PEACH NEWSLETTER

MESSED UP WINTER

I have received a number of calls in the past few weeks with growers expressing concern with the early onset of peach bloom in December

In an effort to find some guidance on what to expect or what, if anything, can be done with this condition I talked with Dr. Bob Rouse from the Southwest Florida research and Education Center in Immokalee. Dr. Rouse has extensive experience with low-chill peach varieties grown at the Center in Immokalee.

Dr. Rouse indicated that the trees at the Center are experiencing the same early bloom issue as are other south Florida peach growers. His experience is that the bloom that is currently emerging has not had any significant chilling and most of this fruit will not develop to maturity. His recommendation is to hold off doing anything at this point and hopefully a frost will provide a natural thinning of this bloom.

The trees at the Center still have plenty of dormant buds that, if they receive chilling, should bloom and potentially make a crop this year. His experience is that this happens to some degree every year and that every year is different. If we don't receive any additional chilling and then have a bloom in January without leaf development the resulting fruit will be of poor quality, low sugar and early.

If you would like to provide your observations on this early bloom occurrence, email me your: variety, age, location, bloom date and percentage of bloom present and we can start to document this for future reference. The email address is wcoswalt@ufl.edu.

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This newsletter is a product of UF, IFAS and County Cooperative Extension Services, in partnership with the participating Boards of County Commissioners and University of Florida

"The Foundation for the Gator Nation"

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PEACH

Now is the time to control White Peach Scale and San Jose Scale

Alicia Whidden
Extension Agent Hillsborough County

White peach scale, *Pseudaulacaspis pentagona*, and San Jose scale, *Quadraspidiotus perniciosus*, are considered to be very destructive pests of peaches. A good time to scout your trees is in the winter while the trees are dormant, looking for scales on the scaffold branches and trunk. Both scales are very damaging to the health of the tree and can kill young trees. Both are pests of a wide range of plants in our warm climate.

In White Peach scale, the females are not mobile and are oval and covered with a coat of wax. The color of the wax coating is usually white to yellow. Males are mobile and are orange colored. Eggs deposited on the plant are orange to white in color. Larvae hatch after 3-4 days from the eggs and will crawl to an area where they will settle and start feeding on the plant (upper right insert).

The San Jose scale are tiny and orange with a light waxy gray covering. Females are round and the covering is made up of concentric rings with a raised nipple near the center. The male is smaller and is more oval shaped with a raised dot near one end rather than in the center. Crawlers are light yellow (lower right insert).

Additional Pest Management References

There are several publications on peach scales and other pests that are excellent references. These publications contain spray recommendations for dormant oil sprays and also for adding insecticides to the oil spray. You also will find more detailed information on these and other pests in these publications.

Insect Management in Peaches

2011 Southeastern Peach, Nectarine and Plum Pest Management and Culture Guide

Scale Insects on Peaches and plums

Heavy infestation of White Peach Scale.

Control

The best time to control scale is during the crawler stage before they have formed the waxy protective covering which helps protect them from insecticides. Crawlers are found in Florida in all seasons. Dormant oil sprays are recommended to help control these pests this time of year. Good coverage is critical. The trunk and branches must be evenly covered to coat the insects with the oil. 1.5 to 2% rate of oil is the recommended rate. If you are spraying late in the dormant season, it is recommended to lower the rate to 0.75 to 1.5 %. If control is not achieved with oil alone, an insecticide can be added to an oil spray. It is recommended that 2 dormant oil sprays will give more dependable coverage than only 1 spray. Wait till trees are dormant. Be sure to only spray when temperatures are to be cool (not much more than 60°F) which I know is hard for us, but this is to avoid possible phytotoxicity. Also be sure not to spray if the temperature is to be below 28°F within the next 3 days.

PEACH

Importance of fruit thinning

"One of the most important and time consuming of these practices is fruit thinning."

The top figure demonstrates the distance or scale to adequately space fruit on peach limbs. Current recommendations for thinning or fruit spacing is one fruit for every 6 to 10 inches although, trials suggest that 9 to 12 may produce larger fruit of a more marketable size.

The second figure illustrates the precocity of peach varieties in Florida. Unlike citrus which sets only a small fraction of the bloom, peach flowers set fruit in excessively high numbers. This results in large crops of small fruit that is not desirable to peach marketers or customers.

Peach Thinning to Control Fruit Size

Gary K. England
Extension Agent Lake County

Florida peach growers strive to optimize marketable fruit yields to coincide with typically high wholesale prices. These prices occur at the end of the Chilean harvest in South America (late March) and remain high until domestic harvests in major production areas such as Georgia, South Carolina and California begin (center insert). Timely completion of several important horticultural practices is the key to optimizing yield of marketable fruit. One of the most important and time consuming of these practices is fruit thinning.

The UF/IFAS EDIS document entitled "Florida Subtropical Peaches: Production Practices" (HS1109) recommends thinning peaches to one fruit for every 6 to 10 inches along the fruiting branches. Thinning demonstration trials at Mid-Florida Citrus Foundation in Avalon and the Plant Science Research and Education Center in Citra over the past two years confirm this recommendation for several of the popular Florida peach cultivars. Trends in these trials suggest that spacings of 9 to 12 inches are necessary (upper left insert) to optimize the production of fruit having a diameter greater than 2.5 inches, typically the desired size in the wholesale market.

