

BLUE BILLYGOAT WEED

Ageratum houstonianum

GROUND LAYER



Origin	Tropical America
Description	Billy Goat Weed is an annual or short-lived perennial herb growing to 1 m. It is a widespread weed of disturbed areas.
Leaves	Leaves and stems and are softly hairy. Leaves mostly opposite, but sometimes (upper) alternate leaves. Finely serrated, almost triangular to ovate, with either blunt or pointed tips.
Flowers	Spherical flower heads. Light lavender blue florets to 3 mm, grouped into fluffy flower-heads to 7 mm across. Bracts at the base of the flower-head are hairy. Flowering occurs throughout most of the year.
Dispersal	Dispersed by very fine dry seed, with short coarse hairs.
Confused with	Very similar to <i>Praxelis clematidea</i> , which is on the national weed alert list. <i>Ageratum</i> has finely serrated leaves, <i>Praxelis</i> leaves are more bluntly toothed. <i>Praxelis</i> has domed, conical flower heads and seed with long fine hairs.
Control	Stems tend to break easily when pulled, leaving root system to re-grow. Spray with metsulfuron-methyl at 1 g/10L with surfactant.

***Ageratum houstonianum* is toxic to grazing animals, causing liver lesions. It contains pyrrolizine alkoids.**

BLUE BILLYGOAT WEED

CANNA LILY

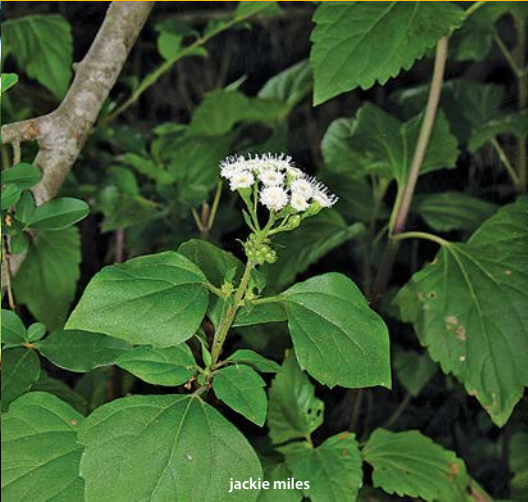
Canna indica

GROUND LAYER



Origin	South America
Description	Erect perennial to 2 m high without true stems. Stems are a collection of tightly furled leaf bases.
Leaves	Dark green to multi coloured and striped, large (60 x 25 cm), arranged alternately on stems.
Flowers	Tubular flowers (yellows, oranges, reds and pinks) formed in asymmetrical clusters. Spring–autumn.
Seed	Black, globular seeds (5–7 mm long) borne in a capsule.
Dispersal	Extensive, fleshy rhizome underground. Seed and rhizomes spread by water, humans, contaminated soil and garden rubbish dumping. Seeds are spread by birds.
Control	Hand-pull/dig, bag all plant parts and remove from site. Foliar spray with glyphosate at 20 ml/L or metsulfuron-methyl at 1 g/10 L with surfactant.

CANNA LILY



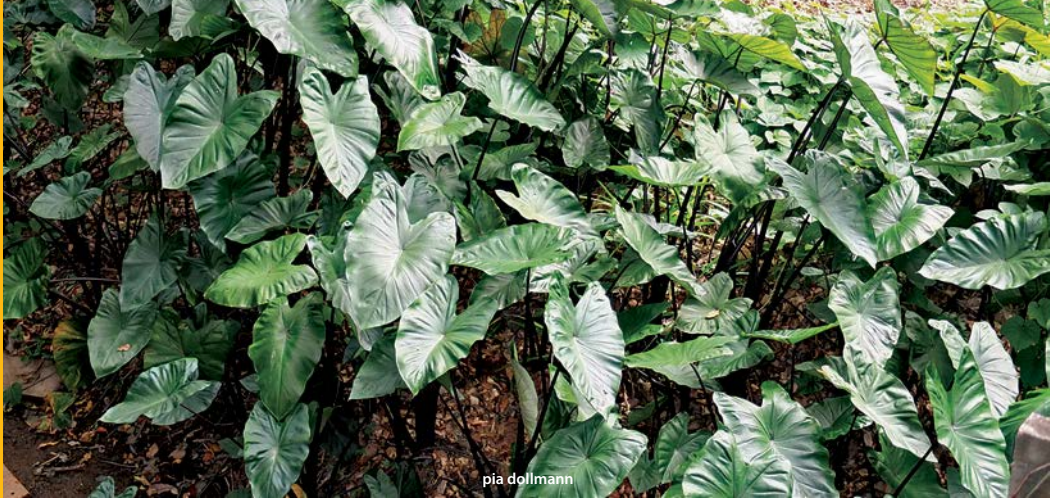
Origin	Mexico
Description	A member of the daisy family. Erect, perennial plant with numerous purple-brown, woody stems emanating from an underground crown and reaching a height of 1–2 m. Has a strong unpleasant smell when crushed.
Leaves	Opposite, broad, trowel-shaped, toothed leaves with red to brown leaf stalks.
Flowers	Clusters of white, tubular flowers, produced in profusion in early spring.
Seed	Seed brown to black, angular, 1.5–2 mm long, with a parachute-like plume of white hairs (pappus) about 4 mm long at the top of the seed.
Roots	Thick, yellowish, extensive in mature plants.
Dispersal	Seeds carried by water and wind. Transported in hay, machinery, vehicles, clothing and mud.
Confused with	Mistflower, which is also a declared noxious weed. Grows as a dense ground cover, and has more narrow leaves.
Control	Hand-pull, watch out for roots breaking up. Foliar spray metsulfuron-methyl at 1.5 g/10L water with surfactant or glyphosate at 5 ml/L.

