nearby objects. Some climbers may have a **combination** of climbing structures.

# Native Vines

Native vines normally do not need controlling, except when they are growing on small trees in revegetation areas.

# It is natural for a number of trees in a woodland or forest to be overcome by climbers.

Natural control of vines is by animals and, in some forest types, fire. Vines can become unnaturally dominant in forests where fire regimes have been interrupted. Implementation of a natural fire regime in bushland can maintain natural vine populations. Native vines are not 'untidy and useless' and do not need to be removed. Control, if required, is best achieved by cutting the plant stem and allowing it to regrow, giving the host plant a chance to 'get ahead' of the vine.

**Native Vines** 

Native Wisteria (Callerya megasperma)

# Leaves simple with many closelyspaced longitudinal veins.

# Scrambling Lily (Geitonoplesium cymosum)

Weak climber. Similar to Wombat Berry but <u>has a mid-vein</u>. Coils right to left (clockwise). White flowers. Birds eat the black fruit.

Leaves simple with many closelyspaced longitudinal veins.

# Wombat Berry (Eustrephus latifolius) Weak climber. Similar to Scramb

Weak climber. Similar to Scrambling Lily but has <u>no mid-vein</u>. Coils right to left (clockwise). The orangecoloured fruit is food for birds. Leaves simple and with 3 or more distinct longitudinal veins.



Leaves simple, alternate with heart-shaped base.

False Sarsaparilla (Hardenbergia violacea) Scrambling vine with attractive purple pea flowers. Twining (coiling) light climber. Host plant for Common Grass-blue butterfly. Leaves alternate, with tendrils (thin stem-like coiling threads) produced opposite the leaves.

## Kangaroo Vine (Cissus antarctica) Strong climber and good groundcover. Common in the bush. Tendril climber.

Leaves alternate, with tendrils (thin stem-like coiling threads) produced opposite the leaves.



# **Slender Grape** *(Cayratia clematidea)* Scrambler with tendrils. Host plant for Joseph's Coat moth (pictured).

**Native Vines** 

# Alternate compound or simple leaves; stem with thorns or prickles.



Alternate simple leaves; stem with thorns or prickles.

# **Cockspur Thorn** (Maclura cochinchinensis) A vigorous spiny climber providing perfect protective habitat for small birds. Birds eat the fruit.

# Alternating compound leaves.



## Native Wisteria (Callerya megasperma) Vigorous vine with attractive mauve flowers. Coils. Host plant for Common Pencilled-blue butterfly (pictured). Compound leaves of 7 to 13 leaflets.

# Alternating compound leaves.

# **Dusky Coral Pea** (Kennedia rubicunda) Vigorous coiling scrambler;

Vigorous coiling scrambler; compound leaves with 3 leaflets; attractive red pea flowers. **Native Vines** 

# Leaves simple, alternate, palmately (like a hand) veined.

**Richmond Birdwing Vine** *(Pararistolochia praevenosa)* Rainforest vine, host for the rare Richmond Birdwing butterfly (pictured).

A twining climber.

# Leaves simple, alternate, palmately (like a hand) veined.

# Round-leaf Vine (Legnephora moorei) Vigorous climber. Birds are attracted to the grape-like fruits.

# Leaves simple, alternate, palmately (like a hand) veined.

**Tape Vine** (*Stephania japonica var. discolor*) Small scrambler. Coils. Fruit red when ripe. Common. Leaves opposite and compound with 3 or more leaflets.

# Headache Vine (Clematis glycinoides) Bushy climber. Leaf stems coil around supports. Crushed leaves when sniffed

(carefully), reputed to relieve colds

Leaves opposite and compound with 3 or more leaflets.

and headaches.

Wonga Vine (Pandorea pandorana) Very attractive flowers, with many varieties in cultivation. A vigorous twining climber.

# Leaves simple, opposite with latex.



## Silkpod / Monkey Rope (Parsonsia straminea) Very common vine. Begins as a root climber and also coils. Provides food for native bees and wasps. Host plant for Common Crow butterfly (pictured).

Leaves simple, opposite with latex and basal glands.

Wax Flower (Hoya australis) Attractive, scented flowers. Fleshy leaves and milky sap. Coiling climber or scrambler. Native Vines

# Weed Vines

Most weed vines are imported plants that have escaped from gardens or pastures. Weed vines invade bushland and smother and displace native plants. They can destroy natural ecosystems. Weed vines that have escaped into bushland are particularly successful in disturbed areas, along drainage lines and edges of forests. Thin strips of riparian vegetation are extremely vulnerable to invasion by vines.

