

**ASPARAGUS – CLIMBING / FERN****Weed of National Significance***Asparagus africanus* / *A. plumosus**Asparagus plumosus*

terry inkson



robert white

*Asparagus africanus*

<b>Origin</b>	South Africa
<b>Description</b>	Wiry perennial twining scrambler to 12m high on supporting vegetation. <i>A. africanus</i> with spikes along stems. Aggressive weed of urban bushland in tropical and subtropical areas.
<b>Leaves</b>	Fine, feathery, leaf-like cladodes (adapted stems) arranged in horizontal sprays. Ferny appearance.
<b>Flowers</b>	Small, <i>A. plumosus</i> greenish white and single or in pairs arranged at the tips of branches, in spring to autumn. <i>A. africanus</i> flowers are cream-white and occur in clusters from September to November.
<b>Fruit</b>	Fleshy berries, <i>A. plumosus</i> berries blue-green at first, ripening to black, 4–5 mm wide. <i>A. africanus</i> berries turn orange when mature. Single seed.
<b>Roots</b>	Tough, woody crown with extensive fleshy root mass radiating out.
<b>Dispersal</b>	Seeds spread by birds and water. Rhizomes and fruit containing seeds also spread in dumped garden waste.
<b>Confused with</b>	These two species are often confused with each other and with other <i>Asparagus</i> species. In this region, these two are most likely to occur, with <i>Asparagus africanus</i> more likely in the north of the region. Both can be referred to as Climbing Asparagus, Asparagus Fern or Climbing Asparagus Fern.
<b>Control</b>	Remove and dispose of all aerial stems from the site as they can re-establish into new plants. The crown of the plant should also be removed and all berries collected. Hand-pull emerging seedlings, dig out root systems. Foliar spray metsulfuron-methyl at 1 g/10L with surfactant.



<b>Origin</b>	Tropical America, West Indies and Africa
<b>Description</b>	Plants spread along the ground or climb trees and shrubs. Common in moist gullies along the warm temperate to tropical coast of Qld and NSW.
<b>Leaves</b>	Compound 6–16 cm long, on a leaf stalk 2–10 cm long, with leaflets each further divided into 3. Margins of leaflets irregularly toothed.
<b>Flowers</b>	White, four petals, in clusters. The stalk of the flower head ends in a pair of tendrils. Flowers occur most of the year.
<b>Fruit</b>	Inflated papery membranous capsule (balloon), 6-ribbed, 4–8 cm long, covered with short stiff hairs, each containing three blackish round seeds.
<b>Roots</b>	Shallow and fibrous, fragments re-root readily.
<b>Dispersal</b>	Seeds spread by wind, water and contaminated soil.
<b>Confused with</b>	Native Slender Grape ( <i>Cayratia clematidea</i> ) which has tendrils <b>opposite</b> leaf axil, not <b>in</b> axil as balloon vine and has 5 leaflets not 3.
<b>Control</b>	Hand-pull/dig, scrape and paint with 100% glyphosate or foliar spray with glyphosate at 10 ml/L. Best approach is to cut vines and spray re-growth.