Very poisonous for horses.

ELEPHANTS EARS – TARO

Colocasia esculenta

GROUND LAYER



- Origin** S.E. Asia, Hawaii, and the Pacific Islands
- Description** A variable species of perennial herb 1–2m tall; occurs in many variants. Forms dense monocultures, shade tolerant. Occurs in moist areas, including creek beds.
- Leaves** Large ‘elephants ears’ leaves grow from the base, upper surface glossy green to bluish-black. Stems dark, purplish. Stem & leaf colour varies depending on variety of plant.
- Flowers** Pale yellow spike enclosed by a greenish yellow hood like a leafy sheath. Flowers winter-summer.
- Seed** Small berry, green or yellow, maturing to orange, 5–10mm long, containing about 4 yellow-brown seeds.
- Roots** Fleshy tuberous rhizome.
- Dispersal** Roots, tubers and seed are spread by water, humans, contaminated soil and garden rubbish dumping.
- Control** Hand-pull/dig, bag all plant parts which can reproduce and remove from site.
Foliar spray with glyphosate at 20ml/L or metsulfuron-methyl at 1.5g/10L with surfactant in summer, avoid water pollution.

ELEPHANTS EARS (TARO)



pia dollmann



terry inkson

Origin	South Africa
Description	Mostly erect annual or biennial herb to 70 cm high but varies greatly in size and shape depending on conditions. In dry and harsh conditions may be less than 20 cm tall with narrow leaves, no branching and few flowers. In ideal conditions, grows up to 50 cm tall, bushy, with multiple branches.
Leaves	Variable, to 8 cm long and to 1.5 cm wide, long narrow leaves, alternate, dark green, with serrated margins.
Flowers	Yellow, daisy-like, about 2 cm diameter. Usually 13 ray florets (outer petals). This number distinguishes it from native species.
Seed	Numerous, to 2.5 mm long, topped by hairs to 6.5 mm long.
Roots	Shallow-branched tap root with many fibrous roots.
Dispersal	Most spread is by wind-dispersed seed. Long distance dispersal also occurs by seeds on animals, in stock feed or in mud on vehicles.
Confused with	Native <i>Senecio</i> species. We can safely assume that Fireweed look-alikes found in coastal environments are the native species.
Control	Remove small infestations immediately manually (wear gloves to prevent poisoning through skin absorption). Slashing usually not effective, as it increases poisoning risk to stock and only delays flowering and seeding. Herbicides are most effective if sprayed before plants reach maturity. Consult with local weeds officer.

Fireweed causes reductions in growth rates, or death of cattle and horses caused by pyrrolizidine alkaloids occurring in the plant.

FISHBONE FERN

Nephrolepis cordifolia

GROUND LAYER



- Origin** Native of tropical and subtropical regions of the world including Australia (north from Clarence River, NSW). It is found in rainforest or open forest.
- Leaves** A semi-evergreen fern, which is growing as a groundcover. Fronds (the leaves of ferns) are upright, up to 75 cm long. The pinnae (the green leafy parts along the leaf) are in 2 rows on either side of the stem of the leaf, they are slightly regular to toothed. The horizontal above-ground stems (stolons) are slender and wiry, also with some scales. Often there are round tubers on the stolons. This plant forms dense clumps.
- Roots** The rhizomes are covered with brown scales.
- Dispersal** Fishbone fern spreads by stolon and by wind-blown spores. Also with soil and garden rubbish.
- Control** This plant is best dug out. The roots usually are not deep but form quite dense mats. Ensure to remove all tubers. Foliar spray with metsulfuron-methyl at 1 g/10L plus surfactant.

