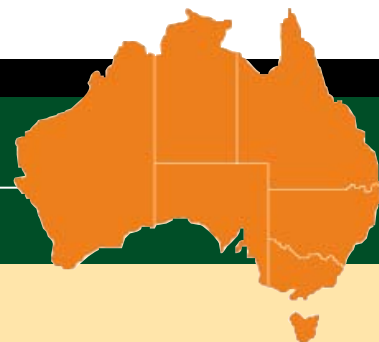


factsheet

Managing garden weeds: creeping plants



Creeping weeds in gardens

Creeping weeds include climbers, scramblers and groundcovers. These weeds generally grow and take root using stolons or rhizomes, often spreading over large areas. Others, such as bridal creeper, spread using tubers, while some species, for example alligator weed, regrow from small plant fragments and runners, and many can also colonise and spread to areas by seed.

Lawn species such as couch grass and kikuyu can become weeds when they infest garden beds. Creeping weeds with stolons and rhizomes are easily spread outside the garden fence when garden waste is dumped because of their ability to grow from vegetative plant parts or fragments.

Managing creeping weeds in the garden

Tactic Groups

There are a number of tactics that can be used to manage weeds in gardens. These tactics can be grouped according to their main aim and which part of a weed's life cycle is being targeted.

There are five 'Tactic Groups' and these are outlined in the Weeds CRC Factsheet, *Managing garden weeds: planning tactics*. These 'Tactic Groups' may aim to prevent new weeds entering the garden, kill the weed or simply stop the production and dispersal of propagules.

Propagule: method of multiplication or spread used by a plant (or animal) to reproduce eg seeds, corms, vegetative parts, spores.

Rhizome: a root-like subterranean stem, commonly horizontal in position, which usually produces roots below and sends up shoots progressively from the upper surface (bearded iris, bamboo).

Stolon: a slender branch or shoot, usually a runner or prostrate stem, which takes root at the tip which eventually develops into a new plant (strawberry, creeping oxalis).

VET sector resource: RTD5402A
Develop a strategy for the management of target pests.

Allocating the various weed management tactics to one of the five Tactic Groups assists in planning a more successful garden weed management program.

Successful weed management relies on:

- using a variety of tactics from a number of Tactic Groups;
- choosing the right tactics; and
- applying and timing tactics correctly.

Important tactics for creeping weeds

The ultimate weed management plan will use a tactic from each Tactic Group. For creeping weeds in the garden it is essential to include tactics from:

- Tactic Group 1: Reduce number of weed propagules (dig and dispose of rhizomes and stolons) in area being targeted;
- Tactic Group 2: Kill (apply herbicide or dig whole plant including underground parts) and remove weed from area being targeted; and
- Tactic Group 5: Prevent viable weed propagules (seeds, vegetative plant parts) from moving to new areas (eg via mulch, garden waste, transplanted plants).



Creeping grasses such as kikuyu become weeds when they invade garden beds.

Garden weed planner

A garden weed planner can be used to develop and outline a weed management plan. It identifies which tactics are suitable for use and which Tactic Group they belong to. Going to the effort of filling in the planner

