# African daisy

Gazania linearis (Thunb.) Druce. Gazania rigens (L.) Gaertn.



#### **PLANT DESCRIPTION**

The African daisy has tuberous roots at the nodes of the leaves, forming dense clumps of dark green upright leaves that are white and hairy on the underneath. They produce large yellow/orange/white or red flowers that can be 10cm.

#### **IMPACTS**

This affects native herbs/small shrubs and understory plant communities by dense clumping and fast growth causing widespread in bushland habitats. The African daisy is resilient to drought allowing the plant to grow into dense clumps.

#### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings ensuring all plant body is removed and carefully disposed is effective. Larger plants can have vines severed, leaving them to dry in the canopy and then dig out the roots.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**ASTERACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

CAPE PROVINCE, SOUTH AFRICA

#### **OTHER NAMES:**

TREASURE FLOWER, GAZANIA

#### **GROWTH FORM:**

CLUMPING ANNUAL

#### **HABITAT:**

COASTAL, WET DEPRESSIONS, SAND DUNES AND DISTURBED AREAS IN SANDY OR LOAM SOILS.

#### **DISPERSAL**:

POLLINATED BY INSECTS

#### FLOWERING PERIOD:

JUNE- DECEMBER

#### **FIRE RESPONSE:**

**UNKNOWN** 

### DECLARED/ ENVIRONMENTAL PEST: ENVIRONMENTAL WEED



# **Black Flag**

Ferraria crispa (Burm.)



Photographer Roger Cousens Copyright © Western Australian Agriculture Authority, 1995

#### **PLANT DESCRIPTION**

Black flag is a small perennial herb, with thick, succulent leaves and flowering stems up to 450mm tall. Black Flag occurs in coastal heath, Tuart, Agonis and Banksia woodland from Perth to Cape Riche. It is often found growing in clumps and readily recognised by its succulent foliage even when not in flower. Plants produce dark brown to black, foul-smelling Iris-type flowers from August to November. Flowers only last one day but are produced in succession.

#### **IMPACTS**

Black Flag reproduces asexually from cormlets and is a prolific seeder, which can form monocultures under favourable conditions. Dense growth results in the smothering of smaller native herbs and prevents native plant recruitment.

### SUGGESTED CONTROL METHOD

Hand-pull seedlings and small plants, ensuring roots are removed. In areas with denser populations, it may be necessary to use herbicides for control. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

**FAMILY:** 

**IRIDACEAE** 

**SYNONYMS: FERRARIA** 

UNDULATA

**ORIGIN:** CAPE PROVINCE, SOUTH

**AFRICA** 

**OTHER NAMES:** SPINEKOPBLOM,

FLAG LILY

**GROWTH FORM: PERENNIAL** 

**CORM** 

#### **HABITAT:**

COASTAL WOODLAND,
GRASSLANDS, HERBFIELDS, SAND
DUNES AND DISTURBED AREAS IN
SANDY OR LOAM SOILS.

#### **DISPERSAL**:

SOIL MOVEMENT, SURFACE RUNOFF

FLOWERING PERIOD: AUGUST-

**NOVEMBER** 

#### **FIRE RESPONSE:**

UNDERGROUND CORMS SURVIVE FIRE

# DECLARED/

**ENVIRONMENTAL PEST:** 

WEED OF NATIONAL SIGNIFICANCE



# **Brazilian Peppertree**

Schinus terebinthifolius (Raddi)



### **PLANT DESCRIPTION**

Sprawling shrub or erect tree to 6 (rarely to 15) m high. Stems single or branched at base, bark grey with vertical cracking in older stems. Aromatic leaves 5-22cm long, with 5-17 (usually 7-9) glossy, green leaflets. Creamy flowers produced on inflorescence between leaf axils followed by showy bunches of red fruits on female trees. Fruits contain a single seed and are attractive to birds.

### **IMPACTS**

Once widely planted as an ornamental, Brazilian peppertree has become naturalized in many areas of Australia, as well as numerous sub-tropical countries. This species is particularly invasive on disturbed soils where it forms dense stands but will invade a number of environments. Vigorous growth smothers native plant species and prevents seed germination.

#### SUGGESTED CONTROL METHOD

Hand-pull seedlings and small plants, ensuring roots are removed. Larger plants may require the 'Cut and Paint' method. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

FAMILY: ANACARDIACEAE

SYNONYMS: SCHINUS TEREBINTHIFOLIA

ORIGIN:

ARGENITINA, SOUTHERN BRAZIL AND EASTERN PARAGUAY

#### **OTHER NAMES:**

JAPANESE PEPPERTREE, BROAD-LEAF PEPPERTREE, POIVRE SAUVAGE, FAUX POIVRE, BAIES ROSES, CHRISTMAS BERRY

**GROWTH FORM:** LOW SHRUB-SMALL TREE

#### **HABITAT:**

WOODLANDS, FORESTS, CREEKLINES, WETLANDS. SAND DUNES, COASTAL HEATHLAND AND DISTURBED SITES

#### **DISPERSAL:**

SEED SPREAD BY FRUIT-EATING BIRDS, RODENTS AND MOVING WATER. SUCKERS PROLIFICALLY FROM DAMAGED ROOTS

#### FLOWERING PERIOD:

YEAR ROUND, WITH MAIN FLUSH IN AUTUMN AND SMALLER FLUSH IN SPRING

#### FIRE RESPONSE:

RESPROUTS FROM ROOTS AND REINVADES BY SEED

DECLARED/
ENVIRONMENTAL PEST:
ENVIRONMENTAL WEED



# Caltrop

Tribulus terrestris L.



#### **PLANT DESCRIPTION**

Prostrate annual herb with leaflet pairs covered with long, soft, weak hairs with a distinct spine up to 8 mm long. With sharp spine fruit and yellow flowers. They can flower and fruit within 6 weeks of germination and are drought tolerant with persistent seeds of up to 5 years in the soil.

#### **IMPACTS**

Caltrop rapidly invades native vegetation, displacing local native species. Caltrop can produce up to 1000 fruits on each plant, with a total of up to 20,000 seeds. Plants grow rapidly, flowering and forming new burrs within three to five weeks.

#### SUGGESTED CONTROL METHOD

Direct spraying before seeding and flowering with herbicides. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

ZYGOPHYLLACEAE

#### SYNONYMS:

NONF

#### **ORIGIN:**

SOUTHERN EUROPE, NORTH AFRICA, MEDITERRANEAN, ASIA AND SUBTROPICAL PARTS OF AUSTRALIA

#### **OTHER NAMES:**

PUNCTURE VINE.

#### **GROWTH FORM:**

ANNUAL HERB

#### **HABITAT:**

SAND, WASTE PLACES, ROADSIDES AND DISTURBED SITES

#### **DISPERSAL:**

SOIL MOVEMENT, WATER, MACHINERY, ADHESION TO ANIMALS.

#### FLOWERING PERIOD:

ALL YEAR, MAINLY BETWEEN DECEMBER-MAY

# **FIRE RESPONSE:**

PLANTS MAY BE KILLED BY VERY HOT FIRE.

DECLARED/

DECLARED/

### **ENVIRONMENTAL PEST:**



# Cape weed

Arctotheca calendula



#### **PLANT DESCRIPTION**

Cape weed is a stemless or short-stemmed herb growing up to 30 cm high. This species has a rosette of leaves that lie close to the ground. Leaves can be up to 25cm long with deep lobes and a felty appearance. Flowers are daisy-like, yellow with dark blackish centres. Cape weed germinates in Autumn but can occur throughout winter and into spring

#### **IMPACTS**

If established, can have a moderate impact on native plant communities as it is likely to impact soil moisture and nutrient availability. Can be poisonous to mammals through accumulating high levels of nitrate.