FISHBONE FERN

HAIRY COMMELINA – TROPICAL SPIDERWORT, WANDERING JEW

Commelina benghalensis



www.en.wikipedia.org/wiki/File:ARS_-_Commelina_benghalensis.jpg

www.en.wikipedia.org/wiki/File:Commelina_benghalensis_W_IMG_1553.jpg

GROUND LAYER

HAIRY COMMELINA – TROPICAL SPIDERWORT, WANDERING JEW

- Origin** 'Old World Tropics', South Africa, Asia
- Description** Annual, sometimes perennial herb. Stems have a high moisture content, and once well rooted, the plant can survive for long periods without moisture availability and can then grow rapidly after the onset of rains.
- Leaves** Alternate, lily-like, 3–7 cm long. Broadly oval shaped (length up to twice width). Leaf sheaths have reddish-brown-tipped hairs.
- Flowers** Above-ground flowers are very small with relatively large lilac to blue petals and are present from the spring to autumn. Underground flowers, which grow on burrowing rhizomes, are white and very small.
- Seed** Wrinkled.
- Dispersal** Produces above and below ground flowers. This results in viable seed being produced above and below ground. Will also root at the nodes and can be propagated from cut stems. Light cultivation can often break plant parts and increase the area of infestation.
- Confused with** A number of other weedy and/or native *Commelina* species. None of the other weedy species have brown-tipped hairs.
- Control** Try raking back and spot spray or hand weed the regrowth, or spray with glyphosate at 20 ml/L. Tolerance to glyphosate has been documented.

MISTFLOWER – CREEPING CROFTON WEED

Ageratina riparia

GROUND LAYER



- Origin** Central and South America
- Description** Spreading, sometimes erect, perennial herb to 40–60 cm high. Stems purplish, cylindrical with purple striped hairs on upper stems and leaf stalks. Stems produce roots at the joints where they touch the ground. Very shade tolerant, frost sensitive, favours damp places, stream banks. Seedlings develop in late spring to early summer.
- Leaves** Opposite, long and tapered to 10 cm long and to 4 cm wide, single-veined at the base, margins toothed with hairs on stalk to 2 cm long.
- Flowers** White, flat-topped terminal clusters of small flowers (florets), similar to Crofton Weed, produced in winter in small, dense heads at the end of the branches.
- Fruit** Seeds are slender, angular, 2 mm long, black, with fine white hairs at the tip.
- Dispersal** Seed dispersed by wind and water.
- Confused with** Crofton Weed (*Ageratina adenophora*) see page 11.
- Control** Hand-pulls easily. Foliar spray glyphosate at 5 ml/L or metsulfuron-methyl at 2.5 g/10 L with surfactant. Biologically control, the fungus *Entyloma ageratina*, was introduced into southern NSW in 2011 with promising success.

MISTFLOWER – CREEPING CROFTON WEED



Mother of Millions

Mother of Millions

Resurrection

- Origin** Africa, Madagascar
- Description** Succulent perennial plant, growing 30 cm to 1 m in height. The stems are pinkish-brown or greyish in colour.
- Leaves** Fleshy, pencil-shaped, pale green to pale brown with dark green patches and a shallow groove on the upper surface. There are up to seven projections at the tip of each leaf, which can develop into new plants when broken off.
- Flowers** Orange-red and occur in a cluster at the top of a single stem. May–October.
- Fruit** Dry capsule, producing hundreds of tiny black seeds.
- Roots** Weak fibrous roots develop from all vegetative parts of the plant.
- Dispersal** The name ‘mother of millions’ is based on the plant’s ability to reproduce vegetatively in large numbers. Each plant produces small plantlets along the edges of its leaves, which detach and form new plants. Also dispersed by seeds, which can remain viable in the soil for a number of years.
- Confused with** Two less common *Bryophyllum* species. These are hybrid mother of millions (*Bryophyllum daigremontianum* x *B. delagoense*) and Resurrection Plant (*B. pinnatum*). The hybrid has boat-shaped leaves with notches along the edges and the Resurrection Plant is much taller (60 to 200 cm). Resurrection Plant only flowers from June to August, while the others flower from May to October.
- Control** Hand-pull, taking care to remove all parts of the plants. Spray with 1 g metsulfuron-methyl plus 20 ml glyphosate per 10L water. Add non-ionic surfactant.