Examples of creeping weeds			
Common name(s)	Scientific name	Method of spread or propagule	Comments
Alligator weed	<i>Alternanthera philoxeroides</i>	Rhizome Stem fragments	Running plant that can grow on land or in water. Forms dense free floating or rooted mats in aquatic areas.
Asparagus fern	<i>Protasparagus densiflorus</i>	Rhizome Seed Vegetative	Spiny, vigorous perennial plant that smothers other species.
Asparagus fern - climbing	<i>Protasparagus plumosus</i>	Rhizome Seed	Perennial vine.
Bamboo - running	<i>Phyllostachys</i> spp.	Rhizome - long	Highly competitive, forming an impenetrable network of shade and roots, displacing native plants.
Bindii	<i>Solvia pterosperma</i>	Rhizome	Weed of lawns. Spiny seed can be transported via eg animals, clothing, tyres
Bridal creeper	<i>Myrsiphyllum asparagoides</i>	Tuber Seed	Erect or climbing plant that is a serious environmental and orchard weed as it smothers ground and shrub layers.
Clover and medics	<i>Trifolium</i> spp. <i>Medicago</i> spp.	Seed	Often weeds of lawns and gardens that run and produce many small seeds within a burr. Medic seeds often contained within a spiky burr that can be transported via animals, clothing etc.
Couch grass	<i>Cynodon dactylon</i>	Stolon Rhizome Seeds Vegetative	Persistent weed of non-couch lawns and gardens. It is frost tender.
Creeping oxalis	<i>Oxalis corniculata</i>	Rhizome Seed	A weed of lawns and gardens. Seeds are readily spread by soil and water movement, and may also be scattered by machinery such as lawn mowers. Brown seeds 'explode' out of long, thin seed pods.
Kikuyu	<i>Pennisetum clandestinum</i>	Rhizome Runner fragment	An environmental and garden weed. It is very invasive and small fragments of broken runners (eg lawn clippings, garden waste) will take root.
Mullumbimby couch	<i>Cyperus brevifolius</i>	Rhizome	A weed of lawns, gardens and disturbed areas.
Nut grass	<i>Cyperus rotundus</i>	Rhizome Root Tuber Basal bulb	Often called the 'world's worst weed'. Sedge can be found in lawns, gardens and cultivated agricultural areas.
Pennyweed	<i>Hydrocotyle tripartite</i>	Stolon Rhizome	Weed of sheltered moist soils and lawns.
Pennywort	<i>Hydrocotyle bonariensis</i>	Stolon	Running plant that is a stabilizer of coastal sand dunes. Found in lawns and gardens that are on sandy soils.
Pigweed	<i>Portulaca</i> spp.	Vegetative Seed	Invasive, running, succulent plant that forms dense mats.
Wandering jew, wandering creeper	<i>Tradescantia fluminensis</i> or <i>T. albiflora</i>	Stem fragment	An aggressive creeper that invades damp, shady areas. Forms a thick mat on the ground and smothers other plants.
White root lobelia	<i>Pratia purpurascens</i>	Stolon - strong Rhizome - numerous	Running weed of lawn and turf.



Creeping weeds such as a) creeping oxalis, b) pigweed and c) alligator weed can quickly invade gardens. Alligator weed has mistakenly been grown in gardens as a green, leafy vegetable (it is similar to the Asian vegetable, sessile joy weed or mukunuwenna.) It has 'jumped' the garden fence and is a serious environmental weed of terrestrial and aquatic areas in Australia.

highlights 'gaps' and any possible weakness in the plan.

An example garden weed planner for the creeping weed, couch grass (*Cynodon dactylon*), is included as a case study in this factsheet. It illustrates a successful weed management plan using tactics from each Tactic Group and how to complete a planner to manage any garden weed problem. An individual planner should be used for each target weed.

Best garden practice

'Best garden practice' or management to favour desirable garden plants will also improve the success of any weed management plan. Best garden practice includes activities such as monitoring weeded areas, mulching, replanting weeded areas with desired plants and providing the required nutrients to encourage active plant growth.

Case study: managing couch in gardens and lawns

Planning couch management

The successful management of couch will depend on the tactics chosen, the timing of the tactics, where the weed is situated and the density of the infestation (eg few plants or many). Deciding how to best manage this creeping weed can be assisted by filling in a garden weed planner. The following garden weed planner demonstrates how to approach the management of couch in a garden situation.

A blank garden weed planner can be found in the Factsheet *Managing garden weeds: using tactic groups*.

Name: *Cynodon dactylon*, couch grass. Also known as Bermuda grass

Brief description: A summer-autumn germinating perennial grass that grows up to 30 cm high. Its leaves and stems are hairless except for a few hairs on the stem base. The thick mats or couch are formed by tough, scaly rhizomes and long, branching stolons. Roots and stems develop at the nodes. Seeds are found on spikes arranged on a seed head that has the shape of an umbrella.

Key propagules: rhizomes, stolons, plant fragments and seeds.

Method of spread: Couch is a creeping grass weed that spreads underground via rhizomes, above ground via stolons or produces seedlings from seed. Plant fragments that are dislodged from the parent plant will take root. The ability of this plant to spread using a number of methods makes it a challenging weed to manage in lawns and gardens.