#### SUGGESTED CONTROL METHOD

Manually removing small plants and seedlings is effective, ensuring all plant material is completely removed and properly disposed of. The optimal time for herbicide application is between June and November. For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**ASTERACEAE** 

#### SYNONYMS:

**NONF** 

#### **ORIGIN:**

**SOUTHERN AFRICA** 

#### **OTHER NAMES:**

CAPE DANDELION
PLAIN TREASURE FLOWER
FERTILE CAPEWEED

#### **GROWTH FORM:**

**ANNUAL HERB** 

#### **HABITAT:**

WOODLANDS, FORESTS, SAND DUNES, COASTAL HEATHLAND, CULTIVATED AREAS, ROADSIDES AND DISTURBED SITES.

#### **DISPERSAL:**

SEED SPREAD BY FRUIT-EATING BIRDS, RODENTS AND MOVING WATER. SUCKERS PROLIFICALLY FROM DAMAGED ROOTS

#### FLOWERING PERIOD:

**AUGUST - NOVEMBER** 

#### **FIRE RESPONSE:**

RESPROUTS FROM ROOTS AND REINVADES BY SEED

# DECLARED/

# **ENVIRONMENTAL PEST:**



# Castor oil plant

Ricinus communis L.



#### **PLANT DESCRIPTION**

Small woody tree or shrub, usually up to 3 meters. It is poisonous to people, dogs, and livestock. This **is a** fast-growing shrub or small tree, usually to 3 meters. Leaves are large and star-shaped, with toothed, edges. Maturing from dark reddish-brown to green.

#### **IMPACTS**

Seed dispersed through water, ants, and garden waste. Fire and disturbance trigger germination of the soil seed bank. Resprouts from woody structure and has a long soil seed bank of up to 10 years

# SUGGESTED CONTROL METHOD

Hand-pull seedlings and small plants, ensuring roots are removed. Larger plants may require the 'Cut and Paint' method. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**EUPHORBIACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

AFRICA, ASIA, AMERICA

#### **OTHER NAMES:**

**CASTOR BEAN** 

#### **GROWTH FORM:**

PERENNIAL HERB

#### HABITAT:

SAND DUNES, COASTAL HEATH, ROADSIDES AND DISTURBED SITES, GARDENS, SAND, LOAM, WASTELAND

#### **DISPERSAL:**

EXPLOSIVE SEED, SEED, GARDEN
WASTE, POSSIBLY ALSO DISPERSED BY
ANTS

### FLOWERING PERIOD:

ALL YEAR ROUND, MAINLY BETWEEN NOVEMBER -JUNE

#### FIRE RESPONSE:

MATURE PLANTS ARE KILLED BY FIRES, HOWEVER FIRE BREAK SEED DORMANCY, RESULTING IN MASS GERMINATION OF SEEDLINGS.

#### DECLARED/

# **ENVIRONMENTAL PEST:**



# **Century plant**

Agave americana



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#### **PLANT DESCRIPTION**

Agaves are perennial succulent shrub that reaches up to 1-2 m long and flower spikes up to 6 meters high. The leaves are long, lanceolate dark green/greyish or variegated, with large thorns along the margins of the leaves 5-10mm long. The flower spikes an upright dark green/greyish or variegated with large clusters of pedicelled yellow/greenish flowers. The leaves have toxins that are poisonous to animals and the sap can cause irritation or dermatitis. A prolific spreader with suckering roots, it flowers and sets seeds only once before dying after producing a flower spike, typically living for 15 to 20 years.

#### **IMPACTS**

Forms dense thickets, reducing native species diversity and natural regeneration. Agaves can tolerate extreme temperatures and can be established in large numbers due to rapid colonisation.

#### SUGGESTED CONTROL METHOD

Smaller plants can be hand-weeded or dug out, removing all the roots. Larger plants require stem injection at the base with herbicide. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

### **FAMILY:**

**ASPARAGACEAE** 

### **SYNONYMS:**

NONE

#### **ORIGIN:**

MEXICO, SOUTH CENTRAL AFRICA AND CENTRAL AREAS OF THE UNITED STATE

#### **OTHER NAMES:**

AMERICAN ALOE AMERICAN AGAVE MAGUEY

#### **GROWTH FORM:**

SUCCULENT SHRUB

#### **HABITAT:**

DUNES, ROADSIDES, SAND WASTELAND AND DISTURBED SITES

#### **DISPERSAL:**

WATER, BIRD, ANTS, SLASHING, SOIL MOVEMENT, GARDEN REFUSE

#### FLOWERING PERIOD:

JANUARY - APRIL

#### **FIRE RESPONSE:**

FIRE STIMULATES MASS
GERMINATION OF SEED AND
GENERALLY KILLS ADULT PLANTS

# DECLARED/

**ENVIRONMENTAL PEST:** 



# **Coastal Tea Tree**

# Leptospermum laevigatum (Gaertn.) F.Muell.



Photographer Rod Randall Copyright © Western Australian Agriculture Authority, 2007

#### **PLANT DESCRIPTION**

Sparse, spreading shrub or small tree to 6m high (shorter in exposed situations) with small, dull green elliptical leaves. Plants produce abundant white flowers which closely resemble those of white Geraldton Wax (Chamelaucium uncinatum).

#### **IMPACTS**

Coastal tea tree was an early introduction to Western Australia, mainly for use as a hedge plant in coastal settlements and for coastal revegetation. Many coastal areas of southern Western Australia are now seriously threatened by dense monocultures of Victorian tea-tree. Seed is distributed by the wind, while stem layering facilitates further spread. Seeds released en masse when plants are damaged or stressed, including herbicide application, mechanical damage or fire. The roots produce chemicals that retard the growth of native plants.

# SUGGESTED CONTROL METHOD

The preferred control period is during July to September with small seedlings or plants hand weeded or to be dug out, removing all the roots and the larger shrubs will need to be cut at the base of the trunk and pasted with glyphosate on the cut stump. Foliar herbicide spray can be used before flowering or seeding with repeated treatments. Read the manufacturers' labels and material safety data sheets before using herbicides.

#### **FAMILY:**

**MYRTACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

COASTAL AEAS OF SOUTHERN NSW, VICTORIA, TASMANIA AND EASTERN SOUTH AUSTRALIA

#### **OTHER NAMES:**

AUSTRALIAN MYRTLE, VICTORIAN TEA TREE

**GROWTH FORM: SHRUB-**

**SMALL TREE** 

#### **HABITAT:**

ROAD VERGES, SWAMPS, LAKES,
DAMPLAND, RIVERINE EDGES,
COASTAL HEATH AND WOODLANDS

**DISPERSAL:** WIND, STEM-LAYERING

#### FLOWERING PERIOD:

MAY-OCTOBER

#### **FIRE RESPONSE:**

ADULT PLANTS ARE KILLED BY
FIRE, SEED IS RELEASED FROM
WOODY FRUITS AND GERMINATES
PROLIFICALLY IN POST FIRE
CONDITIONS

DECLARED/ ENVIRONMENTAL PEST: DECLARED PEST



# Cootamundra Wattle

Acacia baileyana F.Muell.



