

PEST EXCLUSION ADVISORY No. 12-2021

To: All County Agricultural Commissioners

Date: July 29, 2021

Place: Sacramento

Phone: (916) 654-0312

From: Plant Health and Pest Prevention Services

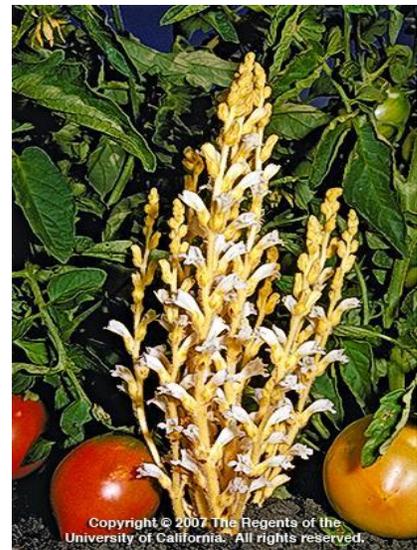
Subject: Egyptian Broomrape and Branched Broomrape Detections 2021

Egyptian Broomrape, *Orobanche aegyptiaca*, has been found in Solano county (PDR 480P50000323). Branched Broomrape, *Orobanche ramose*, has been found in Yolo county (PDRs 570P50000270, 570P06924654, 570P06924771).

The infested fields have been placed on hold and appropriate safeguards and mitigation measures have been implemented.

About Broomrape

Egyptian broomrape and branched broomrape are obligate parasites of roughly 30 broadleaf crops, such as bell pepper, cabbage, carrot, tomato, and potato. This parasitic plant extracts all its nutrients and moisture from host plants, causing stunting, yellowing, and unthrifty host crops. Because it does not photosynthesize, it can only grow in the presence of appropriate host plants and spends the first



Branched Broomrape in Tomato Field. Photo credit: UC IPM, photo by Joseph M. DiTomaso



Egyptian Broomrape in Tomato Field 2021. Photo courtesy of Solano county

portion of its life cycle underground, making it difficult to detect. When the flower spikes emerge from the ground, it is easier to detect. The flower spikes can produce viable seeds as soon as two weeks after the onset of flowering. A single plant can produce over 100,000 seeds that are tiny (~0.3 mm long). They are also sticky and can adhere to other seeds, plant material, fruit, farm equipment, clothing (especially footwear), and vehicles. These seeds can also be spread internally in livestock and during movement of water, soil, and air.

Both species of broomrape should be scouted for when conducting PQ field walks for host crops. This parasitic plant is more easily detected when the host plants are young or when the broomrape is in flower. Use the statistical method to collect broomrape samples as outlined in Section 3, Page 10 of the CDFA County Pest Exclusion Training Manual.

Detection History

Egyptian broomrape was first detected in Solano county in 2014 (Pest Exclusion Advisory [27-2014](#)), 2016, and again this year in the same county. Branched broomrape infestations have occurred in the past, and re-emerged in 2014. It was detected in four tomato fields in San Joaquin county (Pest Exclusion Advisory [28-2014](#)). Since then, there have been detections in both San Joaquin and Yolo counties in tomato and sunflower fields.

Additional information

- https://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/orobanche-aegyptiaca-factsheet.pdf
- <https://blogs.cdfa.ca.gov/Section3162/?tag=branched-broomrape#:~:text=United%20States%3A%20Branched%20broomrape%20has%20been%20found%20in,and%20agricultural%20weed%20in%20Europe%20and%20western%20Asia.>

If you have any questions regarding this advisory, please contact Vince Arellano (vince.arellano@cdfa.ca.gov) or Terra Walber (terra.walber@cdfa.ca.gov).