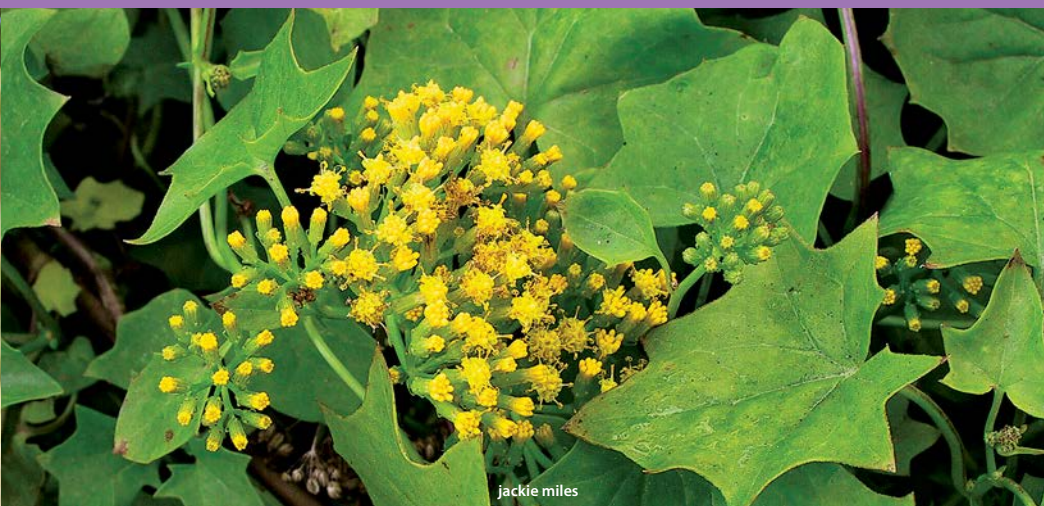
*Cayratia clematidea*



**BRAZILIAN (CLIMBING) NIGHTSHADE***Solanum seaforthianum*

<b>Origin</b>	Central and South America
<b>Description</b>	Perennial shrub or twining climber to 6m.
<b>Leaves</b>	Green, deeply 3–9 lobed, hairless except edges and veins on under surface.
<b>Flowers</b>	Mauve-blue, 2–3 cm across in groups of up to 50 in spring–autumn.
<b>Fruit</b>	In clusters, green berry up to 1 cm across, ripening to bright red.
<b>Roots</b>	Shallow and fibrous.
<b>Dispersal</b>	Seed is spread by water, animals, humans, contaminated soil and garden rubbish dumping.
<b>Control</b>	Hand dig, scrape and paint with 100% glyphosate or foliar spray with glyphosate at 10ml/L.





jackie miles

<b>Origin</b>	South Africa
<b>Description</b>	A climbing and trailing perennial, non-woody vine that smothers vegetation to heights of 10m. Stems break easily. Rapidly grows into blankets and smothers surrounding vegetation.
<b>Leaves</b>	Ivy or star-shaped with 5–7 lobes, fleshy, glossy green above and silvery below, often with a purple tinge.
<b>Flowers</b>	Strongly scented on warm days, yellow and daisy-like in dense clusters lacking petals. Flowers autumn to spring.
<b>Fruit</b>	Small, reddish-brown with a 'parachute' of fine hairs (pappus). A mature plant can produce up to 4000 seeds annually.
<b>Roots</b>	Shallow and fibrous, fragments re-root readily.
<b>Dispersal</b>	Vegetation fragments and seed are spread by wind, water, animals, humans, contaminated soil and garden rubbish dumping.
<b>Control</b>	Hand dig or foliar spray metsulfuron-methyl at 1 g per 10L with surfactant.



<b>Origin</b>	South America
<b>Description</b>	Vigorous, blanketing climber in excess of 30m with distinctive three-pronged claws along the growing portion of the plant. The weight of the vine's mass often collapses the supporting tree's branches and may even cause mature trees to fall. Mature stems can become very woody, growing up to 20 cm in diameter.
<b>Leaves</b>	Leaves compound, oppositely arranged, with two dark green leaflets and a 3-pronged climbing tendril (cats claw). New leaves and tips are a showy red/brown colour.
<b>Flowers</b>	Attractive bright yellow flowers forming a bell shape when fully open and only occurring on mature plants. Flowers winter to spring.
<b>Fruit</b>	Long, dark brown, flattened seed pods (beans), that split open when mature, exposing numerous hard brown seeds.
<b>Roots</b>	Deep underground tuberous roots, suckering readily.
<b>Dispersal</b>	Seed and tubers spread by wind, water, contaminated soil and garden rubbish dumping.
<b>Control</b>	Hand dig, scrape and paint or cut and paint with 100% glyphosate. Cut vines and spray regrowth with glyphosate at 10 ml/L. Consult with local weeds officer about large infestations.

