November 1, 2007

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

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Upcoming Workshops, Tours & Meetings

November 7, 2007. The North Carolina Irrigation Society 43rd Conference and Business Meeting. NCSU McKimmon Center, Raleigh, NC. Three sessions will cover:

- fruit and vegetables (including frost-freeze protection)
- wastewater irrigation
- field crop irrigation (including the economics of irrigation given higher commodity crop prices)


December 4-6, 2007. Certified Crop Advisor Training. Onslow County Extension Office. Contact Curtis Fountain at the Duplin County Extension office (910) 296-2143 for more information.


February 6-8, 2008. Mid-Atlantic Direct Marketing Conference & Trade Show. Sheraton Inn, Dover, Delaware. Contact Carl L. German at the University of Delaware Cooperative Extension at: (302) 831-6243 or by email at clgerman@udel.edu for more information. You can also go to the MADMC website at http://www.madmc.com/ to get more information.

Note: I attended this conference in 2007. It is well worth your time to attend if you are looking for a conference to attend. It is closer to home than the conference in Wisconsin and the farm market tour will give you some great marketing ideas!


CANCELLED!! Due to a recently announced cut in travel budgets (25%), my out-of-state travel in 2008 has to be eliminated. I still hope to find funding to make this trip but at this time it is doubtful. I would still encourage you to consider attending as I think this would be a very good conference.
Business Planning & Management:

Character

“Winning takes talent, to repeat takes character.”

The Quotable Coach

by Thom Loverro

John Wooden

UCLA Basketball Coach

Character

Coach Wooden’s view on character is very pertinent to anyone in the produce business. The challenges Mother Nature throws at farmers can be daunting. In addition to drought, floods, hail and other weather events, you have to live with the whims of consumer demand, competition from overseas and political winds. One food safety scare in any crop that you grow is all that it takes to see a significant downturn in sales of that crop whether you were involved or not.

I have written about continuous improvement in a previous newsletter. Continuous improvement is the character that Coach Wooden refers to. Building character is the process of learning how to do something and then having the drive, fortitude and ambition to continue to make this practice work for you each and every day.

Character is what you must have to maintain your pesticide records, to take time to attend educational programs, to adopt good food safety handling practices and to keep good production notes. It takes character to take time to record and later review notes about each season that let you hone in on areas that need fixing. And it takes character to do the record keeping necessary to know what it cost you to produce a crop.

Is any of this work fun? On most days, probably not. Is any of this work going to go away? As a colleague from the North Carolina Department of Agriculture said in a recent meeting I attended, “In all my years of working for NCDA I have never seen a regulation be eliminated!” So none of the paperwork or record-keeping is going away and you have to have the character it takes to not only get it done but to do it right.

Hospitality Training

If you operate a roadside market, sell at a farmers market, or hire people who work for you in performing customer service, you know how important hospitality is for your business. Treating people with courtesy and respect, no matter how aggravating their questions or limited their knowledge is on a topic, seems to be a lost art and business skill in today’s world.

NC Cooperative Extension is introducing a new curriculum called Hospitality Training. This is a two-day, four hour per day, training program that will be led by NC Cooperative Extension agents on a county by county basis, across southeastern NC beginning in January 2008.

If you are trying to find ways to improve your image in the community, this training may be of value to you. The cost is $30 per person and covers materials and snacks. There will be homework at the end of day one, to help make you more aware of your community and tourism development opportunities in your area.

The first training dates will be January 8 and January 15 from 1 PM to 5 PM in Carteret, Onslow and Wayne County. A second set of training will be held in Duplin County on January 22 and January 29 from 1 PM to 5 PM.

Topics include:

Making a Good First Impression
Communicate Clearly
Mind Your Manners
Know Your Community
Know Your Job
Handle Problems Effectively
Make a Good Last Impression

Contact your local Cooperative Extension Service office if you are interested in signing up, or for more information.

Crop Production

Iodomethane (Midas) Fumigant Registration

From: Dr. Barclay Poling
Berry MG, Vol. 8 No. 72
Oct 9, 2007 (no.2)

1) EPA Issues One-Year Registration for Soil Fumigant Iodomethane
EPA has approved a one-year registration of iodomethane (methyl iodide) under highly restrictive provisions governing its use. Iodomethane can serve as an alternative to the ozone-depleting pesticide methyl bromide. The risk assessment process for iodomethane has been one of the most thorough analyses ever conducted on a new pesticide. It has incorporated state-of-the-art methods and extensive chemical-specific toxicology and exposure data.

EPA’s assessment carefully evaluated the potential for cancer and special sensitivities to the most vulnerable populations. The agency also paid particular attention to potential exposures of those who live, work, or spend time in areas near fields where iodomethane might be used. The risk-assessment techniques, protocols governing generation of toxicology studies, and exposure evaluation methods used to support the evaluation of iodomethane have been peer-reviewed by agency scientists, the independent Scientific Advisory Panel or both. By using a thorough evaluation process the agency concluded that there are adequate safety margins and the registration of iodomethane does not pose significant risks.

On September 25, EPA received a letter signed by 54 scientists who oppose the registration of iodomethane as a soil fumigant, citing potential human health and environmental concerns, and requested additional peer review. EPA has discussed its assessment with some of the signatories and sent a letter to inform these scientists of the rigorous science used to support EPA's decision.

Iodomethane can be used as a pre-plant soil fumigant to control plant pathogens, nematodes, insects, and weeds on strawberries, tomatoes, peppers, ornamentals, turf, trees, and vines. More information on iodomethane is available on EPA's Web site at: http://www.epa.gov/pesticides/factsheets/iodomethane_fs.htm.

