

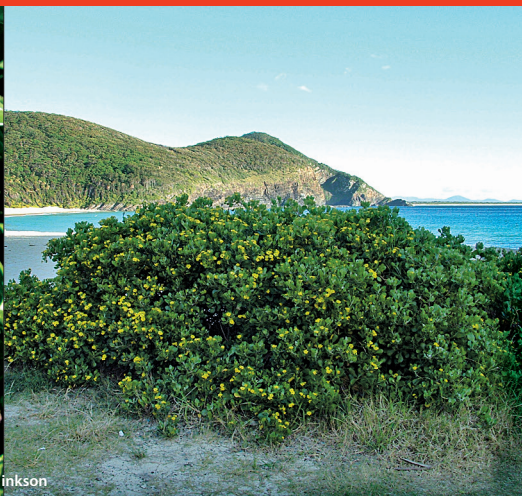
## BITOU BUSH

*Chrysanthemoides monilifera* ssp. *rotundata*

Weed of National Significance

Contain this weed

SHRUBS



<b>Origin</b>	South Africa
<b>Description</b>	Sprawling shrub to 2 m tall.
<b>Leaves</b>	Alternate, practically hairless except for a cottony down on young leaves. Ovate to oblong, 1.5–6 cm long, 0.7 to 2 cm wide, smooth edged or slightly toothed, pointed at tip.
<b>Flowers</b>	Daisy-like, yellow, in heads with up to 13 petal-like ray florets (some may not develop) at the end of branches. Flowers mainly autumn and winter. 8–13 petals.
<b>Fruit</b>	Fleshy green berries, 5–8 mm long, drying to a seed with black, bony covering.
<b>Roots</b>	Fibrous, shallow in young plants, becoming extensive with maturity.
<b>Dispersal</b>	By animals passing the indigestible seeds, also by water.
<b>Control</b>	Pull out plants in small infestations. Spot spray with glyphosate at 5 ml/L or with metsulfuron-methyl at 1 g/20 L with surfactant where native grasses are present. Follow-up important as seeds remain viable for many years.

BITOU BUSH



Blackberry



White Blackberry



Native Raspberry,  
 don't confuse with Blackberry

<b>Origin</b>	North America, South Asia and Europe
<b>Description</b>	Scrambling shrubs to 5m high with prickly canes to about 7m long and leaves, black, purple, pink or red fruit. Stems mostly arching, green, reddish or purple, ribbed, angled or concave, with or without hairs. Prickles straight or curved. There are 26 known introduced and 10 native <i>Rubus</i> species in Australia.
<b>Leaves</b>	Usually comprise 3 or 5 ovate serrated leaflets, are dark green on the upper surface and with many to no hairs underneath. Usually also prickly.
<b>Flowers</b>	European spp. have a branched flower head (panicle), American not.
<b>Fruit</b>	Globe-shaped, 1–3 cm across, initially green ripening through yellow, red and purple to black. European spp. has sepals bent backwards from the fruit, American has sepals surrounding the base of the fruit.
<b>Seed</b>	Pitted, to 3 mm long.
<b>Dispersal</b>	Spread by seed, rooting of cane tips and lateral roots producing suckers. Fruit is eaten by birds and mammals (especially foxes) that may transport seeds some distance.
<b>Confused with</b>	Native Raspberry (see photo above).
<b>Note</b>	It is important to distinguish between American and European <i>Rubus</i> species in order to apply the correct and successful chemical control agent. If in doubt, send sample to herbarium.
<b>Control</b>	<b>European &amp; Asian <i>Rubus</i>:</b> Spray with metsulfuron-methyl at 1 g/10L with surfactant. Positively identify species and consult with local weeds officer.