Since many peach cultivars set large numbers of fruit (lower left insert), most growers will need to thin the crop to obtain desired fruit size. When considering the potential for multiple or extended bloom periods and the large number of fruits set, multiple thinning passes may be required to obtain properly sized fruit for marketing. Many growers agree that thinning is one of the more expensive cultural practices in peach production due to the large amount of hand labor involved.

HS 1109 points out that it is important to thin fruit before pit hardening occurs. Pit hardening begins by the time the immature fruit are the size of a nickel. If thinning occurs after pit hardening, the practice is not as effective, and fruit size and yield are reduced. Some growers are considering the benefits of bloom thinning (i.e., with chemical or mechanical means) in their programs. This could be a less costly practice but growers should consider the potential of freezing temperatures occurring after a bloom thinning occurs. In some cases, natural thinning by sub-freezing temperatures could replace all or some of the hand thinning requirement.

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PEACH

Chilling Hours in Florida

Peaches are a semi-deciduous fruit crop unlike citrus which is characterized as an evergreen broadleaf. So what does this mean? Deciduous crops typically need what is called a winter induced period of rest or dormancy. This is evidenced by a slowing of growth and defoliation when the days get shorter and temperatures become cooler in the fall and winter. One of the early limiting factors to peach production in Florida was the lack of consistent cold temperatures called chilling hours. Most of the earlier varieties of peaches grown in the Southeast United States had chilling hour requirements that greatly exceeded the hours that we get here in central Florida.

Characteristics of a Chilling Hour

- Typically is one hour of temperatures between 32 and 45^{0}F for peaches.
- Most temperatures above and/or below this range count only in fractions of a chilling hour.
- Lack of chilling can result in weak bloom, growth and fruit set.

Did you know you can track chilling hours to date for this season and historical averages on the UF/IFAS AgroClimate website at the: Chill Accumulation Calculator.

Current conditions

The insert photos above and to the right were taken last week near Polk City. This winter has been particularly unique in that some growers have had a difficult time inducing defoliation in some peach varieties. In some situations, 2 application of zinc sulfate were required to get acceptable results. Additionally, there hasn't been much in the way of chilling hours to date. Leading to the thought that this bloom is more likely due to tree stress than adequate chilling hour accumulation.

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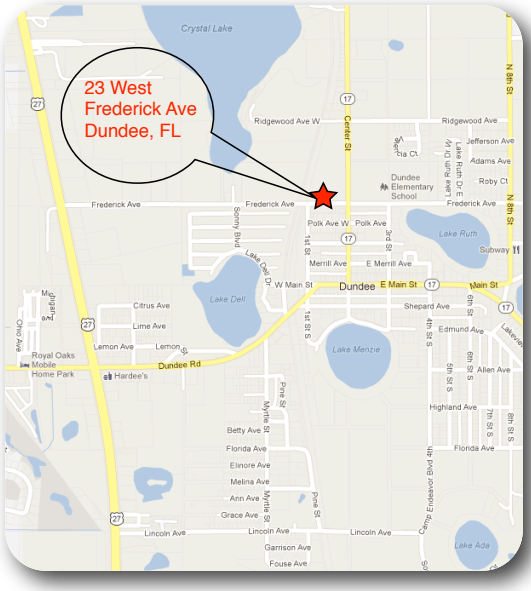
January Peach Grower Roundtable Meeting



There will be a Central Florida Peach Grower Roundtable to be held at Dundee Citrus Growers Association (CGA) at 23 West Frederick Ave in Dundee, FL. Ryan Atwood from KeyPlex will be sponsoring lunch. The meeting will begin at 11:00 a.m. on Tuesday, January 10, 2012.

Scheduled topics include a review and discussion of fruit thinning with Gary Engalnd, food safety from a production perspective with Dr. Michelle Danyluk and peach fertilization specifically tissue and soil analysis with Alicia Whidden and Chris Oswalt.

Since Ryan and Keyplex are sponsoring lunch, I will need to have an approximate count for lunch by Friday (January 6, 2012), so please call Gail at 863-519-8677 ext 111 or email me at wcoswalt@ufl.edu to let us know you are attending.

Stone Fruit Postharvest Handling Workshop

There will be a half-day workshop covering harvest and postharvest handling issues in the Florida stone fruit industry. Topics include differences between citrus and stone fruit harvest, postharvest sanitation techniques, and proper storage conditions. Dr. Carlos Crisosto from UC-Davis will be speaking at the workshop, who is a stone fruit specialist in California, specializing in postharvest handling in addition to our esteemed colleagues from the University of Florida.

It will be held on February 16, 2012, at the Citrus Research and Education Center in Lake Alfred, FL from 9 am to 12:30 pm, followed by lunch.

A registration cost is $15.00 and includes lunch and workshop materials. Online registration can be found here: http://stonefruitpostharvest.eventbrite.com – and credit cards are accepted.

Hope to see you on Tuesday the 10th,

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