Commercial Horticulture:
Future Cooperative Extension Programs, Business Planning
and Crop Production Issues & Alternative Crops

This newsletter is intended for people interested in commercial fruit and vegetable production, business planning and North Carolina Cooperative Extension Service meetings throughout North Carolina. For back issues of this newsletter please go to the Jones County Extension website and click on the Commercial Horticulture, Nursery & Turf menu option on the left side of the website. The website address is: http://jones.ces.ncsu.edu

Upcoming Workshops, Tours & Meetings

February 6, 2007. Onslow County Farmers Market Board Meeting. 3:30 PM. Onslow County Extension Center. Jacksonville, NC.


February 10, 2007. New Bern Farmers Market Board Annual Strategic Planning Meeting. 9 AM – 2 PM. New Bern City Hall. Contact Mary Ann Dunn at 637-8235 or the Jones County Extension office for more information.

February 12, 2007. Sweetpotato Educational Meeting - Food Science, Breeding & Genetics, Weed Management Considerations. Wilson County Ag Center, Wilson, NC. Contact Billy Little at (252)-237-0111 for more information.


February 15, 2007. Sweet Potato Managing Insect and Post-harvest Diseases on Sweetpotato: Information Update and Discussion Meeting. Contact the Johnston Co. Ag Center at (919) 989-5380 for more information.

February 20, 2007. Sweetpotato Educational Meeting - Production, Micropropagation, Disease Management Considerations. Contact the Johnston Co. Ag Center at (919) 989-5380 for more information.
February 21-24, 2007. *Mid-Atlantic Direct Marketing Conference.* This is a multi-state Extension effort and conference. Contact number (410) 822-1244, Fax 410-822-5627 or email *sdill@umd.edu*. I will be attending this conference and will be driving. If anyone is interested in attending get your registration in and let me know and you are welcome to ride with me to this meeting.


February 28, 2007. *Strawberry Field Walk,* Virginia Beach, VA. 12:30 PM - 4:00 PM. Contact Cal Schiemann, Virginia Cooperative Extension at (757) 385-4769 or by e-mail: cschiema@vbgov.com for more information.


**General Information:**

**Farmers Markets**

As of February 1, 2007, the New Bern and Onslow County Farmers Markets will be finalizing plans for their 2007 season. The New Bern Farmers Market will open its doors on Saturday, March 24, 2007, and the Onslow County Farmers Market will start its season on Saturday, April 21, 2007. Both markets have space available for anyone interested in selling locally grown fruit or vegetables or who make their own crafts. Contact the Onslow or Craven Extension offices, or me at the Jones County Extension office, if you or someone you know is interested in selling vegetables at either of these markets.

**Business Planning & Management:**

**FACT in Jones County**

We are still hoping to put the first FACT class together in Jones County. If you have any interest in learning how to turn on, run, scream at or enjoy working on a computer, this is the class for you. Please call the Jones County Extension office if you have any interest.

Once again classes are free of charge and will begin as soon as a minimum of six people register. You can get more details about this program at the Jones County Extension or the Lenoir Community College – Jones County campus.

**Regional Farmers Market Board Meeting**

Tuesday, February 13, 2007, at 10 AM, at the Onslow County Extension Center. This is the second eastern NC Regional Farmers Market meeting. A number of topics pertaining to farmers markets & regional challenges will be discussed. Invited speakers include: Dr. John O’Sullivan, NC A&T State University and
Sheila Neal, Carrboro Farmers Market Manager. Please contact me at the Jones County Extension Center no later than February 9, 2007, to indicate if you can attend. Lunch is $7 and will be served on-site.

**Fruit & Vegetable Budgets**

Fruit and vegetable crop production budgets for a number of small fruit and many vegetable crops are available online for anyone considering starting or adding a fruit or vegetable crop to their rotation.

These budgets are based on a detailed analysis done by Dr. Charles Safley, NCSU Agriculture & Resource Economics professor, numerous fruit and vegetable specialists and farmers. The format of many the small fruit budgets are taking a new approach. In the past only enterprise budgets – budgets developed for annual crops, were used to evaluate the cost of production and the profitability of perennial fruit crops.

Because of the sizable investments required to plant crops such as blueberries, strawberries and muscadine grapes, a more detailed analysis is required. Dr. Safley has included a cash flow analysis for each of these crops as well as evaluating the Net Present Value (NPV) – the value of an investment at some point out in the future that you made today and Internal Rate of Return (IRR) – the rate of return on an invested that has a $NPV = 0$. These calculations show you the long-term risk and profit potential associated with each of these crops.

Many of these small fruit crop budgets and vegetable crop enterprise budgets can be found on the NCSU Horticulture website at: [www.ncsu.edu/hortbudgets/](http://www.ncsu.edu/hortbudgets/)

They can also be found at the Small Fruit Consortium website: [www.smallfruits.org](http://www.smallfruits.org), along with a wealth of small fruit production guides and recommendations for the southeast US.

