CLFP Ag Production Committee Meeting:

Broomrape Update

December 12, 2023

ZACH BAGLEY, MANAGING DIRECTOR 530-405-9469 ZACH@TOMATONET.ORG



8. GENETICS

7. WATER & NUTRIENT MGMT

California Tomato Research Institute 6. SOIL HEALTH

> 5. RKN & STINKBUG

PR

DISEASE

IGMT

BROOMRAPE

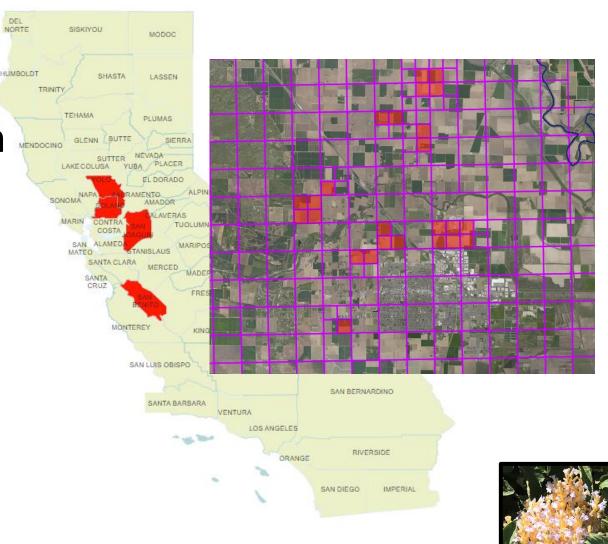
2. VIRAL

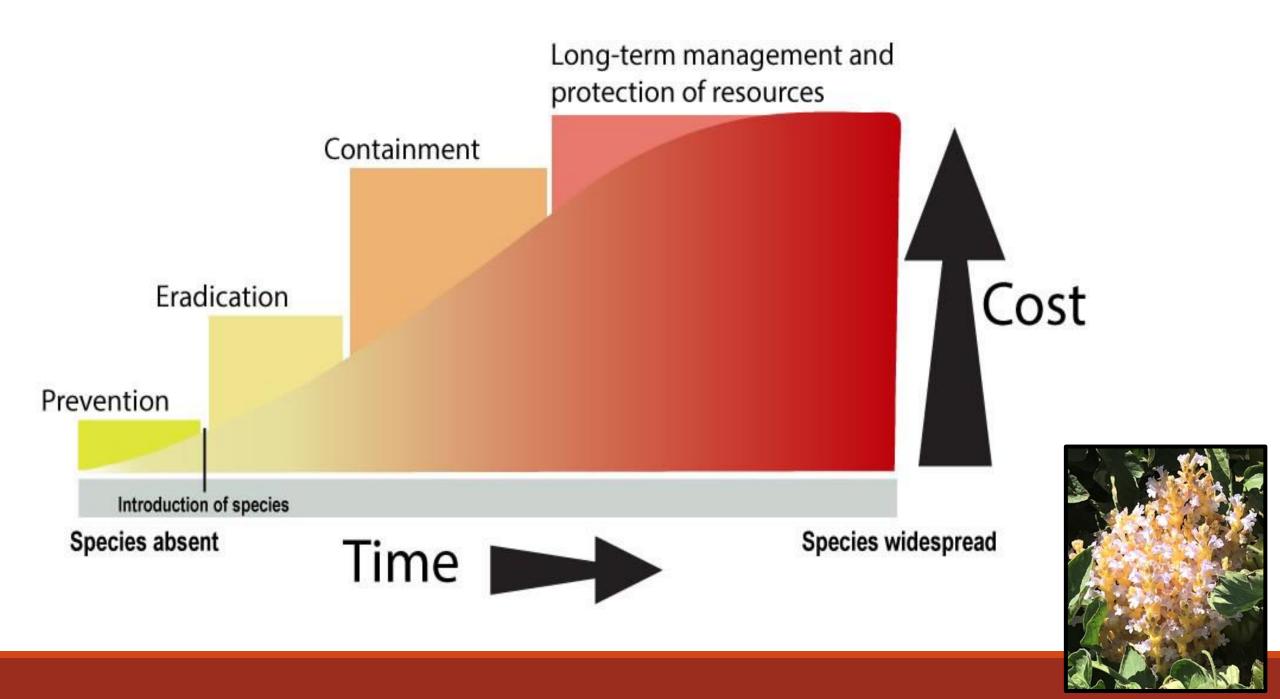
"Broomrape is the single biggest threat to our industry today and it should be our number one focus. Nothing is a close second. All of the other weeds mentioned above have ways to control them, Broomrape threatens the tomato industry as well as many other crops that we grow."
- comment from our 2020 survey

