FREEZE HITS CROPS; MAJOR TREE DAMAGE

any Florida citrus groves experienced freeze conditions for three consecutive nights in January with some in low-lying pockets hit for additional nights. The worst came on the second night, Jan. 11, when the freeze covered most of the Florida citrus belt. Growers reported pockets down to the low 20s.

"In Southwest Florida, the temperature got from 24 to 28 (degrees) in most areas. The duration at 28 or lower was



Zekri

more than five hours in all locations," said Mongi Zekri, a University of Florida multi-county citrus extension agent in Hendry County. "There was ice in the fruit in all locations. Most likely, the juice content for late-maturing citrus (Valencia oranges) will drop significantly."

No area escaped unscathed, but hardest hit were Polk County and the northern

edge of the citrus belt, particularly commercial groves still located north of Interstate 4, and the

low, flatland areas in the Southwest. "Lake County and the west side of the citrus belt along Pasco, east Hillsborough, western Polk, Desoto, Hardee and Hendry received the brunt of cold temperatures," on Jan. 11, said Mike Sparks, the chief executive at Florida Citrus Mutual. "The central region and the Indian River region appeared to come through in decent shape, but there could be isolated or low-lying areas where damage occurred."

On the first night, Jan. 10, growers in Lake, Pasco and Hernando counties reported lows down to 23°F and freezing conditions for more than 10 hours. Some reported fruit frozen solid.

On the third night, The FAWN station in Arcadia and Ona reported freezing conditions for nearly eight hours with lows of 24°F and 25°F, respectively.

Damage was severe in low-lying groves in Polk County,



Scenes like this were common during the January freeze as growers ran microsprinklers to protect trees. Photo courtesy of Mongi Zekri, UF/IFAS

said Charles Counter, director of field operations for the Haines City Citrus Growers Association. He saw temperatures as low as 23 degrees during a freeze of almost six hours. Fruit froze solid in one Valencia grove east of Haines City.

Early damage estimates ranged from 10 percent to 20 percent of unharvested early- and mid-season oranges, about 54 percent of which were still on the tree before the freeze hit. That would represent a loss of 3.5 million to 7 million boxes.

Loss estimates for Valencia oranges were trickier because the fruit can heal after ice damage. Honey tangerines suffered the biggest loss, as much as 50 percent of a projected 2.3 million crop for 2009-10, Counter said. Harvesting had just begun by the time the freeze hit, and the CAC estimated nearly 95 percent of them were still on the tree.

All but 12 percent of early tangerines had been picked before the freeze.

In the weeks after the freeze, harvesting crews worked overtime to pick damaged oranges before they drop prematurely. But even those oranges making it to the processing plant will have lower pound solids. The ice-damaged fruit dries up the longer it hangs on the tree.

Most observers believed the freeze was not bad enough to cause significant tree damage.