## BUTTERFLY BUSH

*Buddleia davidii* / *B. madagascariensis*

SHRUBS

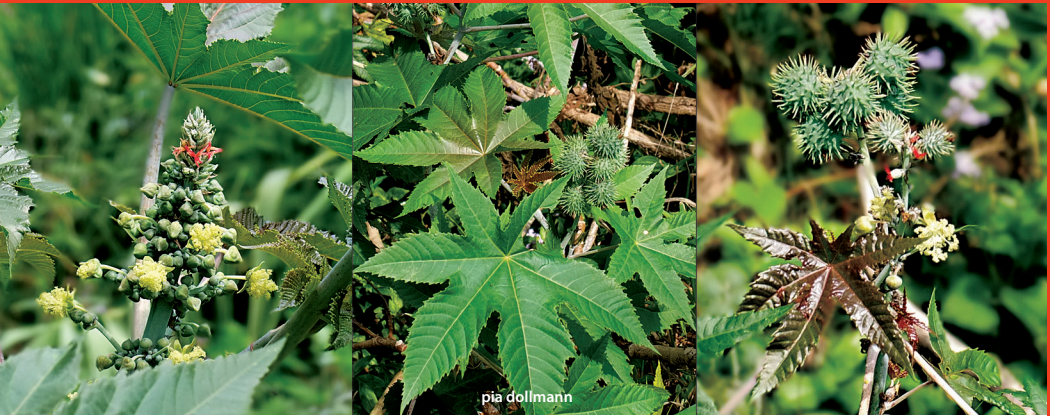


*B. madagascariensis*

<b>Origin</b>	China and Japan
<b>Description</b>	Large, brittle, woody shrub to small tree, can behave as a vine, fast-growing, deciduous. Buddleia can grow almost anywhere, but prefers nutrient-rich watercourses and creeklines, where it quickly dominates, shading out and replacing native plant species and climbing high into mature trees.
<b>Leaves</b>	Long and narrow with a finely-toothed pointed tip, dull green above, grey-white and hairy below.
<b>Flowers</b>	Lilac/purple ( <i>B. davidii</i> ) or yellow-white flowersprays ( <i>B. madagasariensis</i> ), borne on arching branches, long, narrow and fragrant, and made up of masses of small tubular flowers. The lilac is the most weedy. Summer flowering.
<b>Fruit</b>	Prolific numbers of small brown cylindrical fruits are produced in late summer, each tailed to aid dispersal.
<b>Dispersal</b>	Seeds are mainly dispersed by wind and water, but also by machinery, vehicles, the movement of soil, and by dumping.
<b>Control</b>	Small plants can be pulled by hand. Cut and paint larger stems with 100% glyphosate. Foliar spray with metsulfuron-methyl at 1 g/10L with surfactant. Difficult to control.

BUTTERFLY BUSH





<b>Origin</b>	Probably originated in Africa, now widespread throughout the tropical and subtropical regions of the world.
<b>Description</b>	Long-lived perennial shrub which can grow to the size of a small tree in suitable conditions.
<b>Leaves</b>	Glossy, 15–45 cm long, long-stalked, alternate and compoundly palmate with 5–12 deep lobes with coarsely toothed segments. In some varieties dark reddish purple or bronze when young, gradually changing to a dark green, sometimes with a reddish tinge, as they mature. The stems and the spherical, spiny seed capsules also vary in pigmentation.
<b>Flowers</b>	Borne in terminal panicle-like inflorescences of green or shades of red, flowers without petals. Male flowers are yellowish-green with prominent creamy stamens and are carried in ovoid spikes up to 15 cm long; female flowers, borne at the tips of the spikes, have prominent red stigmas. Capable of flowering year round in a frost-free environment.
<b>Fruit</b>	Capsules of some varieties are more showy than the flowers. The fruit is a spiny, greenish to reddish purple capsule, containing large, oval, shiny, bean-like, highly poisonous seeds with variable brownish mottling.
<b>Seed</b>	Seeds have a warty appendage. The plant can seed prolifically.
<b>Roots</b>	Shallow-rooted.
<b>Dispersal</b>	Seed is spread by rodents and birds, on mud adhering to boots, on vehicles and machinery and by floodwaters. Taller plants can throw their seeds over 5 metres from the mother tree.
<b>Control</b>	Hand-pull when young. Spray young plants with glyphosate at 10 ml/L. Cut & paint larger plants with 100% glyphosate.



## COFFEE

*Coffea arabica*, *Coffea canephora*

SHRUBS



<b>Origin</b>	Africa
<b>Description</b>	Wild plants grow to between 9 and 12m tall, and have an open branching system.
<b>Leaves</b>	Opposite, simple elliptic-ovate to oblong, 6–12 cm long and 4–8 cm broad, glossy, dark green.
<b>Flowers</b>	White, 10–15 mm in diameter, growing in axillary clusters.
<b>Fruit</b>	Drupe, though commonly called a 'berry', 10–15 mm in diameter, oblong, 1 cm long, maturing bright red to purple and typically contains two seeds.
<b>Roots</b>	Shallow.
<b>Dispersal</b>	Seed is dispersed by birds, rodents and water.
<b>Control</b>	Hand-pull small plants. Cut & paint or inject larger stems with 100 % glyphosate.

