By Mark A. Ritenour and Megan M. Dewdney

By most accounts, the 2009-10 season turned out well for Florida's fresh citrus growers, packers and shippers. While fresh shipments declined more than 5 percent compared to the previous season to 32.5 million cartons (4/5 bu), fruit quality remained excellent and revenues increased more than 19 percent to more than $433 million (http://www.fdocgrower.com/emr/shipmentsfresh.php).

Of this production, approximately 54 percent was grapefruit, 28 percent oranges and 19 percent tangerines and tangelos. While diseases such as Huanglongbing (HLB; *Candidatus Liberibacter asiaticus*) affect both processed and fresh-citrus production, other diseases such as citrus canker (*Xanthomonas citri* subsp. *citri*, Xcc) and now citrus black spot (CBS; *Guignardia citricarpa*) disproportionately impact fresh citrus, especially because of their potential impacts on fresh-citrus market access. However, advancing research resulted in relaxed canker regulations in domestic and Japanese markets over the past year, and continuing research offers hope for both slowing the spread of CBS and opening markets closed to fruit with CBS.

**CITRUS BLACK SPOT**

Although CBS distribution within Florida is very limited, there has been a flurry of activity related to CBS since its discovery. The disease was first discovered March 8 in Collier County and to date, the disease has been found in 12 citrus blocks within a relatively small area near Immokalee, plus one additional find in Hendry County located along a transportation corridor. Inspectors stationed at 17 processors near the end of last season only found CBS in fruit coming from known infected blocks. While CBS distribution within Florida appears to be very limited, regulatory, research and Extension resources have been mobilized to not only determine its distribution within Florida, but also understand the biology of this new disease, control the disease within the few groves that have it, and prevent its spread. Information about CBS biology, control strategies, and links to related federal and state Web sites can be found at the UF/IFAS citrus black spot Web site (http://www.crec.ifas.ufl.edu/extension/black_spot/citrus_black_spot.htm).

On the regulatory front, Emergency Action Notifications (EANs) were issued to growers within a one-mile arc of all CBS finds and to processors receiving fruit from these blocks. The EANs identify the regulated blocks, require tarping of fruit moved out of the regulated area, and require fruit-hauling trailers to be cleaned and disinfected after use. More recently, USDA APHIS developed a draft pest risk assessment (PRA) which concludes that fresh and dried fruit is not a pathway for CBS establishment into new areas. As of press time, the PRA was still undergoing peer review. If these conclusions remain in place, then cogent arguments can be made to allow shipment of infected fruit outside the state.

Based on the final PRA, a federal order will be issued establishing quarantine areas and then growers, packers and processors will be placed under compliance agreements that will likely continue to require tarping and decontamination treatments. Ahead of the federal order, interim safeguard measures were expected to be released around Sept. 16 and may include requirements such as field treatments for CBS control, preharvest inspections for CBS within 30 days of harvest, running fruit through a commercial packinghouse with grading/culling and fruit disinfection, APHIS inspection in the packinghouse, and possible...
limited distribution to only non-citrus producing states. All these current and proposed regulations only apply to fruit from the few regulated areas mentioned above or where quarantine areas are established as a result of the federal order.

For all other areas of the state, fresh fruit regulations and handling will remain the same as last season and fruit will not be inspected for CBS. For exports to Japan, APHIS will only inspect fruit originating from within the regulated area. Japan will reject or destroy any fruit found infected with CBS. The European Union will accept fruit from a CBS-regulated area provided the phyto-sanitary certificate has the proper Additional Declaration (AD). For fruit from groves within the CBS-regulated area that are free of disease, the AD will state that the fruit originates in a production unit free of CBS. For fruit from groves within the CBS-regulated area that are known to have CBS, the AD must reflect that the groves are subjected to “appropriate controls” for CBS. For the rest of the state, European Union requirements will remain unchanged from last season. Any containers of fruit destined for export that do not meet the requirements established for domestic movement must be sealed by APHIS and shipped with a Limited Permit for Export.

Given that no loads of fresh citrus containing canker symptoms have ever been shipped from Florida over the years when regulations prohibited it, Florida growers and shippers, working with federal and state regulators and inspectors, have a good track record for being able to effectively meet likely requirements related to CBS.

CITRUS CANKER RULE

Last year at this time, pending changes to the citrus canker rule were in the headlines. Fortunately, the new canker rule was published Oct. 22, 2009 and allows fruit to be shipped with lesions as long as they do not affect the visual marketing quality of the fruit. In addition, such fruit can now be shipped to all domestic states, even those such as California that produce citrus. However, export markets are governed by the receiving country and many of these (i.e., the European Union) still require fruit to be inspected for the absence of canker lesions before shipment. While the canker pest risk assessment is being used to argue for relaxing the canker regulations in these export markets, only Japan has so far changed its regulations to now accept fruit with canker lesions.

PESTICIDE MAXIMUM RESIDUE LIMITS

Because pesticide maximum residue limits (MRLs) allowed on fresh produce are constantly changing, it is important that fresh citrus growers and packers remain vigilant for these changes. In September, a revised table of MRLs for domestic and important export markets was posted on the UF/IFAS Postharvest Resources Web site (http://postharvest.ifas.ufl.edu).

This site also has links to other useful MRL sites, such as the U.S. Foreign Agricultural Service’s International MRL database and sites for specific markets such as the European Union, Canada, and Japan.

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