High levels of light on edges of plant communities and below breaks in the forest canopy allow weed vines to flourish, smothering groundcovers and climbing trees. Vigorous weed vines can smother trees by covering the leaves, eventually killing them. The weight of the weed vines may also break tree trunks and branches.

Imported vine species have an advantage over local native vines because the natural controls from their places of origin were not imported with them.

Weed vines do not provide food for the variety of native animals that native vines do.

Weed vines often need specialist control techniques. The current best practice methods are detailed for each species. Being superbly adapted as weeds, weed vines have many reproductive techniques that ensure they can out-compete our local plants.

When undertaking chemical control of weed vines it is important to follow all directions and take appropriate safety precautions for the chemical being used.

# Control techniques

- Control techniques, including the chemical used, vary from vine to vine. Always carefully read the label of the chemical before commencing any work and always follow label directions. The methods recommended may change over time as new weed research is conducted and new products are registered for use. Check with the council or the Catchment Association for the most up-to-date information.
- Always use the recommended safety equipment.
- Chemicals are sold as brand-names but the active ingredient is what kills the plant. Some chemicals have the same amount and type of active ingredient but are marketed under different brand names.
   A 360mg/L Glyphosate product is, for example, marketed as Weedmaster 360, and Round-up. Zero contains the same ingredient but in a different concentration. Using products with any of these brand names will give the same effect if they have the same concentration of the active ingredient.

# **Cut and Paint**

(also known as Cut Stump or Cut Stem)

- 1. Make a horizontal cut to the stem of the weed.
- 2. Immediately apply herbicide to the exposed stump.

Note: If the chemical is not applied within 10 seconds, the plant's system will seal the cut and the chemical treatment will be ineffective. If multiple stems of the weed occur in the one area handfuls can be 'cut and painted' at the same time.

# Foliar Spray

 Spray the chemical on to the leaves of the weed, until the point of run-off.



Weed Vines









# Dig up

Remove the plant by hand 1. pulling, or digging around the stem and removing the plant.

Note: If the weed reproduces vegetatively (by growing from plant parts) be careful to find and remove all plant parts.

# **Basal Bark**

Paint all of the trunk of the plant from the ground to a height of 30cm.

# Cut and Soak (Cut Under)

- Cut the stems. 1.
- 2. Immediately place both of the cut ends in a solution of herbicide for 15 seconds.

- **Cut low, spray regrowth** 1. Cut the weed low to the ground (remove any plant parts that can regrow).
- Allow the plant to regrow until healthy leaves show. 2.
- Spray with chemical specified. 3.



# Stem Scrape

- On the stem, use a knife to 1. scrape away 15-30cm of the bark/outer layer.
- 2. Immediately apply herbicide along the length of the scrape.

Note: If the chemical is not applied within 10 seconds, the plant's system will seal the cut and the chemical treatment will be ineffective. Be careful not to ringbark the stem scrape on one side of the stem only.

**Need Vines** 

# Cat's Claw Creeper (Macfadyena unguis-cati)

Aggressive climber with claw-like climbing structures and leaves in threes. Yellow bell flowers and long bean-like fruit. Reproduces from wind-blown seeds and underground tubers. Can smother very large trees.

## **Control methods**

- Cut and paint with solution of equal parts Glyphosate 360 and water.
- Foliar spray to point of runoff with Glyphosate 360 diluted at 10ml per 1L.
- Dig up/hand pull young plants.

# Dutchman's Pipe (Aristolochia elegans)

Wide heart-shaped leaves. Large flared pipe flowers – cream with purple spots. Toxic to larvae of the rare Richmond Birdwing butterfly. Wind-sown seeds thrown from hanging cradle-like pods. Also reproduces vegetatively.

**Weed Vines** 

Control methodsDig up/hand pull young plants.

# **Madeira Vine** (Anredera cordifolia)

Vigorous climber with fleshy leaves. Drooping white 'lambs-tail' fragrant flowers. Spreads readily from knobby potato-like aerial tubers and other plant parts. Can smother large trees.

## **Control methods**

- Cut stems under solution of equal parts Glyphosate 360 and water, and hold for 15 seconds.
- Foliar spray to point of runoff with Glyphosate 360 at 10ml per 1L water. Foliar spray 5ml Starane per 1L water.