COFFEE



<b>Origin</b>	Native to southern and eastern Asia
<b>Description</b>	Small upright shrub, usually growing up to 1 m tall, and occasionally reaching 2 m in height. Shade tolerant.
<b>Leaves</b>	Simple leaves (5–20 cm long and 1–4 cm wide), alternately arranged and dark green. Thick and leathery and narrowly oval or elongated. Glossy and dark green above with paler and duller undersides, with slightly toothed or finely wavy margins. Leaves are borne on short stalks about 3–10 mm long and have pointed tips.
<b>Flowers</b>	Fragrant, small, white to reddish-pink in colour, in clusters on flowering branches 4–16 cm long. Branches divide into several smaller (2–4 cm) long branches, each bearing numerous flowers on stalks 5–10 mm long. Under close inspection, numerous tiny black spots can be seen on the flowers.
<b>Fruit</b>	Showy bright red berries, which hang down in clusters, can remain on the plant for months.
<b>Dispersal</b>	By seed. May be spread by humans (i.e. in dumped garden waste), and by water movement (i.e. during floods).
<b>Control</b>	Hand-pull and collect up all fruit.

## GIANT DEVIL'S FIG

*Solanum chrysotrichum*

Contain this weed

SHRUBS



kim curtis

<b>Origin</b>	Central America
<b>Description</b>	Fast-growing, prickly, upright shrub growing up to 4 m tall.
<b>Leaves</b>	Lobed, large leaves, 17–30 cm long and 12–20 cm wide, with 7–13 lobes per leaf. Very hairy when young and just hairy underneath when mature.
<b>Flowers</b>	Small, star-shaped, white, 3–4.5 cm wide, and grow in clusters of up to 50. Flowers from autumn to spring.
<b>Fruit</b>	Round yellow or orange berry, 10–15 mm wide. Contains lots of seeds.
<b>Stems</b>	Young stems are densely covered in reddish coloured hairs and have green prickles. Older stems have 3–9 mm long thorns.
<b>Roots</b>	Shallow roots.
<b>Dispersal</b>	Seed dispersed by water, birds, flying foxes and other animals.
<b>Confused with</b>	Weed species Devil's fig ( <i>Solanum torvum</i> ) and Tropical soda apple ( <i>Solanum viarum</i> ).
<b>Control</b>	Manually remove where appropriate. Cut and paint with 100% glyphosate. Foliar spray with 200ml glyphosate plus 1g of metsulfuron-methyl in 10L of water + surfactant".

GIANT DEVIL'S FIG





pia dulmanis



terry inkson



greg egan

<b>Origin</b>	North America, West Indies
<b>Description</b>	Groundsel Bush is a densely-branched shrub, usually 1.5–3 m high, and it sometimes grows into a small tree up to 12 m high with an open branching system.
<b>Leaves</b>	Dull or pale green, waxy to touch, alternate, 2.5–5 cm long, 1–2.5 cm wide, wedge-shaped and prominently-toothed, particularly near the tip. Stems are green at first, turning brown with age and have a characteristic striped bark.
<b>Flowers</b>	Numerous male and female flowers grow on separate plants. Male flowers are cream coloured and occur in globular heads. Female flowers are white and grow in head clusters at the ends of branches.
<b>Seed</b>	Very small and light, about 3 mm long and weighing only about 0.1 mg. Tufts of white hairs (the pappus) grow on the top of each seed, giving the female plant its characteristic fluffy appearance when in full flower.
<b>Roots</b>	Mature Groundsel Bush has a deep branching taproot, with numerous fibrous lateral roots.
<b>Dispersal</b>	Each female plant can produce more than 1.5 million seeds annually. The seeds are adapted for dispersal by wind and water.
<b>Control</b>	Hand-pull small plants. Cut and paint or stem inject with 100 % glyphosate.

