MANAGING BROOMRAPE IN PASTURES

Management considerations throughout the growing season

**January & February**

Paddocks going back in to pasture will benefit from chemical summer weed control. This will help to conserve moisture and nutrients and keep weed seed banks low. Pastures will establish better at the break of the season if summer weed control has been implemented.

Host weeds to watch for broomrape attachments are volunteer canola, vetch, skeleton weed, and heliotrope (potato weed), wild turnips and radish.

**March & April**

Good summer rain, or late summer rain, may stimulate early germination of pastures and annual weeds and Growing Degree Days (GDD) will begin accumulating early as long as soil conditions stay moist.

If medic density is low (< 30%) and the weed burden is high in a pasture paddock, consider early sowing cereal or vetch. Although a host, vetch may be sown with the plan to spray-top or brown manure at 1500GDD to prevent broomrape emergence.

A dry summer and autumn period will limit broomrape activity early in the season.

Volunteer pastures that have big populations of broadleaf host weeds are higher risk for broomrape emergence.

Look to broomrape Growing Degree Days for optimum timing of herbicide control in pastures.

Sown cereal pastures are an excellent alternative pasture in paddocks with widespread broomrape.

Keep fence-lines free of broomrape host weeds.

**April & May**

Wait for the “break of season” to begin accumulating GDD.

The “break of season” for GDD typically begins once 25mm rainfall is received after the 1st of April, if not before. Monitor paddocks for pasture growth and broadleaf weed size.

Medic pastures can be grazed from the 6 leaf stage and cereals once they have anchored, around the 3 leaf stage.
Advantages of alternative pastures
The type and quality of pasture can greatly impact on broomrape emergence.

Dense medic pastures are preferred but weedy volunteer pastures are more common and can be a big problem as they carry many host weeds. It’s also difficult to maintain an adequate spray regime in volunteer pasture without losing feed.

Sown pastures can be more competitive with weeds and provide options for chemical weed control including a knockdown prior to sowing. Hay freezing cereals and spray-topping or brown manuring vetch with glyphosate by 1500GDD are suitable options to consider.

Sown pastures will fit a cropping rotation as long as grass weed control is achieved.

June, July, August
Maintain consistent grazing pressure over winter as this will help to keep weeds under control and optimise spray timing.

Pasture can be sprayed from 700GDD with Broadstrike® to remove small broadleaf weeds and early broomrape attachments. In wet years consider patch spraying known infested areas with glyphosate to prevent broomrape escapes.

Other pasture spray options include spray grazing early winter (best for dense medic pastures) followed by a glyphosate spray-top at 1500GDD.

Weedy pastures should be spray-topped with a robust rate of glyphosate at 1500GDD or patch sprayed in areas known to have broomrape.

Hay freezing sown cereal pastures or brown manuring vetch pastures is a good option for broomrape control as well as grass weed management. Timing of glyphosate treatments should be by 1500GDD to prevent broomrape seed set.

Include fence-lines when spraying paddocks by using fence jets or raise the boom to make sure these areas are sprayed for broadleaf hosts.

September & October
Broomrape emergence is expected around 1500GDD. The timing of this will vary depending on the break of the season. An early break will promote early broomrape emergence and require earlier spraying.

If grazing paddocks, it may be difficult to detect any broomrape emergence due to stock eating and trampling plants. For this reason move stock to a holding area for 7 days before transferring to a broomrape free paddock.

If broomrape emerges treat fresh flowering plants and hosts with glyphosate straight away and hand pick into a plastic bag and burn if practical. This will prevent seed set.

Mature plants and flowers that have dried off are likely to have set seed and may be drenched with Interceptor Concentrate Weed Control®. Drench a half metre buffer around plants to a depth of 20cm. Mark these areas for future reference and monitoring.

November & December
Early summer weed control is recommended following a pasture phase. Early control will help keep paddocks clean and give better overall weed control. Wet spring conditions will hasten germination of summer weeds and they will need to be controlled before they get too big.

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

The SA Murray Darling Basin NRM weather stations provide daily GDD for different Mallee areas.
Visit: www.aws-samdbnrm.sa.gov.au