## DESMODIUM – GREEN / SILVER-LEAFED

*Desmodium intortum / uncinatum*



Origin	South America
Description	Sprawling or climbing vine with stems to about 2m long. Stems and seed pods densely hairy with hooked hairs. Also described as 'velcro plant'. There are other weedy and native tri-foliolate vines. Consult with weeds officer if in doubt.
Leaves	Three leaflets, green or green with a silver stripe and covered in hairs.
Flowers	Pea-type flowers are pink to blue or white, in small clusters. Flowers summer to autumn.
Fruit	The pods, constricted around the seeds, are covered in hooked hairs that adhere easily to clothing and animal fur. Seeds are hard coated and occur in autumn.
Dispersal	By seeds ingested by animals, seeds in whole pods attached to clothing or animal fur. Also by stem sections in dumped garden rubbish, or spread by machinery.
Control	<b>Seedlings/individual plants:</b> Hand remove ensuring tuberous root is completely dug out. <b>Large infestations:</b> Foliar spray with glyphosate at 10ml/L or metsulfuron-methyl at 1.5 g/10L + surfactant. Metsulfuron-methyl has best results. Follow-up will be required to address germination from soil seed bank.



## GLORY LILY

*Gloriosa superba*



<b>Origin</b>	Africa / South East Asia
<b>Description</b>	Deciduous perennial. Glory Lily appears to 'disappear' in winter. Can form dense understorey carpets in dune systems along the coast, competing strongly with native flora. Climbing stems to 4 m. All parts of the plant are toxic.
<b>Leaves</b>	Glossy, green, 5–10 cm, hairless, alternate with 10–20 mm long hooked tendrils at the tips, which curl around supporting plants.
<b>Flowers</b>	Yellow, orange and red (7–10 cm) with 5 large, elongated petals. Single flowers on stalks arising from leaf forks. Flowers look upside-down with petals folded upwards and 4–7 mm long stamens radiating out.
<b>Fruit</b>	Fleshy, green, glossy capsule (4–10 cm), containing multiple red seeds when mature.
<b>Roots</b>	Small tubers, connected by fragile threads.
<b>Dispersal</b>	Spreads by movement of seed and by rhizomes.
<b>Control</b>	Spot spray foliage with glyphosate at 20 ml/L or use 200 ml glyphosate plus metsulfuron-methyl at 1.5 g/10 L water.



<b>Origin</b>	China & Japan
<b>Description</b>	Robust climbing or scrambling shrub to 8m high. Young stems, reddish, covered with short hairs. Older stems woody and hairless.
<b>Leaves</b>	Glossy, opposite with a conspicuous ridge between opposite leaf stalks, ovate to about 7 cm long.
<b>Flowers</b>	White, ageing cream to yellow or pale orange. Paired, long and tubular (3–4 cm), very sweetly scented. Autumn–spring.
<b>Fruit</b>	Round berry, 4–10 mm long, purple-black.
<b>Roots</b>	Fibrous initially, becoming a dense, extensive and woody crown with age.
<b>Dispersal</b>	Seed mostly spread by birds, contaminated soil, garden rubbish dumping.
<b>Control</b>	Dig out plant and all roots. Foliar spray with 1.5 g/10 L metsulfuron-methyl plus surfactant. If stems are hard to access, plants can be cut back to ground level and new growth then sprayed the following year.