Copyright © Western Australia Agriculture Authority, 2006

#### **PLANT DESCRIPTION**

A small evergreen tree to 3-4m. Leaves are compound, with many tiny silvery-grey leaflets. Flowers are clusters of fluffy yellow balls produced in winter, and the black shiny seeds are carried in flat brown papery pealike pods. Easily distinguished as, unlike local wattles, *Acacia baileyana* retains its fern-like juvenile foliage throughout its life.

#### **IMPACTS**

Cootamundra wattle is native to a small area between Cootamundra and Temora in NSW but has been widely planted across Australia for its attractive foliage. It often grows on road verges and in dry bush, where it can outcompete native plants and shade out grasses and wildflowers. Although short-lived and creates a mess when it dies. The hard-coated seeds can remain viable for decades, leading to significant population increases after disturbances like cultivation or fire

### SUGGESTED CONTROL METHOD

Hand-pull seedlings and small plants, ensuring roots and all plant material are removed. Larger plants may require the 'Cut and Paint' method. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

**FAMILY:** 

**FABACEAE** 

SYNONYMS:

NONE

ORIGIN:

NEW SOUTH WALES (COOTAMUNDRA AREA)

**OTHER NAMES:** 

NONE

**GROWTH FORM:** 

**SMALL TREE** 

**HABITAT:** 

WOODLAND, CREEKLINES.
WASTELAND AND DISTURBED SITES

**DISPERSAL:** 

WATER, BIRD, ANTS, SLASHING, SOIL MOVEMENT, GARDEN REFUSE

FLOWERING PERIOD:

JUNE - SEPTEMBER

**FIRE RESPONSE:** 

FIRE STIMULATES MASS
GERMINATION OF SEED AND
GENERALLY KILLS ADULT PLANTS

DECLARED/

**ENVIRONMENTAL PEST:** 



# **Dolichos Pea**

Dipogon lignosus (L.) Verdc.



Copyright @ Photography by C. Hortin & J. Hooper

#### **PLANT DESCRIPTION**

This species grows as a vine with stems up to 4 meters long. Leaves grow in groups of 3 leaflets and are oval to diamond-shaped. Flowers are pea-shaped and are pink/purple, up to 1.5cm long. Seeds are produced in 5cm long pods.

#### **IMPACTS**

Seeds are explosively dispersed and assisted by birds, water, soil disturbance and garden refuse. This species can resprout and fire while killing mature plants stimulates seed germination.

#### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings ensuring all plant body is removed and carefully disposed is effective. Larger plants can have vines severed, leaving them to dry in the canopy and then dig out the roots.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONF

#### **ORIGIN:**

SOUTH AFRICA/MEDITERRANEAN, INCLUDING ALGERIA, EGYPT, LIBYA, MOROCCO, TUNISIA, ISRAEL, JORDAN, LEBANON

#### **OTHER NAMES:**

CAPE SWEET PEA

#### **GROWTH FORM:**

SHRUB/CLIMBER

#### **HABITAT:**

GRAVELLY SOIL, SAND DUNES, COASTAL HEATH, ROADSIDES AND DISTURBED SITES, GARDENS, SAND, LOAM,

#### DISPERSAL:

EXPLOSIVE SEED, BIRDS, SOIL, WATER, GARDEN WASTE,

RABBITS, INAPPROPRIATE PLANTINGS, POSSIBLY ALSO DISPERSED BY ANTS

### FLOWERING PERIOD:

**AUGUST-JANUARY** 

#### FIRE RESPONSE:

MATURE PLANTS ARE KILLED BY FIRES, HOWEVER FIRE BREAK SEED DORMANCY, RESULTING IN MASS GERMINATION OF SEEDLINGS.

# DECLARED/

## **ENVIRONMENTAL PEST:**



# Flax Leaf Broom

Genista linifolia.



Photographer © 2021 Centre for Invasive Species Solutions

#### **PLANT DESCRIPTION**

Flax leaf broom is an upright, spreading shrub that can grow up to 5 meters tall and has stalkless leaves with 3 narrow leaflets up to 30 mm long. The underneath leaves are white and hairy with margins that roll downwards. They have pea-shaped yellow flowers in clusters at the end of each branch. The shrub has hairy pea pods that burst open when mature.

### **IMPACTS**

It forms dense thickets, reducing native species diversity and hindering natural regeneration. Flax leaf broom produces a large number of seeds that can germinate year-round when conditions are favourable. Additionally, it outcompetes native plants by increasing soil fertility through nitrogen fixation.

#### SUGGESTED CONTROL METHOD

Smaller plants can be hand-weeded or dug out, removing all the roots. Larger plants the 'Cut and Paint' method, whilst dense thickets of smaller plants can be treated with a foliar spray. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

CYTISUS LINIFOLIUS TELINE LINIFOLIA

#### **ORIGIN:**

COASTAL AEAS OF SOUTHERN NSW, VICTORIA, TASMANIA AND EASTERN SOUTH AUSTRALIA

#### **OTHER NAMES:**

FLAX BROOM

#### **GROWTH FORM:**

SPRAWLING SHRUB

#### **HABITAT:**

ROAD VERGES, SWAMPS, LAKES,
DAMPLAND, RIVERINE EDGES,
DRAINS, WET DEPRESSIONS,
COASTAL HEATH AND WOODLANDS

#### **DISPERSAL:**

WIND, WATER,
INSECTS, ANIMALS,
SOIL MOVEMENT

#### FLOWERING PERIOD:

**AUGUST-JANUARY** 

### FIRE RESPONSE:

RECOVERS AFTER FIRE AND GERMINATES IN POST-FIRE CONDITIONS

#### DECLARED/

#### **ENVIRONMENTAL PEST:**

WEED OF NATIONAL SIGNIFICANCE



# Flinders Range Wattle

Acacia iteaphylla Benth.



#### PLANT DESCRIPTION

Fast-growing, spreading shrub 2-5m in height with silvery, blue-green foliage. Plants produce masses of pale yellow wattle flowers from March to September followed by masses of flattened blue-green seed pods which become brown when mature. Commonly planted in home gardens, but like many wattle species, has become invasive outside of its natural range. Easily distinguished from local Acacia species by its narrow, silvery blue-green phyllodes (foliage).

#### **IMPACTS**

Rapid growth smothers native understorey species and displaces local wattle species. Plants are relatively short-lived but set abundant seed which remains viable in the soil seed bank for many years.

#### SUGGESTED CONTROL METHOD

Hand-pull seedlings and small plants, ensuring roots and all plant material are removed. Larger plants may require the 'Cut and Paint' method. Consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**FABACEAE** 

**SYNONYMS: NONE** 

#### **ORIGIN:**

FLINDERS AND GAWLER RANGES, **SOUTH AUSTRALIA** 

#### **OTHER NAMES:**

WINTER WATTLE, WILLOW-LEAVED WATTLE, GAWLER RANGE WATTLE

**GROWTH FORM: SPRAWLING SHRUB** 

#### **HABITAT:**

WOODLANDS AND DISTURBED SITES (OFTEN RECRUITS UNDER ROOSTING TREES)

#### **DISPERSAL**:

WATER, BIRDS, ANTS, GARDEN REFUSE, SOIL MOVEMENT

#### FLOWERING PERIOD:

MARCH-SEPTEMBER WITH SPOT-FLOWERING YEAR-ROUND

### FIRE RESPONSE:

FIRE STIMULATES MASS GERMINATION OF SEED AND GENERALLY KILLS ADULT PLANTS

### DECLARED/

#### **ENVIRONMENTAL PEST:**



# Geraldton Carnation Weed

Euphorbia terracina L.



