

Control of Branched Broomrape in Tomato

Orobanche ramosa Yemededer kitenge



Branched broomrape (© O.P. Sharma, Bugwood.org)



Branched broomrape on tobacco (© R.J. Reynolds Tobacco Company Slide Set, R.J. Reynolds Tobacco Company, Bugwood.org)

Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<ul style="list-style-type: none"> • Use clean seed to reduce the chance of contamination • Prevent water runoff from infested land to prevent seed introduction • Do not allow livestock into an affected area to avoid spread • Clean farm machinery and vehicles after work in infested areas • Crop rotation with trap crops /false host may help to deplete seed bank • Avoid seed set, as the seeds are very long-lived • Soil solarization - mulching moist soil with polyethylene sheets for six weeks under solar irradiation 	<ul style="list-style-type: none"> • It is a parasitic weed of many broadleaved crops. The infestation of tomato by <i>O. ramosa</i> is especially serious. Branched broomrape produces leafless branched flowering stems. The plant is pale, completely lacking any chlorophyll. The flowers are whitish below and cream, blue or violet distally (occasionally all white) • Look for stunted crop growth even the weed has not emerged. Uprooting may confirm the presence of young parasite seedlings on the root • Check for farm history if the field was infested in the previous cropping seasons 	<ul style="list-style-type: none"> • Light infestations can usually be controlled by hand pulling or hoeing before seed is produced • Grow trap-crops that stimulate seed germination but do not host the parasite, such as cotton, or catch-crops that are susceptible but are harvested before <i>Orobanche</i> seed is produced, such as groundnut, cowpea and soyabean, for 3 or more years • Improve soil fertility by addition of organic and inorganic fertilizers • Irrigate tomato field frequently with in 4-5 days interval 	<ul style="list-style-type: none"> • Use of chemical herbicides may lead to the development of herbicide resistance. 	<ul style="list-style-type: none"> • When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval. • Currently no chemical control available for the weed



Ethiopia

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AUTHOR(S): Etagegnehu G., Tamado T., Desalegn G., Negussie E.

EDITED BY: Plantwise