

Factsheet on Weeds

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Managing Garden Weeds

Having a successful garden weed management program all starts with understanding a weed's life cycle and how they grow. Common garden plants which produce large numbers of seeds can potentially become weeds once their seeds are scattered everywhere and spread to neighbouring gardens and agricultural areas. Seeds can spread in various ways including through plants from commercial nurseries and local markets, garden materials and tools, vehicle tyres, pets, birds and through wind gusts. This is why it is essential to implement key tactics which will help to stop weeds from spreading and avoid new weeds from springing up. The following tactics are grouped according to the stage in the weed life cycle and its corresponding aim.¹



Tactic Group 1

The first tactic is to deplete the weed seedbank. Actions that can be taken include digging and disposing of propagules; raking and collecting fruit and berries from the ground; mulching the weeds with materials such as newspaper, straw and bark chips; and replacing soil containing propagules with new soil. Whilst it can be time-consuming, digging is especially suitable for weeds with large underground propagules as this then reduces the number of weeds by destroying their propagules. Raking and collecting helps in reducing the chance for birds to spread seeds by pecking at fruit, whilst mulching results in seeds rotting and becoming non-viable.

Tactic Group 2

Actions taken in the second tactic group aim to kill the weeds when they are small but may also be used on large, mature shrubs and trees. Digging, weeding or chipping whole plants is well suited for removing small weeds whilst applying herbicide is an effective control method for actively growing weeds, keeping in mind that herbicide shouldn't be applied to plants that are stressed due to lack of water, over-watering, frost or heat. Mulching may also be used in the second tactic group.

Tactic Group 3

The tactics in group three focus on stopping the formation of propagules which serves to hinder the spread of weeds. Tactics such as removing spent flowers to stop formation of fruit, berries or seed, prevents weed multiplication. Pruning the tips of spent flowers also stops the formation of fruit or seed and in addition, encourages plant growth.

To reduce weeds that have flowers on a tall stem, mow the lawns and repeat cutting to minimise the number of seeds set.

Tactic Group 4

These tactics aim to prevent replenishment of the weed bank, particularly in relation to stopping the spread of seeds from actively growing weeds. Tactics to prevent the spread of propagules include collecting and disposing of propagules and implementing pruning as an alternative to collecting fruit.

Tactic Group 5

To prevent the introduction of weed seed from external sources, there are several things that can be done including monitoring areas where new plants have been planted and disposing of discarded soil from pots. Other actions that may be taken include cleaning mowers and garden tools, using weed-free garden materials such as garden soil, potting mix and mulch, and selecting the right plants for your environment.

¹ Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: planning tactics*, South Australia

Disposal of garden waste

To properly dispose of garden waste avoid placing propagules in compost and dumping garden waste anywhere other than a refuse disposal site; spread vegetative plant parts in a contained area and allow them to dry and die; place propagules in a plastic bag and leave in full sun for a number of weeks; and take propagules along with soil and dispose of in a refuse dump.

Managing Garden Weeds -Wind-dispersed plants

Wind-dispersed plants make it especially difficult to hinder the spread of weeds and as such a combination of tactics should be implemented to help stop the formation of weeds. Examples of trees, shrubs, vines, grasses and broadleaf weeds that are dispersed by wind include balloon vine, crofton weed, dandelion, firewood, pampas grass, and thistles. To manage wind-dispersed weeds, include tactics from Tactic Group 2 which is killing and remove weeds by applying herbicide or digging seedling, and Tactic Group 3, which is stopping weed seed set. For example, in the case of sowthistle management, use mulching to deplete the seedbank (Tactic Group 1) and then proceed to kill and remove weeds by digging, applying herbicide and mulching (Tactic Group 2). To stop the weed from maturing, cut grass and mow (Tactic Group 3) the lawn and then to prevent the replenishment of the weed seedbank, collect and dispose of plants before the seeds are dispersed from the parent plant (Tactic Group 4). Finally, to prevent the introduction of weed seed from external sources, make sure to clean garden tools and use weed-free garden materials.²

Managing Garden Weeds -bulbs, tubers and corms

Plants that reproduce from bulbs, tubers and corms can potentially become problem weeds if they grow in the wrong place. Plants such as Agapanthus, Chinchinchee, Star of Bethlehem, Grape hyacinth, and Freesia are particularly difficult to control. For example, Chinchinchee produce both seed and bulbs, and Freesia contain seed, corms and cormels, making hand weeding difficult. In the case of Freesia, soil needs to be loosened before removal to stop corm breaking off.³

Another problematic weedy bulb are oxalis bulbs which are small, succulent plants growing up to 40cm high. In order to successfully manage oxalis, carefully remove the plant by digging with a trowel and sieve the soil to remove as many bulbs as possible. Once this is done, place the bulbs in sealed plastic bags and leave them to rot in the sun. Then, remove and replace the infested soil with new soil (Tactic Group 1). The second stage involves killing and removing the weeds by digging and removing the plants and bulbs whilst they are growing and then applying herbicide just prior to flowering when there is minimal new bulb development. Also remember to mulch with materials to curb the growth of oxalis (Tactic Group 2). To destroy the parent plant and prevent the flowering of additional bulbs, apply herbicide at flowering when bulb reserves are low (Tactic Group 3). When newly formed propagules do spring up, dig and remove the new season bulbs to reduce the number of new propagules entering the target area (Tactic Group 4). Finally, weed the plants and check the areas around newly introduced plants, removing weeds as they emerge. Remember to clean soil from garden tools and use weed-free garden materials (Tactic Group 5).⁴

References

- Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: planning tactics*, South Australia
- Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: wind-dispersed plants*, South Australia
- Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: bulbs, tubers and corms*, South Australia

² Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: wind-dispersed plants*, South Australia

³ Cooperative Research Centre for Australian Weed Management, 2007, *Managing garden weeds: bulbs, tubers and corms*, South Australia

⁴ Ibid.