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#### **PLANT DESCRIPTION**

The Geraldton carnation weed is a deep-rooted perennial plant that can grow up to 2 meters tall. This herb has a single stem and features linear-lanceolate leaves, which are narrow and parallel-sided in the middle, tapering to a slender base with an acute tip. The plant produces green-yellow flowers. Germination and seed dispersal can occur at any time of the year given suitable conditions. The seed bank can remain viable in the soil for up to 5 years. Additionally, the plant contains a highly toxic sap when broken or cut.

#### **IMPACTS**

The Geraldton Carnation Weed is a highly prolific seeder that can invade healthy plant communities. This weed suppresses the germination of native species and creates dense colonies, outcompeting native herbs for light, moisture, and soil nutrients. Additionally, the sap of the plant is poisonous and can irritate the skin. If it comes into contact with the eyes, it may cause temporary or permanent blindness.

#### SUGGESTED CONTROL METHOD

Hand weeding can promote the germination of seeds in the soil, and if sap from certain plants comes into contact with your skin, it may cause irritation. The best time for hand weeding is from June to November. Spraying herbicide before the plants flower and seed is most effective when they are still small seedlings, as mature plants can develop a tolerance to chemical control.

Always read the manufacturer's labels and material safety data sheets before using herbicides. Additionally, some plants can readily sprout if they are cut, grazed, or burned. Similarly, seedlings can be difficult to kill through slashing or other physical methods that do not completely remove the plant.

FAMILY: EUPHORBIACEAE

**SYNONYMS:** NONE

#### **ORIGIN:**

MEDITERRANEAN COAST AND ISLANDS, CANARY ISLANDS IN THE ATLANTIC, NORTH OF THE RED SEA AND THE BLACK SEA TO GEORGIA

**OTHER NAMES:** FALSE CAPER, TERRACINA SPURGE

### **GROWTH FORM:**

BIANNUAL OR PERRENIAL HERB

#### **HABITAT:**

SANDY & CALCAREOUS SOILS.
DISTURBED COASTAL AREAS,
SWAMPS.

#### **DISPERSAL:**

FRUIT OPENING EXPLOSIVELY, BIRDS, ANTS, MOVEMENT OF LIMESTONE SOILS AND BY MACHINERY. COMMON ON ROADSIDES.

#### FLOWERING PERIOD:

AUGUST-DECEMBER

FIRE RESPONSE: PLANTS ARE
GENERALLY KILLED BY FIRE,
HOWEVER SOME RESPROUT. FIRE
CAUSES MASS GERMINATION OF
SOIL-STORED SEED.

DECLARED/
ENVIRONMENTAL PEST:
ENVIRONMENTAL WEED



# Golden Crown Beard

Verbicina encelioides.



#### **PLANT DESCRIPTION**

Grows to 1-meter high, yellow sunflower-shaped flowers on elongated stalks that are up to 5cm long. The species has two types of leaf shapes, upper leaves are lance-shaped while lower are triangular.

### **IMPACTS**

This herb is highly invasive and adaptable, establishing quickly in disturbed sandy soils. This species invades native vegetation and has a high seed production and dormancy. The species alter the environment outcompeting native plants, including grasses, shrubs, and ground covers. This species is toxic to stock.

# SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings is effective, ensuring all plant material is removed and carefully disposed of. The preferred control timing is from July to September before they set seed to reduce the soil seed bank. Regular monitoring and follow-up treatments are necessary to manage regrowth and prevent re-establishment.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONF

#### **ORIGIN:**

SOUTH AFRICA/MEDITERRANEAN, INCLUDING ALGERIA, EGYPT, LIBYA, MOROCCO, TUNISIA, ISRAEL, JORDAN, LEBANON

#### **OTHER NAMES:**

WILD SUNFLOWER
BUTTERFLY DAISY

#### **GROWTH FORM:**

**ANNUAL HERB** 

#### **HABITAT:**

WET DEPRESSIONS, SAND DUNES, ROADSIDES AND DISTURBED SITES, GARDENS, SAND, LOAM,

#### **DISPERSAL**:

EXPLOSIVE SEED, BIRDS, SOIL, ANIMALS, WATER, GARDEN WASTE, RABBITS, WIND, INAPPROPRIATE PLANTINGS

#### FLOWERING PERIOD:

**AUGUST-JANUARY** 

#### FIRE RESPONSE:

MATURE PLANTS ARE KILLED BY FIRES, HOWEVER FIRE BREAK SEED DORMANCY, RESULTING IN MASS GERMINATION OF SEEDLINGS.

# DECLARED/

**ENVIRONMENTAL PEST:** 



# Lantana

(\*Lantana camara & \*Lantana montevidensis)



#### **PLANT DESCRIPTION**

Lantana is a heavily branched, scrambling shrub or climber that can grow from 3 to 8 m high, with arching branches that form dense tangles that can grow in clumps, thickets, or as a climbing vine. The stems are square in cross-section with small prickles. Leaves are about 6 cm long, bright green above, paler beneath, and have round-toothed edges. They produce a distinctive odour when crushed. Flowers appear year-round in clusters, varying in colour from cream yellow, pink, purple, orange or red. Lantana produces berry-like fruit that turn from green to purplish-black when ripe. It is a major weed pest in 60 countries and is considered one of the world's ten worst weeds.

### **IMPACTS**

Lantana forms dense, impenetrable thickets, increases soil nitrogen and releases toxic biochemicals that affect the germination of other plants. It flowers and germinates year-round, peaking after summer rains. Several thousand seeds can be produced per square meter, remaining viable for 3-10 years, depending on soil conditions.

### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings is effective, ensuring all plant material is removed and disposed of properly. The preferred control period is from October to April. Regular monitoring and follow-up treatments are necessary to manage regrowth and prevent reestablishment. For herbicide control, consult a supplier or qualified professional, read and follow the product label instructions, and use Personal Protective Equipment (PPE) as specified on the label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**VFRBFNACFAF** 

#### SYNONYMS:

LANTANA ACULEATA LANTANA CROCEA

#### ORIGIN:

TROPICAL, MEXICO, CARIBBEAN, CENTRAL AND SOUTHERN AMERICA

#### **OTHER NAMES:**

KAMARA LANTANA WILD SAGE

#### **GROWTH FORM:**

**SHRUB** 

#### **HABITAT:**

SANDY SOILS, DUNES, COASTAL HEATHLAND, DAMP AREAS AND DISTURBED SITES

#### **DISPERSAL**:

BIRDS, WATER, MAMMALS SUCKERS PROLIFICALLY FROM DAMAGED ROOTS

#### FLOWERING PERIOD:

AUGUST - MARCH

#### **FIRE RESPONSE:**

RESPROUTS FROM ROOTS AFTER COOL BURN.

PLANTS MAY BE KILLED BY VERY HOT FIRE.

### DECLARED/

#### **ENVIRONMENTAL PEST:**

WEED OF NATIONAL SIGNIFICANCE



# **Longhead Poppy**

Papaver dubium L.



Copyright © PlantSam.

#### **PLANT DESCRIPTION**

Papaver dubium is a variable annual plant that grows up to 60 cm tall and flowers from late spring to mid-summer. Its large, showy flowers have four lighter red petals, usually without a black spot. The flower stem has coarse, appressed hairs (hairs that lie flat against the stem or the surface of leaves), and the hairless capsules are elongated. When broken, the plant releases white to yellowish sap and can have a long-lived seed bank in the soil.

