



Weed of the Month: Branched Broomrape

Welcome to our "Weed of the Month" feature, designed to raise awareness about the impact of noxious invasive weeds on our environment. This month, we're focusing on Branched Broomrape (*Orobanche ramosa*), an aggressive plant species that poses a significant threat to native ecosystems and agricultural lands.



Identification:

Broomrape is found in the San Francisco Bay region, Northern San Joaquin Valley, Eastern South Coast ranges, and southwestern regions up to an elevation of about 160 ft. It is an A-rated noxious weed. Broomrape is an annual and sometimes perennial parasitic plant, depending on its host. It is only visible when flowering. Broomrape attaches to the roots of ornamental and vegetable crop fields.



Above ground parts of this plant are a pale to bright yellow. Stems are slender, covered with very short glandular hairs, and have many branches.

Top Left- Branched Broomrape flowers

Bottom Left- Broomrape attached to the roots of a tomato plant.

Invasive Behavior:

In California, Broomrape is especially problematic in tomato and hemp fields, heavy infestations can severely damage crops. Roots are modified to attach directly to host plant roots and suck out the nutrients from those hosts. It has a blooming period from late June through September and is reproduced by seed. In natural areas, the flowers may appear later, coinciding with rain in October and November.



Impact:

At high infestation levels, Broomrape can reduce crop yields by as much as 80%, which is a tremendous threat considering California farmers grow roughly 95% of all processed tomatoes. The presence of Broomrape can have serious ecological and economic consequences.

Top Right- Branched Broomrape infestation

Bottom Right- Broomrape emerging from the soil.





Control and Management:

Successful Broomrape control should target the underground Broomrape at their earlier life stages, prior to attachment or as soon as it attaches to the host. This is because they are at highest vulnerability at those stages. To reduce the spread of Broomrape and reduce seed spread maintaining clean practices is also an important factor. Use of herbicides with low rates of glyphosate can also control broomrape. Broomrape reproduces by seed, which spread in water and in contaminated soil.



Prevention:

The key to Broomrape control is preventing the spread and maintaining clean farming practices. Incorporate crop rotation into farming practices to disrupt the life cycle. Please report any sighting of Broomrape to Sutter County Agricultural Commissioner's office.



By staying informed and taking proactive measures, we can work together to curb the spread of Broomrape and protect our native ecosystems. Join us next month for a new "Weed of the Month" feature, where we'll highlight another noxious invasive plant and share tips on how to address it.

For more information about Broomrape, feel free to visit the University of California Agriculture and Natural Resources Integrated Pest Management website at:

<https://ipm.ucanr.edu/PMG/WEEDS/broomrape.html>

For more information about our other county programs, visit our website at:

<https://www.suttercounty.org/government/county-departments/agricultural-department>

Top Left- Branched Broomrape, *Orobanche ramosa*, plant in flower.

Top Right: Mature Broomrape in hemp

Bottom Right- Broomrape infestation in tomato.

Thank you for your dedication to preserving our environment and agricultural land!

- Sutter County Agricultural Commissioner's Office