**CESTRUM, GREEN & NIGHT-BLOOMING***Cestrum parqui* & *nocturnum***Contain this weed** - *C. parqui*

pia dollmann



pia dollmann



Asit R. Gosh Thau

*C. parqui**C. nocturnum*

<b>Origin</b>	Central and South America ( <i>Green Cestrum</i> ), West Indies ( <i>night blooming</i> )
<b>Description</b>	Large evergreen woody shrubs, 3-4 m high, forming clumps and producing suckers.
<b>Leaves</b>	<p><b>GREEN CESTRUM</b></p> <p>Dull grey-green above, paler below, alternate, narrow and lance-shaped, 2-7 cm long, 1-5 cm wide.</p> <p><b>NIGHT BLOOMING</b></p> <p>As above, more glossy and larger leaves (6-20 cm long, 2-4.5 cm wide)</p>
<b>Flowers</b>	<p><b>GREEN CESTRUM</b></p> <p>Loose terminal clusters of greenish to yellow tubular to 3 cm long with 5 lobes. Flowers most of the year.</p> <p><b>NIGHT BLOOMING</b></p> <p>As above but flowers only during the warm months. Greenish-white or yellowish colour, very strong, sweet perfume at night.</p>
<b>Fruit</b>	Green egg-shaped berry, black ( <i>Green Cestrum</i> ) or aubergine colour ( <i>night-blooming</i> ) when ripe, 10-15 mm long.
<b>Dispersal</b>	By water, animals (mostly birds), garden waste dumping.
<b>Control</b>	Small plants can be pulled by hand. Cut and paint larger stems with 100% glyphosate.



pia dollmann



terry inkson



<b>Origin</b>	Central and South America
<b>Description</b>	Perennial, summer-growing, erect or scrambling shrub, occurring as groundcover, shrub or scrambling vine thicket to over 4 m high and often forming dense thickets. Broken stems produce a strong unpleasant odour when crushed. Stems are square-shaped with short, curved and hooked prickles. At least 29 varieties present in Australia. Toxic to livestock.
<b>Leaves</b>	Opposite and curved on a short stalk, about 10 mm long. Egg-shaped to spearhead-shaped, with toothed margins; rough and bright green on the upper surface and hairy and pale green below; 2–10 cm long and 2–8 cm wide.
<b>Flowers</b>	In dense clusters, variable colours, including red, yellow, orange, pink, purple and white, depending on type, maturity and location. Flowering and fruit production can occur almost year round where there is adequate soil moisture, high air humidity and high temperatures.
<b>Fruit</b>	Succulent, one-seeded drupe or berry about 6–8 mm in diameter. These develop in clusters and consist of aggregate, fleshy segments that are green at first and then turn a shiny, dark purple–black when ripe.
<b>Dispersal</b>	Birds and other animals disperse seed. Stems will sprout when in contact with soil. Seeds remain viable for 2–5 years.
<b>Control</b>	Hand-pull or cut and paint with 100% glyphosate. Splatter Gun glyphosate at 1 : 9. FOLLOW UP.



## MICKEY MOUSE PLANT

*Ochna serrulata*

SHRUBS



pia dollmann

terry inkson

<b>Origin</b>	Southern Africa
<b>Description</b>	Extremely hardy plant, capable of growing in harsh, dry conditions. It can grow to 4 m in situations where it is supported by other plants, but mostly grows to about 2 m. The branches are rough to the touch.
<b>Leaves</b>	Alternate, oblong to lanceolate, to 6 cm long, glossy green, slightly paler below. Margins finely serrated and often wavy, new growth reddish-brown.
<b>Flowers</b>	Showy yellow with 5 petals in spring and summer. Green calyx turns red after petals drop and fruit matures.
<b>Fruit</b>	Succulent green berries to 8 mm across, in clusters of 4–6. Ripen black in summer. One seed per berry.
<b>Dispersal</b>	By water, animals, humans (contaminated soil and garden rubbish dumping).
<b>Control</b>	Hand-pulling difficult with strong taproot holding on tight. Stem scrape and paint with 100% glyphosate or foliar spray seedlings with glyphosate at 20 ml/L.

MICKEY MOUSE PLANT



<b>Origin</b>	Asia
<b>Description</b>	Evergreen small tree or shrub to 12m high, often multi-stemmed from base when mature. Commonly planted in gardens as a hedge plant. Stem bark grey, fissured with age.
<b>Leaves</b>	Compound, alternate, dark green, ovate to elliptic, hairless, upper ones larger than lower ones, 1–9cm long, 0.5–6 cm wide. Smells of citrus when crushed.
<b>Flowers</b>	White, petals 1–2cm long. Fragrant. Flowers irregularly throughout the year but mainly late spring to early autumn.
<b>Fruit</b>	Ellipsoid, ripening red, 0.8–2cm long with 1 or 2 hairy seeds.
<b>Dispersal</b>	Seed dispersed by birds.
<b>Control</b>	Hand-pull small plants. Foliar spray glyphosate at 20ml/L or stem inject with 100% glyphosate.

