

# CITRUS DISEASE SPOTLIGHT

## Citrus Black Spot

By Megan Dewdney

**B**lack spot has once again been found outside of the original areas in Hendry County on early oranges. Since early black spot symptoms were spotted in November 2010, it was chosen to be the Citrus Disease Spotlight to once again familiarize the industry with the symptoms.

**Scientific name:** sexual stage *Guignardia citricarpa*; asexual stage *Phyllosticta citricarpa*

**Leaf symptoms:** rare but can be found on all citrus cultivars in badly affected groves; most common on lemons; small sunken lesions that develop a gray necrotic center with brick-red, chocolate-brown margin and yellow halo (Fig. 1)

**Fruit symptoms:** highly variable


- Most symptoms occur after the fruit has ripened; found first on sunny-side of the tree with increasing temperatures and most common on declining trees with poor vigor where temperatures are warmest and light is most intense

- **Hard spot (Fig. 2):** most common and diagnostic symptom; small round lesions are sunken with gray center with brick-red to chocolate-brown, often with cracks around the edge and a green halo; fungal structures appear as slightly elevated black dots

- **False melanose (Fig. 3):** appears on green and mature fruit; often smooth in texture but can become rough if severe; tan to chocolate-brown slightly raised lesions; can become hard spot later in the season

- **Cracked spot:** large diffuse, chocolate-brown lesions that are caused by the interaction of rust mites and the fungus; often raised cracks forming concentric circles in lesion and can become hard spot later in season

- **Virulent spot (Fig. 4):** large irregularly shaped, brick-red to chocolate-brown, depressed lesions that can cover a large portion of the fruit surface; texture is leathery and many fungal structures can be found;

early virulent spot lesions are small, irregularly-shaped, red depressions that can coalesce to form the larger lesions or become hard spot 

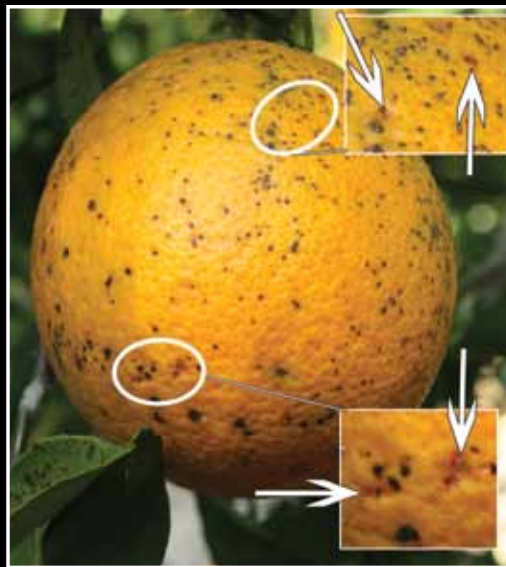


**Fig. 1 (top left).** Leaf symptoms on Valencia

**Fig. 2 (top right).** Hard spot lesions with brick-red and chocolate-brown margins and green halos

**Fig. 3 (bottom left).** False melanose symptoms on Valencia. Note the dark color of the symptoms. Within the circles are early virulent spot symptoms marked by the arrows.

**Fig. 4 (bottom right).** Fruit with early and late virulent spot.



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