2) New Pesticide Registration Notice Informs Registration Applicants about Agricultural Task Force that Develops New Exposure Data

EPA has issued Pesticide Registration (PR) Notice 2007-3 to inform pesticide registrants, applicants, and other interested parties about the Agricultural Handlers Exposure Task Force, L.L.C. (AHETF). This industry task force is developing data to support pesticide registrations, and registrants may wish to join. Specifically, AHETF is comprised of pesticide registrants who wish to cost share in the generation of mixer, loader, and applicator ("handler") exposure data for pesticides used in agricultural settings. Formed in December 2001, the AHETF shares resources for the design, evaluation, and development of proprietary agricultural handler exposure data for use in regulatory risk assessment. EPA expects the data generated by the task force to provide the Agency with significantly better information for assessing handler exposure than the data routinely used at this time.

EPA requires registration applicants to submit pesticide handler exposure data to assess occupational risks of pesticides. Historically, a registrant would conduct active ingredient-specific exposure studies for workers handling pesticides in order to provide information to the Agency. It has become widely accepted, however, that handler exposure is not simply a function of the active ingredient used, but rather depends on other factors such as pesticide formulation, the amount of pesticide used, handler activity, and personal protective equipment and engineering controls used.

Through industry and government efforts, the Pesticide Handler Exposure Database was created in the early 1990s to estimate handler exposure to pesticides. Companies contributed the data without compensation for the benefit of all registrants. Although these data still represent the best available information for assessing handler exposure, the database does not cover all handler exposure scenarios. Some of the existing data also may not be fully representative of current exposures due to changes in work practices, formulations, and equipment.

A January 2007 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel meeting confirmed the need for new exposure data and endorsed the Agency's proposed methods to generate the data. Over the next four to six years, the AHETF intends to conduct additional field studies that will meet current scientific and ethical standards. Only AHETF members will have proprietary rights to the data, and others who wish to use the data will be required to compensate AHETF or generate their own data.

Seedless Watermelon Transplant Production

It is too early to begin transplants for spring 2008, you need to start thinking about your production plans and goals now. Things like variety selection and production schedules should be put together soon, especially for hybrid varieties in high demand. Early order discounts can also be available at this time of year.
Growing seedless watermelon transplants can be a challenging task. Seedless watermelon seeds are more temperamental and sensitive to over-watering than seeded watermelon. For this reason it is very difficult for many farmers in eastern NC, who are familiar with the float bed system of growing tobacco transplants and who grow seeded watermelon on float beds, to produce strong, healthy, vigorous seedless watermelon transplants.

Drs. Jonathan Schultheis (NCSU Horticulture Science) and Richard Hassel (Clemson University) recommend the following practices for producing seedless watermelon transplants.

**Seed Preparation:**
1. Choose seed trays that fit your operation and are economically feasible.
2. Square cells are best because round cells promote root girdling of the root ball.
3. Cells should be at least 2” in depth. Remember, the smaller the transplant cell the more timely your management must be to maintain good production & growth.
4. If reusing trays, be sure to disinfect with bleach to reduce the potential of soil borne diseases from spreading to new transplants.
5. Choose as coarse a soil mix as possible. Do not use a plug mix. The texture of these mixes is too fine, which makes it too easy to over-water. This makes less oxygen available and leads to reduced seedling vigor.
6. Fill trays 24 hours before seeding to let the soil mix in trays settle into each cell.
7. Wet trays to field capacity and let stand for 24 hours to drain excess water. Seedless watermelon seedlings do not like ‘wet feet’ and will either not germinate or will struggle.

**Seed Placement in Greenhouse:**
1. Place imbibed seeds at least one inch deep, preferably with the radical end pointing up and cover with warm, moist soil. This helps the new seedling develop sufficient roots quicker while helping to maintain vigor.
2. Place seed trays in a warm germination room (85°F) for 48 hours. Do not exceed 48 hours as excessive hypocotyl growth will occur. Stacking trays is OK provided there is adequate air movement in the germination room.
3. Maintain soil temperatures at 85°F for optimum growth and vigor. In addition to temperature, germination is dependent on moisture content. Too much water will lead to oxygen deprivation in the root zone and too little will prevent seed swelling. Excess water and high temperatures will lead to hypocotyl stretching.
4. Cover the seed trays with warm soil to facilitate the growth of the seeds & hypocotyl.
5. Do not add water to this mix after seeding. There is too much disease and root damage potential from a water application at this time.

**Why are Germination Rooms Necessary?**
1. May result in 10% increased germination rate.
2. May help increase the speed of germination.
3. Can lead to greater seedling uniformity.
4. Less space and less attention must be paid to them in this environment in an open air room.

The cost of the germination chamber you build depends on the type of seed you are trying to germinate, the amount of space you need, the level of precision in temperature control and how long you need to keep it running.

**Greenhouse Growing Conditions & Needs**
1. After 48 hours in a germination chamber, move seed trays to the greenhouse.
2. Set night temperatures to 65°F and set cooling/ventilation systems to come on during the day when temperatures are between 70°F and 75°F. If the greenhouse gets too warm, excessive hypocotyl stretching will occur.
3. DO NOT water until seedlings emerge. Excess water will also cause excessive hypocotyl stretching.
4. DO NOT fertilize until the appearance of the first true leaf. This is not the cotyledon leaf that you first see but the first true leaf.
5. At first true leaf begin fertilizing with a continuous feed of 50 ppm N to 100 ppm N twice per month.

**SLOW GROWING = QUALITY TRANSPLANTS.**
Plants like this develop thicker, stronger root systems, thicker stems and healthier leaf structures.

6. Plan on a period of four to six weeks from the time of seed placement in the greenhouse to transplanting in the field.

Following these guidelines should improve the quality of the seedless watermelon plants you grow.

If you have questions about any of the information, 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