



July 2013

# MANAGING BROOMRAPE IN HORTICULTURE

Management considerations throughout the growing season



## Potatoes, onions & carrots

Choosing a suitable area for planting will be critical in preventing broomrape emergence. Avoid areas known to have broomrape but also choose sites with low weed numbers that have been well prepared and sprayed in the lead up to planting.

Non-cropped areas and fence-lines adjacent to horticultural crops should be spray fallowed to prevent weeds moving into the pivot irrigated area.

In-crop control options for hosts and broomrape is limited. Refer to the on Property Management of Branched Broomrape – Best Practice Manual for some herbicide options. It is also recommended to speak to a horticultural advisor to determine a long term plan for broadleaf weed control.

If possible monitor Growing Degree Days (GDD) from the day of planting for each crop to determine when 1500GDD may occur and when broomrape may emerge.

Controlling broomrape in horticultural crops will rely on good site preparation and chemical host denial control strategies.

Horticultural crops grown all year round under irrigation can result in broomrape emerging out of the spring season.

Practice good farm hygiene with emphasis on washing down ground engaging machinery and produce bins.

Weed control in fence-lines and non-cropped areas is also a priority.

Monitor crops and adjacent areas at 1500GDD to control and remove any emerged broomrape plants.

Broomrape will most likely be found in the weedy areas of the crop.



Note, that crops grown over spring and summer will accumulate GDD much faster than crops grown in the winter months. The time from broomrape attachment to emergence will be shorter in warmer conditions and so will be the spray window for host control.

Practice good farm hygiene especially with harvested produce covered in soil. Wash down and decontaminate bins and ground engaging machinery at a designated decontamination area before moving to a new site.

## Tree crops



Chemical weed control is the preferred method of weed control in an orchard where broomrape infestations have been found in the past.

Non-broomrape areas should still have some weed control but may be managed with cultivation, mulching or competition with desired plant species between tree rows.

Broadleaf weeds are likely to emerge continually as long as there is adequate moisture (or under irrigation) and therefore broomrape attachment and emergence may also take place over a longer growing period.

Identify areas that have had broomrape emergence in the past. Treat these areas with knockdown and post emergent sprays throughout the growing season.

GDD may be useful as a guide to potential broomrape emergence in spring (and emergence in fence-lines) but be aware emergence is also possible out of the “usual” growing season.

Ongoing monitoring will be important to ensure good broadleaf weed control and for preparation to control any emerged broomrape plants.

## Controlling emerged broomrape

Revisit known infested sites weekly during spring. If sprayed soon after emergence broomrape seed set can be entirely prevented.

Treat fresh flowering broomrape plants and hosts with glyphosate immediately and hand pick collecting broomrape in a plastic bag and burn if practical.

Broomrape plants and flowers that have started to dry off and turn brown are likely to have set some seed.

Glyphosate may still work to prevent seed set on fresh growth but the plants will also need to be drenched with Interceptor Concentrate Weed Control®.

Drench a half metre buffer around emerged plants to a depth of 20cm. Mark these areas for future reference and monitoring.



*Emerged broomrape drenched with Interceptor Weed Control®*

## For more information

Other Managing Broomrape Fact Sheets and the On Property Management of Branched Broomrape - Best Practice Manual can be found at:

[www.pir.sa.gov.au/biosecuritysa/nrm\\_biosecurity/weeds](http://www.pir.sa.gov.au/biosecuritysa/nrm_biosecurity/weeds)

The SA Murray Darling Basin NRM weather stations provide daily GDD for different Mallee areas.

Visit <http://www.aws-samdbnrm.sa.gov.au>