# KUDZU

*Pueraria lobata*

VINES AND SCRAMBLERS



<b>Origin</b>	South America
<b>Description</b>	Kudzu is a deciduous, semi-woody, perennial vine, capable of forming dense mats. It is difficult to detect when leafless in winter. Stems can be up to 30 m long and scramble over the ground or climb over other vegetation and structures. Kudzu is capable of very rapid growth and can grow 10–30 m per growing season and up to 30 cm in a day.
<b>Leaves</b>	Compound leaves are arranged alternately along the stem with three leaflets per leaf. Leaflets are 8–18 cm long and 6–20 cm wide and are usually lobed/triangular, with finger-like glands on the upper surface, growing at right angles to the stalk.
<b>Flowers</b>	Perfumed, pea-shaped, in clusters 10–40 cm in length. Individual flowers are 15–25 mm long and can be purple, blue or pink with a central patch of yellow, occurring late spring to autumn.
<b>Fruit</b>	Pods are brown and are covered in fine hairs. Each pod contains 3–10 seeds and is 4–13 cm long and 0.6–1.3 cm wide. The seeds are reddish brown with black mosaic, ovoid to ellipsoid, slightly flattened and 4–5 mm long.
<b>Roots</b>	Expansive root system. Large (60–90 cm) underground tubers and roots can extend for 5 m into the ground.
<b>Dispersal</b>	Stolons root at the nodes to form new plants by rhizomes. Also dispersed by seed.
<b>Control</b>	Does not persist under grazing. Foliar spray with metsulfuron-methyl at 1 g/L with surfactant.

KUDZU



<b>Origin</b>	South America
<b>Description</b>	Vigorous, robust, fleshy and extensive twining, hairless, perennial climber in excess of 30m. Conspicuous aerial tubers along stem. Capable of smothering and weighing down large mature trees.
<b>Leaves</b>	Fleshy, glossy, heart-shaped, alternately arranged and bright green.
<b>Flowers</b>	Small, fragrant, creamy-white coloured and numerous, in drooping clusters to 20cm long. Spring–summer.
<b>Fruit</b>	Does not fruit in Australia.
<b>Roots</b>	Fleshy and tuberous. Aerial tubers in clusters, underground tubers can be very large (to 20cm) and deeply buried.
<b>Dispersal</b>	Plant material transported by water, such as along rivers in floods, contaminated soil and through garden rubbish dumping. Aerial tubers will be shed from stems after the vine is cut, and remain viable in soil for 5 to 10 years.
<b>Control</b>	Hand dig, stem scrape (5–10cm) in strips for as high as you can reach and paint immediately with 100% glyphosate. Avoid ringbarking. Foliar spray with metsulfuron-methyl at 1.5g/10L with surfactant. Collect all plant material and fallen tubers from site. Never cut and paint.

## MORNING GLORY

*Ipomea indica* (blue), *Ipomea cairica* (coastal, Mile-a-minute)



*Ipomea indica*



*Ipomea cairica*

<b>Origin</b>	South America
<b>Description</b>	Large perennial vines. Invade rainforests, riparian zones and coastal headlands. Capable of engulfing shrubs and trees in relatively short time periods.
<b>Leaves</b>	<b>Blue Morning Glory:</b> Dark green, variably heart-shaped or 3-lobed, 20–180 mm long. <b>Coastal Morning Glory:</b> Light green, hairless, 5–7 lobed, star-shaped to 90 mm long.
<b>Flowers</b>	<b>Blue:</b> Trumpet/funnel shaped, 50–80 mm diameter, purplish blue. <b>Coastal:</b> Mauve to pale pink/red/white. Spring–autumn.
<b>Fruit</b>	No seed set in Blue Morning Glory. <b>Coastal:</b> 4-valved brown capsule containing 4–6 seeds, which have parachute-like attachments.
<b>Roots</b>	Fibrous initially, becoming dense, extensive and crown-like with age. Will set root from stem fragments when in contact with the soil.
<b>Dispersal</b>	Seed is spread by wind, water, animals, in contaminated soil and garden rubbish dumping.
<b>Confused with</b>	Native Beach Morning Glory ( <i>Ipomea brasiliensis</i> ) which has pink-purple flowers and the oblong to rounded leaves have a long petiole (leaf stalk) and are slightly notched to shallowly bi-lobed.
<b>Control</b>	Manual removal easy & effective. It takes a repeated effort to remove from a site. Cut close to the ground or scrape and paint with 100% glyphosate.