Highly toxic for cattle, dogs and humans.

OX-EYE DAISY

Leucanthemum vulgare

GROUND LAYER



- Origin** Europe and western Asia.
- Description** Erect perennial herb to 1 m high.
- Leaves** Slightly hairy to hairless. 2.5–10 cm long, toothed (or lobed) and decrease in size closer to the apex of the stem. Upper leaves stem-clasping.
- Flowers** White daisies with yellow centres, many small florets in heads surrounded by bracts in several rows; 1–1.5 m long, entire to toothed at the tip; inner florets yellow, tubular. Flowers most of year, mainly spring and summer.
- Seed** Dark brown, grey or black with pale ribs, 2.5 mm long.
- Dispersal** Spreads by seed and creeping roots.
- Confused with** Shasta Daisy (*Leucanthemum maximum*) which generally has unbranched stems, flowers in heads 5–8 cm wide and has regularly toothed leaves. Ox-eye Daisy has irregularly toothed or lobed leaves.
- Control** Herbicides with active ingredients picloram and sulfometuron-methyl may be registered for Ox-eye Daisy control. Consult with local weeds officer and check the label.

OX-EYE DAISY

PAINTED SPURGE – DWARF POINSETTIA

Euphorbia cyathophora



GROUND LAYER

Origin	South America
Description	Painted Spurge is an erect herb, growing to 80 cm tall in coastal environments. The leaves are similar to poinsettia, red and green. The stems are green.
Leaves	Mainly 2–4 lobed and 4–7 cm long by 1.5–3 cm wide. Upper leaves red or partially red.
Flowers	Dull red in colour and irregularly clustered at the ends of stems and branches. Flowering most of the year.
Fruit	Small, segmented capsules.
Dispersal	By seed.
Control	Hand-pull, making sure that roots are pulled and any plant material containing seeds is taken off site and disposed of appropriately (e.g. bag, solarise and compost). Foliar spray glyphosate at 10 ml/L or metsulfuron-methyl at 1 g/10L water with surfactant.

PAINTED SPURGE – DWARF POINSETTIA

SINGAPORE DAISSY

Sphagneticola trilobata

GROUND LAYER



- Origin** South America
- Description** Dense mat-forming perennial herb to 70 cm high, with spreading stems to 2 m or longer forming roots at the nodes.
- Leaves** Simple, dark green glossy above, paler below, 3–11 cm long, 2.5–8 cm wide, with white hairs and toothed margins, sometimes tri-lobed.
- Flowers** Single in leaf axils with yellow disc and ray florets. 3.5 cm wide on stalks 3–14 cm long. Flower heads with 4–14 petals 6–15 mm long, inner (disc) florets tubular. Flowering spring to autumn.
- Seed** 4–5 mm long, covered with nodules and topped with dandelion-like tufts.
- Roots** Fibrous, shallow, rooting at the nodes.
- Dispersal** Seed is spread by wind, humans and contaminated soil and garden rubbish dumping. Plants will spread vegetatively by cuttings, rooting at the nodes.
- Control** Hand-pull/dig, bag all plant parts and remove from site. Foliar spray metsulfuron-methyl at 1 g/10 L with surfactant.

SINGAPORE DAISSY



pia dollmann

Origin	South America
Description	Perennial, creeping succulent herb, rooting from distinct nodes. Grows vigorously, layering and smothering low native ground covers. Shade tolerant and moisture loving.
Leaves	Simple, alternate, ovate leaves that are glossy and dark green to 6 cm long. Slightly fleshy.
Flowers	Small (1–2 cm) white flowers, with three petals and six hairy stamens. Spring–summer.
Fruit	Papery capsule, seed not viable in Australia.
Roots	Stolons form underground, with weak, shallow roots forming at the nodes. Pull out easily.
Dispersal	Main method of reproduction is vegetative, whereby stem fragments form roots and grow. Stem fragments spread by water, and contaminated soil (garden rubbish dumping, earth moving etc). Common along watercourses.
Confused with	<i>Commelina cyanea</i> . This native ground cover has blue flowers, hairy leaf sheaths and a much stronger primary root system.
Control	Hand-pull/dig, rake up, bag all plant parts and remove from site or compost under black plastic. Foliar spray with glyphosate at 20 ml/L water in winter or early spring. Add surfactant, apply twice, 6–8 weeks apart. Repeat treatments are essential.