As you review these budgets and cash flow analyses, keep in mind a number of assumptions that had to be made to determine the future value of these crops in a farm operation:

- These budgets are a snapshot of the potential returns at a given point in time.
- Every individual farm/farmer will have inputs and overhead costs different than what is outlined in these budgets.
- The prices used in the analysis were collected from growers in the year the analysis was started.
- Equipment costs in these budgets may/may not apply to your operation.
- The cash flow in these budgets do not account for adverse weather events that can significantly change yield and income.
- Budgets assume you have a market (contract) for the crop BEFORE you invest.
- These budgets are created with the best available information at the time they were published.

Also studying the cash flow trends, NPV and IRR, will help you make better decisions about which crops to invest in or avoid. These budgets can also help you work with your bankers to make the investment in a small fruit crop easier to do if you decide to go this route.

**Crop Production**

**Strawberry Notes**

This strawberry information in this section are a summary of comments from an Extension meeting in Gaffney, SC attended by Dr. Barclay Poling, NCSU Strawberry Production Specialist, in January. There is some good information pertaining to some of the strawberry production
challenges that may/may not be expected based on the variable weather we have experiences in 2006-2007.

- “Don’t use abamectin (Agri-mek) if temperatures are under 50°F.
- Acramite may be a good choice in late winter for two-spotted spider mite control.
- There were relatively few reports of bacterial leafspot problems at this stage, but in the event you see these symptoms following cold/wet weather, please contact your agent for assistance in diagnosing ALS – angular leaf spot - (and control recommendations, if needed).
- Crop development was advanced by extremely mild Dec/Jan, and this has caused Camarosa plants under row covers into very early bloom. Best advice is to pull the covers off and let the cold weather (at end of Jan) kill back these blooms. After letting these blooms be naturally thinned, it is important to treat the field with a fungicide for botrytis crown rot control. Leave the covers off until needed for protection of emerged flower buds – usually damaged in low 20’s.
- Row covers can provide excellent “cold protection” in February: 6°F to 8°F protection is usually all that is needed for the emerged flower buds (much harder than open blossoms). Don't worry about protection of open blossoms and popcorns this early in the season (unless you have a tunnel and are shooting for V-day market).
- Growers at the Gaffney meeting who have not used row covers this winter seemed quite satisfied with their decision (not to use covers), and indicated to this audience that their plants were relatively normal looking for this time of year (fewer open blooms).
- The “direction” of plant growth is highly influenced by temperature – normally, in fall and winter, there is extensive root development and little top growth, but this year we are seeing more top growth than desired by late January (due to abnormally warm temperatures), and the concern is with “starch reserves” in the roots and crowns. Winter blossoms and fruit “tax” plant food reserves, and so a “natural thinning” of winter blooms + a return to a more seasonal winter weather pattern (colder) in early February is very desirable. It is impractical to remove dead blossoms by hand, so be sure to apply a fungicide for botrytis crown rot.
- PROTECT FOLIAGE FROM DEER – defoliation will reduce plant assimilate (food) available for root growth (which is needed) and will later reduce yields.
- This is the time of year for stunting/killing the growth of annual ryegrass. A new material for post-emerge control of annual ryegrass is Select Max.
- Row covers are very useful for cold protection in late February and early March and the covers will not de-harden plants as sprinkler irrigation might. We often see very beneficial “super-cooling” phenomenon at this time of year with “dry plants” (it will not work with "wet" plants).
- Right now is a good time to order a digital thermometer with thermocouple sensors (critical tools for when you use with row covers + sprinkler irrigation).”

**Muscadine Grape Weed Control**

February is the month to be getting ready for the coming of warmer spring temperatures. With that you should be thinking about getting your first herbicide application applied in your vineyard to control grasses and winter annual weeds.

Weed and grass control around the grape vines can have a sizable impact on yield as well as provide habitat for unwanted pests and rodents in the vineyard.
There are number of very good products available for Pre-emergence applications of herbicides in the vineyard for the control of annual grasses and small seeded broadleaf weeds. The 2007 Agricultural Chemicals Manual has the following recommendations:

- **Flumioxazin (Chateau)** can be applied with a hooded sprayer or shielded application equipment at a 6 oz. to 12 oz. per acre rate. An 8 oz. per acre rate appears to give the best control. Two applications per year are going to be needed to maintain good control of small seeded broadleaf weeds & annual grasses. If your grapes are less than 2 years of age, shielded applications are very important.

- **Oxyzalin (Oryzalin, Surflan)** can be applied to new plantings at a rate of 2 oz to 4 oz per acre once the soil has settled after transplanting. Multiple applications per year are permitted. Apply in combination with isoxaben (Gallery) in newly planted vineyards for improved control of broadleaf weeds.

- **Pendamethalin (Prowl)** can be used on non-bearing grapes only at a rate of 2.4 oz. to 4.8 quarts per acre (Prowl 3.3 EC) or 2 to 4 quarts per acre (Prowl H₂O 4E). Allow soil to settle around vines before applying. Apply ONLY to dormant, newly planted and 1-year old vines. Do not apply after buds have started to swell. Do not apply over the top of the vines.

If you have questions about any of the upcoming meetings, business strategies, or crop production management issues, please call me at the Jones County Extension Center at (252) 448-9621. I can also be reached by email at: Mark_Seitz@ncsu.edu.

Mark Seitz
Extension Area Specialized Agent
Agriculture – Commercial Horticulture

Disclaimer: The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University nor discrimination against similar products or services.