

## **Cold winters confuse local fruit trees**

Low temperatures over the past several winters have local blueberry bushes, peach, nectarine and plum trees ready to cry “uncle”. The past four winters have been too cold for their liking.

Dan Mullins, UF/IFAS Commercial Horticulture Extension Agent in Santa Rosa County, explains how these colder temperatures “confuse” our fruit plants in today’s article.

These plants had their dormancy or chill hour requirement met by January 9 of this year. On that date, in central Santa Rosa County, we had accumulated 612 hours below 45 degrees F., which is plenty for our local varieties.

By February 15, 2010, we had accumulated over 1000 hours below 45 degrees at the weather station in Allentown. These are chill hours normally associated with central and northern Alabama, not coastal Northwest Florida. This is literally too much winter for most of our locally recommended varieties which were bred for approximately 600 accumulated chill hours by mid-February.

With dormancy requirement met over a month ago, local fruit trees are attempting to break dormancy and begin flowering and growing too early in the season. Late freezes can then result in frozen flowers and subsequent crop loss.

This winter is apparently not an anomaly. Weather records indicate accumulated chill hours have increased since the winter of 2005 and 2006. Last year 780 chill hours were recorded and the year before that there were 727 hours.

Based upon these weather records and resulting plant response, there might be a pattern developing. Some local commercial fruit growers are using row covers to protect strawberries and other low growing fruit plants while some blueberry growers are using sprinkler irrigation to protect flower buds.

Should such cold winters continue, plant breeders might soon consider revising the list of deciduous fruit cultivars bred and recommended for this region.

Gardening and weather enthusiasts might like to verify this information by visiting the University of Florida’s Florida Automated Weather Network (FAWN). The site contains other useful weather data. Go to <http://fawn.ifas.ufl.edu>. Next, click on FAWN Tools, found at the top of the page and then go to “air temperature threshold”. Place a check mark on Jay (location nearest to Okaloosa County). Under “date range” enter November 1 to February 15, also choosing a particular year, and under temperature threshold enter “near or below 45 degrees F. Last, click the button at the bottom choosing HTML and you will be provided the number of chill hours for the year requested.

Larry Williams, UF/IFAS Extension Agent, Okaloosa County, February 24, 2010