



Keep Your Markets Safe

Watch out for broomrapes

Broomrapes are serious weed pests of pulse, oilseed and vegetable crops worldwide. **Broomrape seed is a prohibited import for many of Australia's key export markets.**

The branched broomrape (*Orobanche ramosa*) has recently been found in SA and farmers across Australia need to check paddocks for this parasitic pest and other broomrape species.

Where to look

Broomrapes only attack broadleaf plants. Branched broomrape has been found in SA on canola, medics and field peas, also on weeds (capeweed, skeleton weed, cretan weed, stemless thistle, long-fruited turnip and tolpis) and native plants (variable daisy, poached-egg daisy and variable groundsel). However, it is a weed of many other pulse, oilseed and vegetable crops in other parts of the world.

When to look

The plant grows underground, attached to the root of the host plant, for about 6 weeks before it emerges in late spring and early summer. Following emergence, broomrape flowers and sets seed within two weeks. Regular checking and removal of plants before seed set is essential. Each plant can produce up to 500,000 seeds which are minute, like dust particles, with a dormancy period of up to 10 years.

Herbicides mask the presence of this weed, so it is best to check plants along the fence lines of paddocks and also on

What to look for

Branched broomrape (*O. ramosa*) is already in Australia and a serious pest of crops and pastures.

Report Immediately



Branched broomrape at flowering stage, is quite a small plant growing 10 to 30cm. There is no chlorophyll in broomrape so the plant is not green at any stage. The branched stems are brown or straw-coloured and the flowers are pale blue.

PHOTOS: R. Carter

By the end of the season the branched broomrape will have matured, set seed and browned off.



PHOTO: R. Randall

These species of broomrape are in Australia but are not serious pests of crops

Common broomrape (*O. minor*) can grow to 1 metre. In Australia, its hosts include capeweed, clover, flatweed, creeping boobialla, nasturtiums and petunias. Overseas it is a weed of pasture, safflower and vetch.

Australian native broomrape (*O. cernua* var. *australiana*) is widely distributed but rare, and parasitises native daisy bushes.



PHOTO: W. R. Barker

Farmer Alert

host weeds which may be near the or on roadside areas. At this stage branched broomrape has most commonly been found in alkaline soils, soils with low nitrogen and free draining soils.

What to do

If you find branched broomrape (do not confuse with the non-branching common broomrape) carefully collect both the broomrape and the host it is attached to and put them in a sealed bag to prevent the spread of their tiny seed. Mark the site in some way so it can be found easily later.

Take samples to your local Department of Agriculture for identification and advice on control. Any sightings of branched broomrape whether on crop plants or on weeds, even on the roadside, must be reported immediately to your nearest office of the State Department of Agriculture.

Contacts



NEW SOUTH WALES
NSW Agriculture 1800 680244
weeds@agric.nsw.gov.au



Natural Resources and Environment
AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

VICTORIA

Keith Turnbull Research Institute, Victoria
(03) 9785 0111



QUEENSLAND
Queensland Department Primary Industries
DPI Call Centre 132523



SOUTH AUSTRALIA
Animal and Plant Control Commission
PO Box 1671, Adelaide SA 5001
Ph (08) 8303 9500, Fax (08) 8303 9555



TASMANIA
Dept of Primary Industry Water & Environment, Regional Weed Management Officer 1300 368 550



WESTERN AUSTRALIA
Cropline 1800 068107
(Use GrainGuard sample kits to send in suspect plants available from Agriculture WA offices, CBH and agribusiness outlets.)



NORTHERN TERRITORY
Dept of Primary Industry and Fisheries Ph (08) 8999 2375, Fax (08) 8999 2049



Plant Protection Branch, National Office of Animal and Plant Health, Department of Agriculture Fisheries and Forestry Ph (02) 62716534, e-mail plant.protection@affa.gov.au



Grains Research & Development Corporation

IMPORTANT

This publication has been prepared by the Grains Research and Development Corporation on the basis of information available at the date of publication without any independent verification. Neither the Corporation and its editors nor any contributor to this publication represents that the contents of this publication are accurate or complete; nor do we accept any errors or omissions in the contents however they may arise. Readers who act on this information in this newsletter do so at their own risk. The Corporation and contributors may identify products by proprietary or trade names to help readers identify particular types of products. We do not endorse or recommend the products of any manufacturer referred to. Other products may perform as well or better than those specifically referred to.

Exotic Broomrapes

The following broomrapes are not yet found in Australia but are serious pests of crops in many other parts of the world.

Report Immediately if sighted



Crenate broomrape

(*O. crenata*) is not in Australia, but in other countries is a weed of:

- chickpea
- field pea
- lentil
- vetch
- carrot
- fennel
- berseem clover
- faba bean
- lathyrus
- white lupin
- safflower
- celery
- parsley

PHOTO: Prof. D. M. Joel



Egyptian broomrape

(*O. aegyptiaca*) is a branched species (not in Australia) and attacks all of the crops listed above (except for lathyrus and clover) plus those listed below:

- canola
- cole crops
- potato
- tomato
- linseed
- peanut
- tobacco

PHOTO: Prof. D. M. Joel



Nodding broomrape

(*O. cernua* var. *cernua*) is seen here parasitising eggplant but is mostly a pest of:

- lathyrus
- tobacco
- carrot

This species (which is not in Australia) can grow to 45 cm, more if attacking crops under irrigation. The yield reduction in the host crop can be from 30-70%.

PHOTO: Prof. D. M. Joel

Another species, which can be a problem in other countries, is sunflower broomrape (*O. cumana*). A weed of sunflowers, this species is also a major pest of tomato crops.