# Morning Glory (Ipomoea indica)

Very invasive smothering weed. Soft hairy heart-shaped leaves, sometimes 3 to 5-lobed. Blue-violet funnel-shaped flowers.



# Mile-a-Minute (Ipomoea cairica)

Quickly smothers native vegetation. Leaves deeply divided, 5 to 7-lobed. Violet, funnel-shape flowers.



# Brazillian Nightshade (Solanum seaforthianum)

Deeply divided palmate (hand-like) leaves. Bunches of bright red berries, attractive to birds. Mauve-blue flowers in bunches.



# Moth Vine (Araujia sericifera)

Robust climber. Leaves triangular with a twisted point. Stems have milky sap. Fruit green, pear-shaped and choko-like. Wind-blown seeds. Similar in appearance to the native Silkpod, which has colourless sap.

# Most effective control method Hand pull/dig out crown.

## Other control methods

- Cut stump and immediately paint with solution of equal parts Glyphosate 360 and water.
- Dig up/hand pull young plants.

# Balloon Vine (Cardiospermum grandiflorum)

Common along waterways. Seed dispersed by water. Smothers native vegetation. May be confused with the native Slender Grape, which has tendrils growing opposite to where the leaves meet the stem. Balloon Vine has tendrils growing where the leaf meets the stem; and the fruits are gooseberry-like.



# Glycine (Neonotonia wightii)

Fast-growing smothering vine. Develops roots where the trunks touch the soil. Leaves in threes. Small white pea flowers and small bean-like pods.



**Weed Vines** 

# Silver-leaf Desmodium / Velcro Plant (Desmodium uncinatum)

Scrambling vine with silver central pattern on the leaves. Velcro-like hairs on all parts of the plant, including seeds. The seeds and other plant parts are very sticky and have been known to entwine and kill small birds and other animals.

## **Control methods**

- Foliar spray with Glyphosate as per label directions.
- Cut low to the ground and spray regrowth with Glyphosate as per label directions.
- Hand remove plant parts.

# Black-eyed Susan (Thunbergia alata)

Spreads via seeds or stem fragments. Yellow flowers with a black centre. Leaves arrow-shaped or heart-shaped, with wavy margins.

## Control methods

- Foliar spray with Glyphosate as per label directions.
- Cut low to the ground and spray regrowth with Glyphosate as per label directions.
  - Hand remove plant parts.

Weed Vines

# Climbing Asparagus Fern

*(Asparagus africanus)* Aggressive climber with bird-attracting bright orange fruit. Prickly stems and narrow fern-like leaves. Smothers native plants.

# **Control methods** Hand remove underground tubers and other plant parts. Foliar spray seedlings with Glyphosate as per label directions.

# Night-flowering / Climbing Cactus (Hylocereus undatus)

Long (30+cm) fleshy leaves and multiple stems. Attaches to host tree. Spreads from pieces or seeds.



# Exotic Passion Vines (Passiflora spp.)

All native passion vines have two glands (bumps) on the stalk near the leaf; exotics have glands further from the leaf.

# Control methods Cut and paint with solution of equal parts Glyphosate and water.

# Kudzu, Kudzu vine (Pueraria montana var. lobata; syn. P. lobata)

This is a perennial vine (native to Asia) that grows rapidly and can reach 20 – 30m in length. It can reproduce vegetatively. During summer, Kudzu runners can grow at a rate of 30cm a day.

This vine is a serious weed that will completely smother native vegetation. Kudzu is a Class 2 declared plant under the Land Protection (Pest and Stock Route Management) Act 2002.



If you think you have seen K know of any other infestatio and telephone Primary Indu on 13 25 23.

Kudzu Leaf

Kudzu has compound leaves with three broad leaflets (which may be lobed or unlobed), each up to 10cm across. Leaves are dropped during winter in South East Queensland. The roots of Kudzu are fleshy – the taproot can grow to over 1.8m long, 15cm in diameter and can weigh up to 180kg.

Kudzu flowers are purple to pink, fragrant, about 1 - 1.5cm long and are produced in long racemes. Seeds are rarely produced but seed pods are brown, flat, hairy, 5cm long and each contains 3 - 10 small, hard, oval seeds.

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Thanks to Nathan Kirby for many of the photos used in this booklet.

## hould I do if I find Kudzu?

udzu growing in your area or ns, please advise council and stries and Fisheries, Queensland

> Kudzu flowers (shown here) resemble pea flowers



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