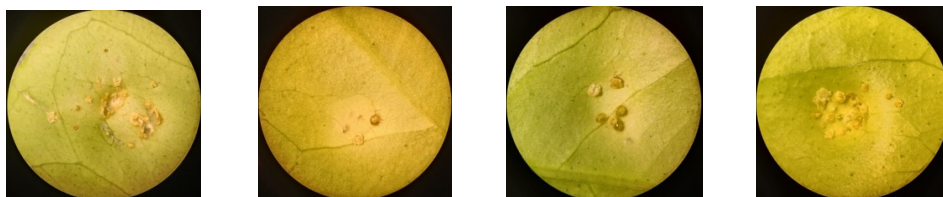


Screening of Sweet Orange and Mandarin against Citrus Canker

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UF/IFAS CREC



'Valencia'

Low severity

Moderate severity

High severity

The range of canker severity seen in vitro assays of breeding selections compared to 'Valencia'. Photos courtesy of M. Asim (UF/IFAS and University of Sarghoda).

Take Home Message:

- The best way to manage citrus canker is to plant tolerant or resistant trees.
- Breeding selections should be systematically screened for disease susceptibility.
- Some selections have promising levels of tolerance in vitro assays but field testing is needed to confirm the results.

Summary: Citrus canker caused by the bacterium *Xanthomonas citri* subsp. *citri* (Xcc) is an important disease of citrus in Florida and other regions in the world. The disease continues to cause problems for citrus growers in Florida as it causes fruit drop and mars the fruit. One way to reduce problems with canker is to plant cultivars that are more tolerant to canker. We have been screening advanced selections for canker susceptibility in vitro and in the field. The selections are sweet orange, including some of the OLL

series and 'Vernia', as well as mandarin hybrids. In the in vitro tests, seven of the fourteen selections have fewer lesions than the highly susceptible grapefruit 'N11-29' and the moderately susceptible 'Valencia'. The remaining selections have as many or more lesions. The in vitro assays will be compared to field results for the OLL series. Because of the 2023 dry spring, there has not been enough canker to be able to draw conclusions about how comparable the data are yet. Disease is just starting with the summer rains.

Funding:

UF | IFAS
UNIVERSITY of FLORIDA

Higher Education Commission Pakistan