CITRUS DISEASE SPOTLIGHT

Alternaria brown spot

By Megan Dewdney

The season for fungal foliar diseases is just around the corner. The most difficult of these to control on tangerines and tangerine hybrids is Alternaria brown spot. Furthermore, in our survey for fungicide resistance in tangerine and tangerine hybrid groves, strobilurin fungicide resistance has been found in 21 of 23 groves tested, which in many cases resulted in control failures. Growers interested in monitoring for strobilurin resistance in their groves should contact Megan Dewdney at (863) 956-1151 or mmdewdney@ufl.edu to arrange sampling.

Fig. 1 (left). *Symptoms on young Minneola leaves and stem*

Fig. 2 (above). *Symptoms on mature Minneola leaf*

Scientific name: *Alternaria alternata*

Leaf and stem symptoms: Symptoms can occur on leaves from emergence to maturity. The brown-to-black leaf lesions with a yellow halo are generally circular, but will often have a tail, following the leaf vein. Lesions become larger as the leaves mature and can vary in size from 0.04 to 0.4 inches, and will be larger if infection occurs earlier in the season (Fig. 1). Lesions on mature leaves are generally small and brown with dead tissue at the center with no halo (Fig. 2). If Alternaria brown spot is severe, the leaves may drop and entire shoots can wilt and die. The lesions on young shoots resemble those on leaves, but become less susceptible within a month (Fig. 1).

Fig. 3 *Lesions on young fruitlets that will likely drop because of Alternaria brown spot*

Fig. 4 *Coalesced corky lesions on Murcott*

Fruit symptoms: Young fruit lesions (Fig. 3) resemble those on leaves with brown, black lesions and yellow halo. As the fruit mature, the lesions become corky protrusions (Fig. 4) which can fall out, leaving white depressions in the fruit surface. Severe infections, especially just after petal fall, result in fruit drop. Lesions can vary in size from dots to large pock marks. Much of the fruit surface can be affected by coalesced lesions.

Fungicide applications should be planned from one-quarter to one-half expansion of spring flush until July. More details can be found in the Florida Citrus Pest Management Guide (http://www.crec.ifas.ufl.edu/extension/pest/).

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