### **IMPACTS**

Forming dense stands that outcompete native vegetation, *Papaver dubium* can persist in the environment due to its long-lived soil seed bank, with seeds remaining dormant for up to 8 years. This can lead to the displacement of native plant species and alter the local ecosystem.

#### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings is effective, ensuring all plant material is removed and carefully disposed of. It's crucial to remove these plants before they set seed to reduce the soil seed bank. Regular monitoring and follow-up treatments are necessary to manage regrowth and prevent re-establishment.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

PAPAVERACEAE

#### SYNONYMS:

NONF

#### **ORIGIN:**

EUROPE, NORTH AFRICA AND ASIA.

#### **OTHER NAMES:**

BLINDEYE

#### **GROWTH FORM:**

**ANNUAL HERB** 

#### **HABITAT:**

WASTE AREAS, SAND DUNES, ROADSIDES AND DISTURBED SITES, GARDENS, MARSHLANDS, SAND, LOAM.

#### **DISPERSAL**:

SEED, INSECTS, WIND, GARDEN WASTE, INAPPROPRIATE PLANTINGS.

#### FLOWERING PERIOD:

JUNE-JANUARY

#### FIRE RESPONSE:

FIRE MAY BREAK SEED DORMANCY, RESULTING IN MASS GERMINATION OF SEEDLINGS.

#### DECLARED/

#### **ENVIRONMENTAL PEST:**



# **Madiera Vine**

Anredera cordifolia (Ten.) Steenis



Photographer Peter Maloney Copyright © Western Australian Agriculture Authority, 2005

#### **PLANT DESCRIPTION**

Fast-growing perennial climber to 20m or more; producing tubers on roots and at nodes on aerial stems. Stems are usually herbaceous with aerial tubers, but sometimes woody. Flesh, heart-shaped, bright green leaves occur alternately on stems and may reach 60mm in length. Mature vines produce abundant sprays of small, fragrant, white flowers.

#### **IMPACTS**

Although this is a rare plant in its natural range, Madeira Vine is capable of growing more than 1m a week under favourable conditions. This vine is capable of climbing up trees and eventually collapsing the canopy under its weight while casting dense shade, severely impacting understorey species and limiting the germination of native species. Vines produce numerous aerial tubers capable of forming new plants when knocked to the ground.

#### SUGGESTED CONTROL METHOD

Each plant grows from a shallow underground tuber and is capable of regenerating from easily broken-off stem tubers. It is important to remove and properly dispose of all tubers, both above and below the ground. For young plants (under 1 meter tall), you can lift them from the soil at their base; however, be cautious to remove all parts, as the underground tuber can snap easily. As the plants mature, they grow vigorously, and the stem tubers develop quickly. Pulling on the vines can dislodge tubers, leading to further spread, so careful cutting and collecting are essential. Mature tubers require careful digging to avoid leaving small fragments in the soil, which can remain dormant for years. For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

**FAMILY:** 

**BASELLACEAE** 

SYNONYMS:

NONE

ORIGIN:

SOUTH AMERICA

**OTHER NAMES:** 

LAMB'S TAIL, JALAP, POTATO VINE

**GROWTH FORM:** 

PERENNIAL CLIMBER

**HABITAT:** 

WOODLAND AREAS, ALONG WATERCOURSES, WETLANTS AND DISTURBED SITES. SALT TOLERANT.

DISPERSAL:

TUBERS AND SPREADING ROOT SYSTEM. SPREAD BY WATER ALONG WATERCOURSES. SEED SET IS UNKNOWN FROM AUSTRALIA

FLOWERING PERIOD:

DECEMBER - MARCH

FIRE RESPONSE:

RESPROUTS FROM UNDERGROUND TUBERS.

DECLARED/ ENVIRONMENTAL PEST:

**DECLARED PEST** 



# **Morning Glory**

Ipomoea indica (Burm.) Merr. Ipomoea cairica (L.) Sweet



#### **PLANT DESCRIPTION**

Rampant, twining climber with large, lobed leaves usually found climbing and sprawling over other plants. Showy, trumpet-shaped flowers are produced in small groups at the end of short stems throughout the year. The flowers of I. indica are brilliant blue-purple with a darker centre. Flowers of I. cairica are lavender, pink or whitish-pink and smaller, as are the leaves which are also more deeply lobed than I. indica.

#### **IMPACTS**

Both species form dense blankets of foliage that smother and kill existing vegetation, causing a breakdown of the forest structure. Occurring as a ground cover, they prevent the germination of other native species. This subsequently impacts native wildlife by destroying habitat and reducing available food resources. Dense infestations may also harbor rodents and other pests.

### SUGGESTED CONTROL METHOD

Small infestations may be hand-pulled. All stems and plant parts must be removed and the roots dug up to ensure no regrowth occurs. Older plants develop tubers that also must be dug out. Larger infestations can be controlled using herbicides such as Glyphosate. Cut and paint or scrape and paint methods, where herbicide is applied immediately to the cut or scraped area, may be used to treat these vines. Foliar spraying with herbicide is effective in some situations, especially for young vines with stems too small to scrape and paint. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

**FAMILY:** 

CONVOLVULACEAE

SYNONYMS:

NONE

**ORIGIN:** 

TROPICAL ASIA

**OTHER NAMES:** 

MILE-A-MINUTE

**GROWTH FORM:** 

TWINING CLIMBER

**HABITAT:** 

OCCCUR IN A WIDE VARIETY OF HABITATS, FROM DRY FORESTS TO WETLANDS AND DEGRADED SITES.

I. INDICA PREFERS SUNNY, DAMP CONDITIONS, BUT WILL TOLERATE DRY SITUATIONS ONCE ESTABLISHED.

I. CAIRICA THRIVES IN DUNE SYSTEMS AND FRESHWATER WETLANDS.

DISPERSAL:

STERILE IN AUSTRALIA. CUTTINGS AND

TUBERS SPREADTHROUGH ILLEGAL DUMPING AND SOIL MOVEMENT.

FLOWERING PERIOD:

YEAR ROUND

FIRE RESPONSE:

RESPROUTS FROM TUBERS

DECLARED/

**ENVIRONMENTAL PEST:** 



# **Pampas Grass**

Cortaderia selloana & Cortaderia jubata.



#### **PLANT DESCRIPTION**

Large, long-lived, tough and dense clumping tussocks, which grows to a height of 6 m. Leaves are grey with pale yellow base and rough sharp serrated edges. Showy Flowers occur in a dense, panicle 25-100 cm on a stem up to 3 m long in late Summer or Autumn. Plants are either female or bisexual, with female plants requiring pollination by bisexual plants. Seeds germinate in spring with multiple tillers and rhizomes produced over time. Most plants will not flower in their first year.

#### **IMPACTS**

Displaces native plant species, and if left unchecked can form into impenetrable thickets. Pampas grass is fond of damp areas and will quickly invade watercourses and urban bush land where it is capable of altering vegetation structure and decreasing diversity of invertebrate and vertebrate fauna. It produces large quantities of flammable material so dense infestations increase the bush fire risk and increase fire control hazards. Tussocks provide nesting sites for introduced birds and rodents and the knife edged leaves will cut skin.