## MYSORE THORN

*Caesalpinia decapetala*

Contain this weed

SHRUBS



kim & forest starr



NSW Nth Coast Weeds Advisory Committee

<b>Origin</b>	India
<b>Description</b>	Perennial shrub, growing to 2–4 m, or a sprawling climber to 15 m high, which readily forms a dense impenetrable thicket. Thorns on the stems are straight or hooked and aid in its ability to climb.
<b>Leaves</b>	Compound, bipinnate and up to 30 cm long. Leaflets are dark green above and pale beneath. Leaflets are about 8 mm wide and covered with fine hairs.
<b>Flowers</b>	Distinctive pale yellow flowers, growing in racemes which protrude up to 50 cm above the main plant. Flowers have prickles at the base. Flowering in winter–spring.
<b>Fruit</b>	Brown woody pods in spring–summer.
<b>Dispersal</b>	By water and possibly rodents. The seed can remain viable in the soil for up to 10 years.
<b>Control</b>	Hand-pull if possible. Foliar spray metsulfuron-methyl at 1 g/10 L with surfactant.

8 MYSORE THORN





<b>Origin</b>	China
<b>Description</b>	A semi-evergreen small tree/large shrub. Bark is a smooth grey. An extremely hardy, aggressively spreading plant, often branching near the base into strong, multiple trunks.
<b>Leaves</b>	Small, opposite, glossy, thickened, leathery leaves, similar colour on both surfaces.
<b>Flowers</b>	Showy, small, white flowers. Flowerhead dense, branched, 5–10 cm long. Flowers fragrant with 4 white petals, each 3–5 mm long. Flowers late winter and spring.
<b>Seed</b>	Large amounts of berries turn black when ripe. Seed remains viable for just one year.
<b>Dispersal</b>	Seed spread by birds and water.
<b>Control</b>	Does not hand-pull easily because of strong tap root. Foliar spray small plants with metsulfuron-methyl at 1 g/10L with surfactant. Stem inject with 100% glyphosate.

## SENNA – SMOOTH & WINTER

*Senna septemtrionalis* & *S. pendula* var. *glabrata*



*S. septemtrionalis*

*S. pendula*

<b>Origin</b>	South America
<b>Description</b>	Straggly evergreen shrub, 1 to 3 m high.
<b>Leaves</b>	Compound with 3–8 pairs of leaflets. Winter Senna ( <i>S. pendula</i> ) has rounded tips, Smooth Senna ( <i>S. septemtrionalis</i> ) has pointed tips.
<b>Flowers</b>	Flowers are yellow, large and showy, with protruding curved stamens (the pollen-producing parts).
<b>Seed</b>	Seed pods are a round bean, which distinguishes the weed from the native, which has flattened pods. Seed may be viable for 3–5 years.
<b>Dispersal</b>	By seed and sprouting from the roots after fire.
<b>Control</b>	Hand-pull or cut and paint with 100% glyphosate.
<b>Confused with</b>	Rainforest Cassia ( <i>Senna acclinis</i> ). Threatened species. Leaflets oval at 15 mm intervals. Seed pod 12–15 cm long, flat and ribbed when dry.



*Senna acclinis*





<b>Origin</b>	Taiwan and Japan
<b>Description</b>	Fast-growing, dense spreading shrub growing up to 1–4 m tall but occasionally reaches 6m. Grows in a broad range of soil types and both full-sun and semi-shade. Popular garden ornamental, sold as hedge or screen plant, often under the name 'Emerald lustre'.
<b>Leaves</b>	Opposite, thick, leathery, large leaves, 10–20cm long. They are bright green with a glossy or lustrous appearance. Irregularly toothed to almost entire margins and have pointed tips.
<b>Flowers</b>	Small, sweet smelling, produced in clusters at the tips of branches.
<b>Fruit</b>	Small, oval shaped fruit, 8mm long ripen to bright red or black in colour when mature.
<b>Stems</b>	Brownish-grey bark mature stems. Young stems are green or reddish tinged and hairless.
<b>Dispersal</b>	Seed is spread by birds and animals. Seed is also spread into bushland areas in dumped garden waste.
<b>Confused with</b>	<i>Viburnum odoratissimum</i> var. <i>odoratissimum</i> , this species has smaller dull green leaves (rather than thick and leathery) and also has the potential to be invasive.
<b>Control</b>	Manually remove whole plant where appropriate. Cut and paint or stem inject with 100% glyphosate.