terry inkson

pia dollmann

<b>Origin</b>	Brazil, Paraguay and Uruguay
<b>Description</b>	Twining perennial climber reaching up to 6m on supporting vegetation. Milky, smelly latex exuded from damaged stems and leaves.
<b>Leaves</b>	Opposite pairs, oblong to triangular, 3–11 cm long, 1–6 cm wide, dark green above, grey-green below.
<b>Flowers</b>	Fragrant, tubular, 0.8–1.4 cm long, 5-lobed, 5-stamens, white to pale pink in groups of 2–5. Flowers late spring to autumn.
<b>Fruit</b>	Grey-green choko-shaped fruit, turning brown and woody with age. When mature fruits split open to release wind-borne seeds on silky hairs.
<b>Roots</b>	Shallow and fibrous.
<b>Dispersal</b>	Seeds spread by wind, water and contaminated soil.
<b>Confused with</b>	Native Silkpod ( <i>Parsonsia straminea</i> ) – no white latex sap.
<b>Control</b>	Hand-pull. Remove all root material, leaving vine to die in canopy, or scrape and paint base of stem with 100% glyphosate. Collect all fruit. Foliar spray metsulfuron-methyl at 1 g/10L with surfactant.

## PASSIONFRUIT

*Passiflora* spp

VINES AND SCRAMBLERS



pia dollmann



terry inkson

<b>Origin</b>	Tropical South America
<b>Description</b>	Vigorous climber with tendrils.
<b>Leaves</b>	Varying with species; from 10 mm up to 150 mm long; generally 3-lobed sometimes ovate; pale green with powdery film and blunt tips to dark green with pointed tips.
<b>Flowers</b>	Very distinctive shape. They range from 1–5 cm across with colours from plain white to white blotched purple, pinks and reds; 5–10 petals; numerous cream/yellow stamens and a prominent divided stigma. Flowers spring to summer.
<b>Fruit</b>	Globe-shaped drupe, generally pulpy 15–50 mm long, glossy, yellow, green, red or purple/black.
<b>Roots</b>	Lateral roots form at right angles to stem, break easily when pulled. Can re-shoot from remnant root stock.
<b>Dispersal</b>	Seeds spread by humans, water, animals and garden rubbish dumping.
<b>Control</b>	Hand-pull. Scrape and paint or cut and paint with 100% glyphosate or foliar spray with glyphosate at 10 ml/L.