#### SUGGESTED CONTROL METHOD

Cut out small plants, remove uprooted plants to avoid them resprouting. Treat young plants with 0.5% Fusilade® Forte + spray oil. May require more than one application. Alternatively foliar spray glyphosate at 4%. Remove flower heads. Slash clumps and Spray regrowth with 1% glyphosate in spring. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

**POACEAE** 

**SYNONYMS: NONE** 

#### **ORIGIN:**

SOUTHERN BRAZIL, ARGENTINA, CHILE, PARAGUAY & URAGUAY

#### **OTHER NAMES:**

URUGUAYAN PAMPAS GRASS, SILVER PAMPAS GRASS. PINK PAMPAS GRASS

**GROWTH FORM:** CLUMPING GRASS, TUSSOCK

**HABITAT:** WETLAND FRINGES AND MOIST, SUNNY AREAS.

#### **DISPERSAL:**

WIND-BLOWN SEED. WATER,
ILLEGAL DUMPING, MAMMALS
OR SREADING RHIZOMES

#### FLOWERING PERIOD:

DECEMBER- APRIL

#### **FIRE RESPONSE:**

RESPROUTS FROM RHIZOMES

# DECLARED/ ENVIRONMENTAL PEST:

**DECLARED PEST** 

**FAMILY:** 



# **Pretty Betsy**

Centranthus macrosiphon





#### **PLANT DESCRIPTION**

Pretty Betsy is a small, erect annual growing to 40 cm high. Flowers form rounded heads above the leaves and are hermaphrodite (have both male and female parts) and are pollinated by bees, moths & butterflies. Seed is dispersed by soil movement, garden waste and possibly wind and water. The seedbank persists for up to 1 year.

#### **IMPACTS**

Pretty Betsy threatens biodiversity by outcompeting native plants, especially after fires. It forms dense carpets on roadsides and in Tuart, Jarrah, or peppermint woodlands. Seed disturbances and the use of machinery facilitate its rapid spread, making it a major conservation concern.

#### SUGGESTED CONTROL METHOD

Small infestations can be managed by hand-pulling, ensuring that all stems and plant parts are completely removed, along with the roots, to prevent regrowth. Larger infestations can be effectively managed between July and September using herbicides. The 'cut and paint' method, where herbicide is applied directly to the cut or scraped area, is an effective treatment for these plants. Additionally, foliar spraying with herbicide can be effective in certain situations, especially in dense areas without lower-story vegetation.

For herbicide control, it is advisable to consult with the supplier or a qualified industry professional for guidance. Always read and understand the product label and strictly follow the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as specified on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

CAPIFOLIACEAE

#### SYNONYMS:

NONE

#### **ORIGIN:**

SOUTH-WESTERN EUROPE, NORTH AFRICA

#### **OTHER NAMES:**

SPANISH VALERIAN

#### **GROWTH FORM:**

PERENNIAL HERB

#### **HABITAT:**

DISTURBED SITES, ROADSIDES, WOODLANDS, HEATHLAND, DISTURBED SOILS AND FREQUENTLY BURNT AREAS

#### **DISPERSAL:**

MACHINERY, SEED DISPERSED BY WATER, WIND AND SOIL MOVEMENT

#### FLOWERING PERIOD:

AUGUST- NOVEMBER

#### FIRE RESPONSE:

FLOWERS PROLIFICALLY IN ASHBED AND SETS ABUNDANT SEED.

#### DECLARED/

**ENVIRONMENTAL PEST:** 



# **Spiderwort**

Tradescantia fluminensis, Tradescantia sp.



#### PLANT DESCRIPTION

This species grows as a vine with stems up to 4 meters long. Leaves grow in groups of 3 leaflets and are oval to diamond-shaped. Flowers are pea-shaped and are pink/purple, up to 1.5cm long. Seeds are produced in 5cm long pods.

#### **IMPACTS**

Seeds are explosively dispersed and assisted by birds, water, soil disturbance and garden refuse. This species can resprout and fire while killing mature plants stimulates seed germination.

#### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings ensuring all plant body is removed and carefully disposed is effective. Larger plants can have vines severed, leaving them to dry in the canopy and then dig out the roots.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

SOUTH AMERICA, INCLUDING ALGERIA, EGYPT, LIBYA, MOROCCO, TUNISIA, ISRAEL, JORDAN, LEBANON

#### **OTHER NAMES:**

INCH PLANT WANDERING TRAD

#### **GROWTH FORM:**

PERENNIAL HERB

#### **HABITAT:**

GRAVELLY SOIL, SAND DUNES, COASTAL HEATH, ROADSIDES AND DISTURBED SITES, GARDENS, SAND, LOAM.

#### **DISPERSAL:**

EXPLOSIVE SEED, BIRDS, SOIL, WATER, GARDEN WASTE,

RABBITS, INAPPROPRIATE PLANTINGS, POSSIBLY ALSO DISPERSED BY ANTS

#### FLOWERING PERIOD:

**AUGUST-JANUARY** 

#### **FIRE RESPONSE:**

MATURE PLANTS ARE KILLED BY FIRES, HOWEVER FIRE BREAKS SEED DORMANCY, RESULTING IN MASS GERMINATION OF SEEDLINGS.

#### DECLARED/

**ENVIRONMENTAL PEST:** 



# Patterson's Curse

Echium plantagineum L.



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#### **PLANT DESCRIPTION**

Paterson's Curse is an annual herb that grows up to 120 cm high. It has several erect stems arising from a taproot and a large rosette (arranged in a circle) of leaves at the base. The stems and leaves are covered in hairs that can cause skin irritation if touched. The rosette leaves grow up to 30 cm long and 8 cm wide, are stalked, and oval to oblong in shape. The stem leaves are narrower, smaller, and either stalkless or stem-clasping.

#### **IMPACTS**

Paterson's Curse is highly competitive and dominant, particularly in areas with low grazing pressure and high soil fertility. Its rapid growth, strong taproot, and large rosette leaves enable it to outcompete native and pasture species. The seeds can remain viable in the soil for up to 6 years. This plant has toxic properties for animals, though deaths from toxicity are rare. Its abrasive hairs can cause dermatitis, itching, inflammation, and hay fever.

### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings is effective, ensuring all plant material is removed and carefully disposed of. It's crucial to remove these plants before they set seed to reduce the soil seed bank. Regular monitoring and follow-up treatments are necessary to manage regrowth and prevent re-establishment.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**BORAGINACEAE** 

#### **SYNONYMS:**

NONE

#### ORIGIN:

TEMPERATE ASIA, CAPE VERDE, AZORES, MADEIRA AND CANARY ISLANDS.

#### **OTHER NAMES:**

RIVERINA BLUEBELL SALVATION JANE BLUE ECHIUM

#### **GROWTH FORM:**

**BIENNIAL HERB** 

#### **HABITAT:**

WASTE AREAS, SAND DUNES, ROADSIDES AND DISTURBED SITES, GARDENS, MARSHLANDS, SAND, LOAM.

#### **DISPERSAL:**

WATER, SLASHING, INSECTS, ANIMALS AND SEED

#### FLOWERING PERIOD:

SEPTEMBER- JANUARY

#### **FIRE RESPONSE:**

FIRE STIMULATES MASS
GERMINATION OF SEED AND
GENERALLY KILLS ADULT PLANTS.

#### DECLARED/

### **ENVIRONMENTAL PEST:**

WEED OF NATIONAL SIGNIFICANCE



# **Sydney Golden wattle**

Acacia longifolia



#### **PLANT DESCRIPTION**

A fast-growing, spreading shrub that can reach up to 10 meters high with mass production of yellow pom-pom-like flowers along the branchlets. The leaves are dark broad leaves that have 3 distinct veins from the tip to the base of the leaf. The leaves contain cyanides which are toxic to animals and insects when eaten. Seeds can germinate from fire or disturbance and be persistent in the soil for 10 years or longer.

