

## Phytophthora Root Rot and Foot Rot Control

Phytophthora foot and root rot is caused by multiple species of the soilborne pathogen *Phytophthora* and is the most economically damaging soilborne disease of citrus. Infection of fibrous roots can lead to poor development or death of trees. Researchers have shown that trees affected with greening, or huanglongbing (HLB) are more susceptible to *Phytophthora* diseases than non-infected trees. The widespread nature of HLB in Florida has been linked to an uptick in losses to *Phytophthora*. Along with sound cultural practices, fungicides are a critical component of a management plan for *Phytophthora*.

Presidio® Fungicide is targeted chemistry that protects citrus threatened by *Phytophthora* root rot and foot rot.

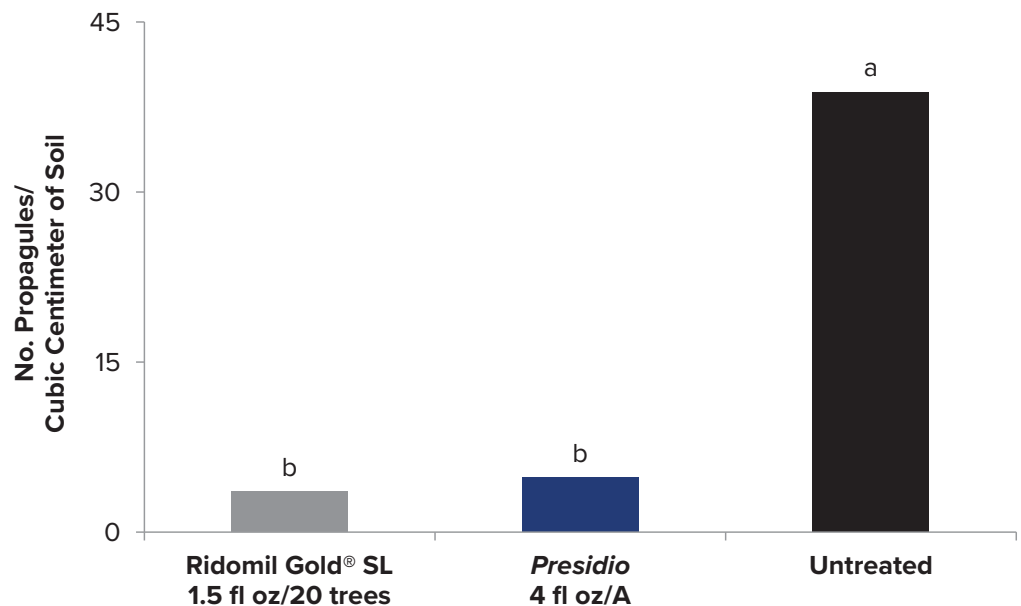
- ▶ **Novel mode of action**—sole member of FRAC Group 43
- ▶ **Effective**—outstanding preventive control and yield protection
- ▶ **Focused**—ideal rotational chemistry for *Phytophthora* management—rotation between modes of action is critical for resistance management

Target Disease	Crop	Use Rate
Phytophthora root rot and foot rot ( <i>Phytophthora</i> spp.)	Citrus fruit	4 fl oz/A

### Presidio Reduces Phytophthora Root Rot

*Presidio* significantly reduced populations of *Phytophthora* in soil to less than 10 propagules/cc of soil in Florida research trials. Research has shown that populations above 10 propagules/cc are likely to cause economic loss.

Source: University of Florida

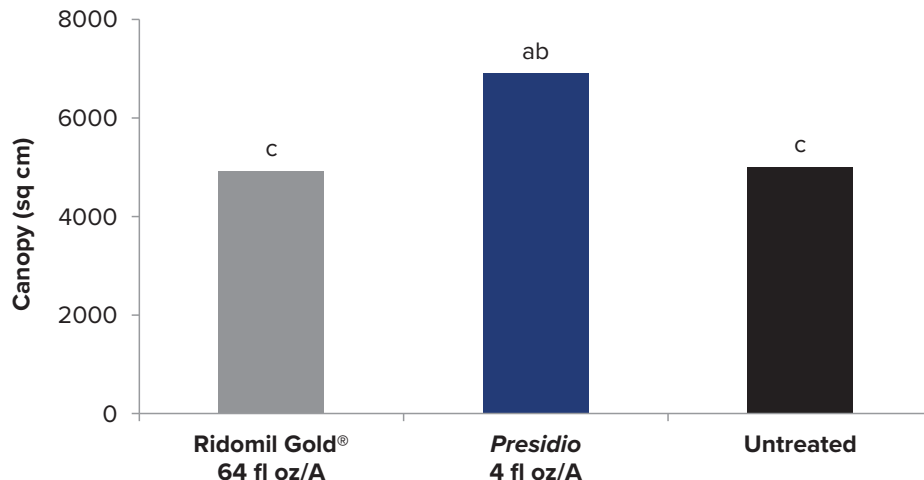


Means followed by the same letters are not significantly different ( $P \leq 0.10$ ).

## Phytophthora Management in Newly Planted Citrus Groves

*Presidio* fungicide effectively controlled Phytophthora root rot when applied to a newly-planted orange grove. At the end of the two-year study, *Presidio*-treated trees had greater canopy area as a result of reduced damage to the trees' root systems.

Source: University of California



Means followed by the same letters are not significantly different ( $P \leq 0.10$ ).

## How To Use

<b>New or Established Plantings</b>	Spray directly on soil beneath canopy or apply through drip or micro-sprinkler irrigation
<b>Individual Tree Applications (New Plantings or Resets)</b>	Mix 4 fl oz of <i>Presidio</i> in 20 gallons of water. Apply up to 10 fl oz of finished solution uniformly around the base of each tree, directed at the root zone. If rainfall does not occur within 24 hours after application, irrigate with sufficient water to move product into the root zone (0.5–1 inch of water).
<b>Application Methods</b>	<ul style="list-style-type: none"> <li>• Chemigation (drip, micro-sprinkler irrigation)</li> <li>• Soil-directed spray</li> </ul>
<b>REI / PHI</b>	12 hours / 30 days
<b>MRLs</b>	The U.S. tolerance for the <i>Presidio</i> soil use pattern is 0.01 ppm. No international MRLs are needed because the U.S. soil use tolerance is at or below global defaults.

## Other Important Information

- ▶ Resistance Management Requirements:
  - Make only one application of *Presidio* per year. If additional fungicide applications are required to maintain adequate control of disease, follow *Presidio* with a labeled fungicide with a different mode of action.
- ▶ Compatible with fungicides, insecticides and fertilizers