PASSIONFRUIT



pia dollmann

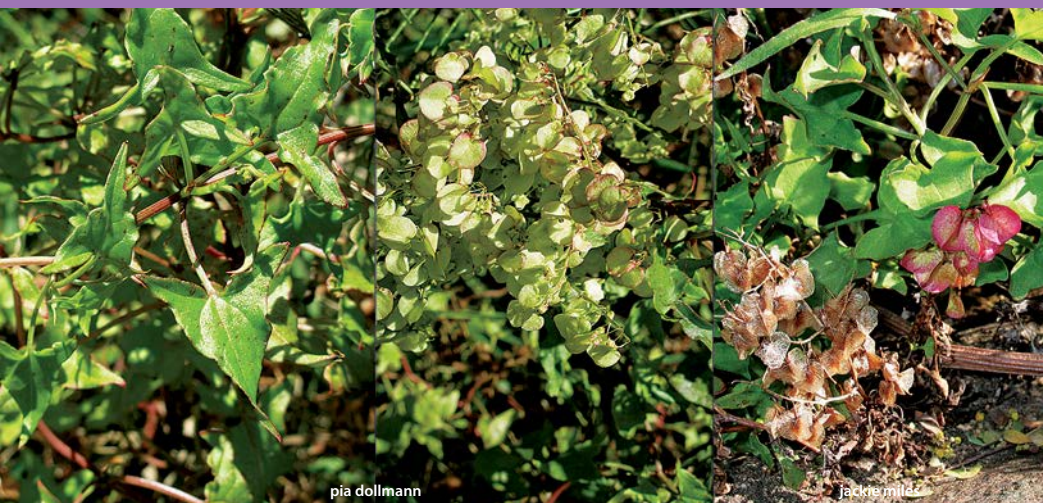
<b>Origin</b>	North America
<b>Description</b>	Deciduous, perennial, woody-stemmed, fast growing vine with stem roots clinging tightly to almost any surface. Climbing up tree trunks in bushland locations. Grows in sunny and partly shaded positions.
<b>Leaves</b>	Bright green when young, hairless, similar on both surfaces. Opposite, compound with toothed leaflets and terminal leaflet. Veination prominent.
<b>Flowers</b>	Showy, orange to red trumpet-shaped in clusters. Spring–summer.
<b>Fruit</b>	Flat, tapered, cigar-shaped capsule fruit that contains large number of flat ‘winged’ seeds. Light green and turning brown when mature.
<b>Dispersal</b>	By seed and layering. The winged seed is spread by wind. Trumpet vine can grow from pieces of the root. Plants that are cut back severely respond with vigorous new growth in the following season.
<b>Control</b>	This is a relatively new weed, spreading fast in Coffs Harbour. Glyphosate application does not appear to control this vine as the plant regrows from the root system. At this point in time we do not have comprehensive information about the control of this vine and recommend to treat it in a way similar to other vines described in this booklet.



**SIRATRO***Macroptilium atropurpureum*

mauricio mercadante

<b>Origin</b>	Central and North America
<b>Description</b>	Creeping or climbing tropical legume, stems to 3 m long.
<b>Leaves</b>	Compound, bright green 2–7 cm long. Each leaf has three broad leaflets. The two lower leaflets often have an extra rounded lobe, and leaves have silky hairs on their underside.
<b>Flowers</b>	Sweet pea-like, dark red to purple flowers are borne on long spikes most of the year. Flowers have a velvety sheen.
<b>Fruit</b>	Narrow pods (beans), 5–10 cm long.
<b>Roots</b>	Taproot.
<b>Dispersal</b>	By birds and other animals, contaminated soil.
<b>Control</b>	Hand-pull, chip or mow. Removing the whole crown by grubbing is the most effective manual/mechanical control method. Tangled growth may need to be cleared using a brush cutter. Foliar spray metsulfuron-methyl (1 g/10 L) plus surfactant. May require repeated treatments. Cannot tolerate grazing.



<b>Origin</b>	South Africa
<b>Description</b>	Vigorous prostrate or climbing perennial herb to 5m long. Found in damp disturbed areas.
<b>Leaves</b>	Bright green, arrowhead shaped, fleshy, with a sharp lemony tang.
<b>Flowers</b>	Green-cream, arranged in branching clusters in spring, gradually changing to red.
<b>Fruit</b>	Small clusters of 3-winged cream-coloured, papery fruit, turning brown with age. Each winged envelope contains one seed.
<b>Roots</b>	Many underground tubers form as a series of small 'potatoes' linked by thin strands.
<b>Dispersal</b>	Seed is spread by wind and water. The plant also spreads vegetatively from underground stems and tubers.
<b>Confused with</b>	The native twiner <i>Calystegia spp.</i> does not develop the papery seeds that <i>Acetosa</i> does and has white flowers, generally found in damp places.
<b>Control</b>	Cut off any papery clusters containing the seeds and dispose of off-site. Carefully lift the tuber at the base of the stem to locate those underground stems which run from the top of the tuber. All seeds, tubers and underground stems must be removed. Remaining seed germinate readily in disturbed soil. Missed tubers will also reshoot. Scrape and paint with 100% glyphosate. Or foliar spray with metsulfuron-methyl (1 g/10L) plus surfactant.