### **IMPACTS**

This wattle increases nitrogen within the soil which changes soil and when there are dense thickets this can impact the uptake of nutrients for surrounding native plants and shrubs from the high level of nitrogen released from these plants. The plant has seed pods that are like pea pods and when mature burst open

#### SUGGESTED CONTROL METHOD

Manual removal of small plants and seedlings is effective, ensuring all plant material is removed and carefully disposed of. The preferred control timing is from March to August before they set seed to reduce the soil seed bank. Regular monitoring and follow-up treatments are necessary to manage regrowth and prevent re-establishment.

For herbicide control, consult with the supplier or a qualified industry professional for advice. Read and understand the product label, strictly following the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as outlined on the product label or Material Safety Data Sheet (MSDS).

### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

EASTERN AUSTRALIA

#### **OTHER NAMES:**

PUNCTURE VINE.

#### **GROWTH FORM:**

ANNUAL HERB

#### **HABITAT:**

WOODLANDS, FORESTS, CREEK LINES,

WETLANDS. SAND DUNES, COASTAL HEATHLAND AND DISTURBED SITES

#### **DISPERSAL:**

SOIL MOVEMENT, WATER, MACHINERY, ADHESION TO ANIMALS.

#### FLOWERING PERIOD:

JUNE - DECEMBER

### FIRE RESPONSE:

FIRE STIMULATES MASS
GERMINATION OF SEED AND
GENERALLY, KILLS ADULT PLANTS

# DECLARED/

**ENVIRONMENTAL PEST:** 



# **Tree of Heaven**

### Ailanthus altissima



Photographer Peter Maloney Copyright © Western Australian Agriculture Authority, 2009

#### **PLANT DESCRIPTION**

Tree of heaven is a fast-growing deciduous tree to 20m high with smooth, grey bark. Large compound leaves are up to 1m long with many leaflets in opposite pairs. There is a gland on a small lobe near the base of each leaflet. Crushed leaves have an unpleasant smell. Small white flowers are carried in terminal clusters, followed by seeds which are red, large and winged.

#### **IMPACTS**

Once widely planted as an ornamental tree, the tree of heaven has escaped from cultivation and is an aggressive competitor due to its ability to retard the growth of other plants, tolerance of a wide range of soils and the abundant suckers it produces from shallow roots. Will shade out smaller plants and create dense thickets. Spreads rapidly via highly viable wind dispersed seed. Bark, leaves and flowers are poisonous to humans and livestock and also known to cause dermatitis.

# SUGGESTED CONTROL METHOD

Apply 250 ml Access® in 15 L of diesel to basal 50 cm of trunk (basal bark). For larger trees (greater than 30cm diameter) with thick bark stem inject 100% glyphosate. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state. Do not plough, bulldoze or cut without poisoning, as trees will sucker prolifically, forming dense stands.

FAMILY: SIMAROUBACEAE

SYNONYMS: NONE

**ORIGIN:** CHINA

**OTHER NAMES:** 

CHINESE SUMAC, PARADISE TREE ,
COPAL TREE

**GROWTH FORM: SUCKERING** 

**TREE** 

#### **HABITAT:**

WETLAND FRINGES, DISTURBED
SITES AND ABANDONED GARDENS

#### **DISPERSAL:**

WIND, WATER, BIRDS, MACHINERY, SOIL MOVEMENT, GARDEN REFUSE

FLOWERING PERIOD: NOVEMBER

FIRE RESPONSE: WILL
RESPROUT VIGOROUSLY
FOLLOWING FIRE.

DECLARED/
ENVIRONMENTAL PEST:
ENVIRONMENTAL WEED



# Vetch

Vicia sativa



#### **PLANT DESCRIPTION**

This short-lived herb has slender, scrambling stems and alternate compound leaves (One leaf per node on the stem) up to 10 cm long, with 2 to 7 pairs of leaflets per stem. The small, pea-shaped flowers are white, pink or purple. Vetch germinates and grows between May and November and flowering and seeding from to December.

#### **IMPACTS**

This plant grows quickly, smothering native understorey species. It fixes nitrogen, changing soil nutrients and affecting native plants. Though short-lived, it produces many seeds that stay viable in the soil for many years

#### SUGGESTED CONTROL METHOD

Small infestations can be managed by hand-pulling, ensuring that all stems and plant parts are completely removed, along with the roots to prevent regrowth. Larger infestations can be effectively managed between July and September using herbicides. The 'cut and paint' method, where herbicide is applied directly to the cut or scraped area, is an effective treatment for these plants. Additionally, foliar spraying with herbicide can be effective in certain situations, especially in dense areas without lower-story vegetation.

For herbicide control, it is advisable to consult with the supplier or a qualified industry professional for guidance. Always read and understand the product label and strictly follow the recommended usage instructions. Additionally, ensure the use of Personal Protective Equipment (PPE) as specified on the product label or Material Safety Data Sheet (MSDS).

#### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

SOUTH AMERICA

#### **OTHER NAMES:**

BLACK-POD VETCH NARROW-LEAF VETCH SUBTERRANEAN VETCH

#### **GROWTH FORM:**

SPRAWLING ANNUAL HERB

#### HABITAT:

RIVERBANKS, WOODLAND AREAS, SWAMPS, LIMESTONE, ALONG WATERCOURSES, WETLANDS, VERGES AND DISTURBED SITES, LOAM, CLAY AND GRANITE SOILS.

### **DISPERSAL:**

ANIMALS, BIRDS, WIND, EXPLOSIVE SEED

#### FLOWERING PERIOD:

JULY-DECEMBER

#### FIRE RESPONSE:

GERMINATES DORMANT SEEDS

#### DECLARED/

# **ENVIRONMENTAL PEST:**



# Watsonia

#### Watsonia meriana



#### **PLANT DESCRIPTION**

An erect perennial herb forming large clumps, similar to gladiolus, with strap-like leaves, slender reddish flowering stems 0.5 to 2 m high, pink, orange or red flowers, underground corms and clusters of small corms (known as bulbils or cormils) on the stems. Leaves and flowering heads are produced annually.

#### **IMPACTS**

Environmental weed of moist sites, but can flourish in well-drained areas, and is a particular problem in small areas of remnant vegetation. The production of very large numbers of stem cormils has enabled it to become a very successful weed, forming dense stands which exclude other vegetation. Corms and cormils can remain dormant in the soil for a considerable period. It has been reported that only about 30% of the corms produce above-ground parts each year.

### SUGGESTED CONTROL METHOD

Wipe individual leaves with glyphosate 10% or spray dense infestations with 2,2-DPA 10 g/L + Pulse®. Apply just as flower spikes emerge at corm exhaustion. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

### **FAMILY:**

**IRIDACEAE** 

**SYNONYMS:** NONE

#### ORIGIN:

SOUTH AFRICA

#### **OTHER NAMES:**

BUGLE-LILY, WILD WATSONIA

**GROWTH FORM:** PERENNIAL

CORM

#### **HABITAT:**

WOODLAND, SHRUBLAND, GRASSLAND, DAMPLANDS, WETLAND FRINGES, CREEK LINES, DRAINS, WASTELAND AND ROADSIDES

#### **DISPERSAL**:

WATER, SOIL, WIND

FLOWERING PERIOD: SEPTEMBER-

**DECEMBER** 

#### FIRE RESPONSE:

GENERALLY, SURVIVES FIRE.
PROLIFIC FLOWERING AND SEED
SET FOLLOW SUMMER FIRE

#### DECLARED/

### **ENVIRONMENTAL PEST:**

**DECLARED PEST** 



# **Wavy Gladiolus**

Gladiolus undulatus.