Garden weed planner		
Target weed: couch		Situation: garden or lawn
Method of spread: creeping plant		Key propagules: rhizomes, stolons, plant fragments, seeds
Tactic Group and aim	Tactic used	Information and timing of tactic
Tactic Group 1 Reduce number of weed propagules in area being targeted.	Dig	Carefully dig runners over winter before they start actively growing and spreading. Rhizomes and roots can be quite deep underground and need to be removed or the plant will regrow.
	Collect and dispose	Dig, rake, pull or cut out couch runners. Take care to remove all stem pieces. Place in heavy duty plastic bags and send to tip. Do not place in compost destined to be used as mulch as runner pieces will grow.
Tactic Group 2 Kill and remove weeds from area being targeted.	Apply herbicide	Apply herbicide using an appropriate method. Seek advice and read and follow label directions carefully. Apply when couch is flowering and plants are actively growing and not stressed from heat, cold or lack of water, to allow uptake of the herbicide. Effective when used on regrowth following physical removal of the bulk of the weed. Note: For further information see Guidelines on the Weeds CRC website: <i>Herbicides: knowing when and how to use them</i> and <i>Herbicides: guidelines for use in and around water</i> .
	Mulch	Mulch with a thick layer of newspaper or cardboard with a vertical lap into a trench to stop growth of couch grass beyond the trench eg into a garden bed. A physical barrier will stop the spread of runners.



Garden weed planner		
Target weed: couch		Situation: garden or lawn
Method of spread: creeping plant		Key propagules: rhizomes, stolons, plant fragments, seeds
Tactic Group and aim	Tactic used	Information and timing of tactic
Tactic Group 3 Stop weeds forming viable propagules.	Cut - mow	Mow lawn when the majority (eg 75%) of the seed heads are flowering to stop seed set. Seed heads are flowering when soft, fluffy, purple anthers are visible on the seed heads. Mow couch infested areas last to prevent movement of any formed seed or fragments to 'clean' areas of lawn.
Tactic Group 4 Prevent the addition of weed propagules, from existing weeds, to the area being targeted.	Collect and dispose	Mow after seed has been set but before it drops onto the ground to reduce the number of seeds that can germinate and produce new seedlings. Mow couch infested areas last to prevent movement of seed or plant fragments to 'clean' areas of lawn. Dispose of clippings with care and do not use them as mulch.
Tactic Group 5 Prevent viable weed propagules from moving to new areas.	Quarantine – soil	Take care when transplanting garden plants from couch infested areas. The soil surrounding the garden plant roots can have couch fragments or rhizomes in it which will take root in the transplanted area. Remove any fragments prior to transplanting and be vigilant weeding the area of any 'escapes' afterwards.
	Quarantine – lawn clippings	Do not dispose of lawns clippings that contain couch fragments or seed in the compost bin, on garden beds or 'over-the-fence'. Put into an isolated heap, in the green waste bin or take to the tip.
	Quarantine – disposal of runners	Dispose of runners in green waste bins, take to the tip or rot them in plastic bags in the sun for several weeks to kill them.
'Best garden practice' Implement 'best garden practice' to favour desirable plants rather than the weeds.	Choose plants carefully	Encourage shading and colonization of the area by desirable plants. Introduce competitive and desirable plants to the area where couch has been removed or encourage existing plants to colonise that area.
	Apply nutrients and water	Provide adequate nutrients and water to maximise the competitive ability of the desirable plants. This increased ground cover by desirable plants means less space for the couch to invade.
	Mulch	Mulch with materials such as thick layers of newspaper, straw, bark chips and gravel to keep plants moist and roots cool during summer and improves plant competitive ability. Weed mat is also effective.
	Monitor	Check regularly for couch around weeded areas. Control during early couch establishment for best results.



For further information visit the Weeds CRC's website: www.weeds.crc.org.au

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Further reading: *What does your garden grow?* (a training resource developed by the Weeds CRC); other factsheets in the *Managing garden weed* series, Weeds CRC.



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