## SUNFLOWER – JAPANESE & MEXICAN

*Tithonia diversifolia*, *T. rotundifolia*

SHRUBS



[www.en.wikipedia.org/wiki/File:Tithonia\\_diversifolia.JPG](http://www.en.wikipedia.org/wiki/File:Tithonia_diversifolia.JPG)

*T. diversifolia*

<b>Origin</b>	Central America
<b>Description</b>	Both sunflowers stand erect to 3–5 m.
<b>Leaves</b>	Large 3–5-lobed, serrated leaves.
<b>Flowers</b>	<b>Japanese Sunflower</b> has sunflower-like heads up to 10 cm across, with orange-yellow petals 4–5 cm long. <b>Mexican Sunflower</b> similar with orange-red petals and yellow flower centres. The stems are bushy.
<b>Seed</b>	Seeds are hairy, with a ring of scales and two spines.
<b>Control</b>	Can be dug out or chipped, where infestations are small. Spray with metsulfuron-methyl at 1 g/10L with surfactant.

SUNFLOWER – JAPANESE & MEXICAN



<b>Origin</b>	South America
<b>Description</b>	Straggly evergreen small tree or shrub to 4 m high. All parts of the plant are covered in velvety hairs and the plant has a life of up to thirty years, and can grow up to 10 m tall. All parts of the plant are poisonous to humans, particularly the green berries.
<b>Leaves</b>	Large, oval, grey-green soft leaves, covered with felt-like hairs. Crushed leaves have a strong unpleasant smell.
<b>Flowers</b>	Purple with a yellow centre. The plant can flower year round.
<b>Fruit</b>	Clusters of large (to 2 cm) berries ripening from green to yellow.
<b>Dispersal</b>	Seed is dispersed by birds, mostly large doves.
<b>Control</b>	Many bush regenerators leave tobacco bush on site, providing protection and shade to young native seedlings. Hand-pull or cut and paint with 100% glyphosate.

## TROPICAL SODA APPLE

*Solanum viarum*

**Eradicate this weed**

SHRUBS



<b>Origin</b>	South America
<b>Description</b>	Erect shrub to 2 m high. Upright and much branching, it has broad-based, straight, cream-coloured prickles to 12 mm long, scattered on most plant parts.
<b>Leaves</b>	Leaves are mostly 10–20 cm long and 6–15 cm wide. The upper and lower leaf surfaces are densely covered in short hairs; mid-veins and primary lateral-veins are cream-coloured on both sides of the leaves and can have large cream-coloured thorns on the midvein of the upper surface.
<b>Flowers</b>	Flowers are white, with five petals 2–4 mm long. They occur in clusters of 3 to 6, off a short stem.
<b>Fruit</b>	The immature fruit is pale green with dark green veins, looking like a small watermelon. The mature fruit is yellow, golf ball size (20–30 mm) and contains numerous brown seeds.
<b>Dispersal</b>	By seed and from root material. Cattle, birds and other animals disperse the seed. Also dispersed by water and contaminated soil & equipment.
<b>Control</b>	Notify your local Council Weed Officer. Hand-pull, taking care to remove all plant parts, including fruit and root fragments. Bag plant material and bury deep under the ground. Foliar spray glyphosate at 20 ml/L or cut and paint with 100% glyphosate.

TROPICAL SODA APPLE





terry inkson

pia dollmann

<b>Origin</b>	Central and South America
<b>Description</b>	Perennial, multi-branched shrub or small tree, 4–7 m high.
<b>Leaves</b>	Compound leaves, 8–25 cm long with 5–13 leaflets. Leaflets toothed and pointed, 2.5–10 cm long and 8–30 mm wide.
<b>Flowers</b>	Large clusters, yellow trumpet-shaped flowers in spring–summer, occurring at tips of branches.
<b>Fruit</b>	Green bean-like flat pod, maturing to brown, 10–22 cm long. Spring to autumn.
<b>Seed</b>	Numerous, winged.
<b>Dispersal</b>	Wind, water, humans, contaminated soil, garden rubbish dumping.
<b>Control</b>	Hand-dig small plants. Cut and paint or frill and inject larger stems with 100% glyphosate. Bag and dispose of all seed pods.