Photo Credit: Dani Zamir

Broomrape: Known Extent

- 2009 San Benito County;
- 2014 San Joaquin County;
- 2014, 2016 & 2021 3 finds in Solano County, all within 2 miles;
- 2017-2022: 22 fields across 9 operations - all but 1 within a 5-mile radius of Yolo;
- These 9 impacted operations cover ~18,000 tomato acres annually and delivered to a combined 10 facilities





Broomrape: What can be done?

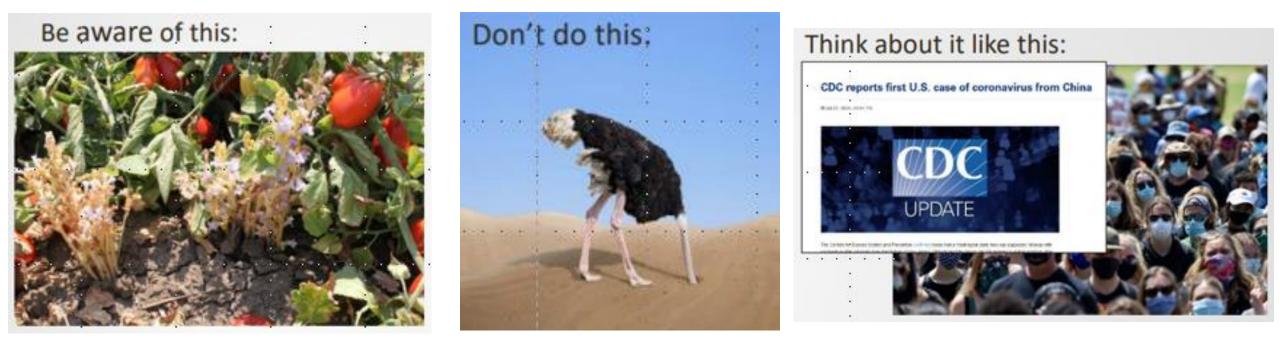
- Sanitation, detection, and delineation BMPs with growers and processors continue
- 24(c) application for Matrix chemigation.
- Support continued **research**.
- Broomrape Control Program Legislation AB 402



CTRI: 2024 BROOMRAPE RESEARCH

2024 TOTAL AFTER FINAL BOARD DECISIONS: \$368,066

Broom	nrape Containment, Control and Management	Research Lead	Institutio
	Broomrape: Devt. of Long Term Mgmt. Options: CA Commercial Field Conditions & Contained Research Facility Ongoing Work	Brad Hanson	UC Davis
2020 Start	Broomrape: Devt. of Long Term Mgmt. Options: Chilean Commercial Field Conditions	Brad Hanson	UC Davis - Chile
2021 Start	Developing best equipment sanitation practices for broomrape and other high-profile soil borne pathogens; to mitigate field-to-field spread	Cassandra Swett	UC Davis
	Determining the population structure of Phelipanche ramosa and Orobanche aegyptiaca field detections in California	Adam Schneider	UW-LaCross
2022 Start	Developing Tomato Lines Resistant to Branched Broomrape, a Critical California Pest	Neelima Sinha	UC Davis
2022 Start	Inducible Suberin for Tomato Drought Tolerance (root architecture)	Siobhan Brady	UC Davis
2023 New	Detection of Broomrape Infestations with Remote Sensing	Alireza Pourezza	UC Davis
2023 New	Screening of a VOC Sensor to Identify Broomrape Infestations	Cristina Davis	UC Davis
nia Ch e			



- Be Aware,
- Work with Growers or grower representatives to limit spread,
- Clean equipment (in known, suspected, or adjacent areas),
- Support voluntary and long-term mechanisms for funding Industry response,
- Work with growers in signing up fields for research efforts,





zach@tomatonet.org (530) 405-9469