Photographer Penny Hussey Copyright © Department of Environment and Conservation

#### **PLANT DESCRIPTION**

This Gladiolus is an upright, cormous (produces corms) perennial with sheathed, strap-like leaves that can grow between 8 to 70 cm long and 1 to 2 cm wide. The herb produced round 4-7 large white/creamy or yellow, trumpet-like flowers that have a curled or wavy petal on a large flower stem that reaches up to 84cm high. The plant reproduces through corms and remains dormant from January to March. Germination occurs during autumn rains, often triggered by fire or soil disturbances. The plant actively grows and flowers from April to December.

#### **IMPACTS**

This herb can actively grow in well-drained areas and moist sites and densely grows in clumps in remnant vegetation. Wild gladiolus is a prolific seeder and reproduces an ample amount of cormils that form into dense patches within good native vegetation. During summer it becomes dormant but can still actively grow if soil disturbances occur. Reducing areas from natural recruitment from the dense matting underneath the soil

# SUGGESTED CONTROL METHOD

Plants produce deeply rooted corm which is difficult to remove by pulling and can readily regenerate if not removed completely. Chemical control is the best means of eradicating plants. Wipe individual leaves with glyphosate 10 % or spray dense infestations in degraded areas with 1% glyphosate just on flowering at corm exhaustion, taking care to avoid non-target species. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

#### **FAMILY:**

**IRIDACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

SOUTH-WEST SOUTH AFRICA

#### **OTHER NAMES:**

WILD GLADIOLUS

#### **GROWTH FORM:**

PERENNIAL CORM

#### HABITAT:

WOODLANDS, HEATHLAND,
DISTURBED SOILS AND FREQUENTLY
BURNT AREAS

#### **DISPERSAL:**

SEED DISPERSED BY WIND AND SOIL MOVEMENT

#### FLOWERING PERIOD:

**AUGUST-OCTOBER** 

# **FIRE RESPONSE:**

RESPROUTS FROM
UNDERGROUND CORM
FLOWERS PROLIFICALLY IN ASHBED
AND SETS ABUNDANT SEED.

# DECLARED/

#### **ENVIRONMENTAL PEST:**



# Wild Gladiolus

Gladiolus caryophyllaceus.



Gladiolus caryophyllaceus, Copyright © Western Australia Agriculture Authority, 1999

#### **PLANT DESCRIPTION**

The Pink Gladiolus is a cormous perennial with red-margined, corkscrew-twisted leaves that grow up to 70 cm long. It produces 2-8 large, fragrant pink trumpet-like flowers on tall stems up to 84 cm high. This plant reproduces from seeds and corms, going dormant in summer. Seeds can remain viable in the soil for up to 5 years, while corms respond to fire or soil disturbances. The wild gladiolus is native to South Africa and is considered endangered, but it has become invasive in the gardens of southwestern Western Australia.

#### **IMPACTS**

This herb can actively grow in well-drained areas and moist sites and densely grows in clumps in remnant vegetation. Wild gladiolus is a prolific seeder and reproduces an ample amount of cormils that form into dense patches within good native vegetation. During summer it becomes dormant but can still actively grow if soil disturbances occur. Reducing areas from natural recruitment from the dense matting underneath the soil.

#### SUGGESTED CONTROL METHOD

Plants produce deeply rooted corm which is difficult to remove by pulling and can readily regenerate if not removed completely. Chemical control is the best means of eradicating plants. Wipe individual leaves with glyphosate 10 % or spray dense infestations in degraded areas with 1% glyphosate just on flowering at corm exhaustion, taking care to avoid nontarget species. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

#### **FAMILY:**

**IRIDACFAF** 

#### **SYNONYMS:**

NONE

#### **ORIGIN:**

SOUTH-WEST SOUTH AFRICA

#### **OTHER NAMES:**

PINK GLADIOLUS

#### **GROWTH FORM:**

PERENNIAL CORM

#### **HABITAT:**

WOODLANDS, HEATHLAND,
DISTURBED SOILS AND FREQUENTLY
BURNT AREAS

#### **DISPERSAL**:

SEED DISPERSED BY WIND AND SOIL MOVEMENT

#### FLOWERING PERIOD:

AUGUST-OCTOBER

#### **FIRE RESPONSE:**

RESPROUTS FROM
UNDERGROUND CORM
FLOWERS PROLIFICALLY IN ASHBED
AND SETS ABUNDANT SEED.

#### DECLARED/

#### **ENVIRONMENTAL PEST:**



# White Weeping Broom

Retama raetam



#### **PLANT DESCRIPTION**

Graceful shrub to about 3m tall and 6m across with downy young foliage on long slender branches. Young plants are wispy with a single stem and strong taproot. The leaves, which are very small (about 5 mm long) and narrow (only 1 mm wide), are quickly dropped and the plant remains leafless for most of the year. Plants produce small white flowers in spring followed by pea-like pods containing one or two kidney-shaped seeds. Plants are prolific seeders, and hard seed-coat enables them to persist in the soil seed bank for up to 20 years. White Weeping Broom was introduced as an ornamental but has escaped from cultivation and is listed on the Alert List for Environmental Weeds, which contains 28 species of non-native plants that threaten biodiversity and the environment.

#### **IMPACTS**

White Weeping Broom rapidly invades native vegetation, displacing local native species. The leaves, flowers and fruits are toxic, resulting in a reduction in the amount of food available for native herbivores, such as kangaroos and wallabies.

#### SUGGESTED CONTROL METHOD

Hand-pull small seedlings. Juvenile plants have a deep tap root making hand removal difficult. For juvenile and mature plants, cut and paint with 50% glyphosate or basal bark with triclopyr + diesel at 1.25 L/60 L. Monitor site for recruitment from the seed bank. Read the manufacturers' labels and material safety data sheets before using herbicides. For further information consult the Australian Pesticides and Veterinary Medicines Authority to determine the status of permits for your situation or state.

#### **FAMILY:**

**FABACEAE** 

#### SYNONYMS:

NONE

#### **ORIGIN:**

NORTH AFRICA/MEDITERRANEAN, INCLUDING ALGERIA, EGYPT, LIBYA, MOROCCO, TUNISIA, ISRAEL, JORDAN, LEBANON

**OTHER NAMES:** WHITE SPANISH BROOM

#### **GROWTH FORM:**

**SHRUB** 

#### HABITAT:

SAND DUNES, COASTAL HEATH, ROADSIDES AND DISTURBED SITES

#### **DISPERSAL**:

SOIL, WATER, GARDEN WASTE, RABBITS, INAPPROPRIATE PLANTINGS, POSSIBLY ALSO DISPERSED BY ANTS

#### FLOWERING PERIOD:

JULY-SEPTEMBER

#### **FIRE RESPONSE:**

PLANTS MAY BE KILLED BY VERY
HOT FIRE, HOWEVER ARE LIKELY TO
SURVIVE AND RESPROUT
FOLLOWING
LESS SEVERE FIRES. FIRE CAN ALSO
BREAK SEED DORMANCY,
RESULTING
IN MASS GERMINATION OF
SEEDLINGS.

#### DECLARED/

#### **ENVIRONMENTAL PEST:**

