

# North Mississippi Fruit and Vegetable Growers Newsletter



July 2015 Newsletter

## **Dr. Jeff Wilson – Regional Horticulture Specialist**

We are now in full swing with the fruit and vegetable season. Farmer's markets are getting crowded now that ripe tomatoes, sweet corn, peaches and watermelons are available. I have visited many of your farms this summer and have seen great produce being grown! I have also seen a lot of disease, insect and weather related problems too. Remember that you can always contact me or your county Ag Agent with these problems. We are all happy to help you determine what is wrong with your crops so that you can make the most profit possible. With that in mind, there are a couple of articles below that may be helpful to you for this time of year. Please read them and also make a note of the **upcoming events!**

As I said at the conference in February, I would be putting together a summer producer meeting in Verona. This gives you an opportunity to see the research being done here at NMREC and to ask any questions that you may have. We look forward to seeing you here.

## **UPCOMING EVENTS**

### **\*\*Summer Fruit & Vegetable Producer Day\*\***

**August 26<sup>th</sup>, 2015 at NMREC (Verona) from 7:00-10:30 a.m.**

We will have our first annual fruit & vegetable producer 'summer field day'. This gives each of you an opportunity to see the research that is being conducted in real time. We will meet early and get started by 7:00 am and have a field tour of Casey's research projects. After an hour or so, we will move inside to the auditorium to hear a few short programs and give everyone time to ask questions and talk with other growers. We plan to be done by 10:30 so you can get back to the farm and harvest for the next day's markets. I hope to see you all there.

### **\*Fall Flower & Vegetable Tour\***

**September 26, NMREC, Verona, from 9:00 am – 2:00 pm.**

Come and see all the horticulture research being conducted here in Verona. There will be lectures, garden tours, vendors, and more. This event is primarily for home gardeners, but is a great chance to get caught up on some of the research going on here at our facility. If you can't come in August, try to make it here in September.

### **Good Agricultural & Good Handling Practices Workshop**

July 30, 2015, (8:00am - 5:00pm), Room (A-103)  
CREC, 1815 Popp's Ferry Road, Biloxi, MS 39532  
More information is attached.

## **Dr. David Nagel – Vegetable Specialist**

The consequences of our cold, wet spring are still being realized. Reports of squash plants breaking under windy conditions may be traced to weakened, constricted stems from damping off diseases when the plants were seedlings. Several reports of tomatoes and peppers wilting and dying could have links to restricted root growth and/or diseases induced by wet conditions. Almost everyone is two weeks or more behind normal in plant maturity and harvest times. The good news is the sunshine is hitting plants regularly now and temperatures are close to normal.

Pumpkin growers should have their seed planted by now. Planting time is the first week of July for most varieties and the last week of June for people who want the largest possible pumpkin. Our warm nights work against us growing 1,000 pound behemoths, but 100 pound jack o'lanterns may be possible if the sun shines and the night temperatures cooperate.

Temperatures are getting hot enough that some large fruited tomatoes and peppers will not pollinate successfully. The fruit already formed will continue to develop, but new flowers may not produce any fruit. Small tomatoes like cherry, grape and small peppers, particularly hot ones, will continue to fruit.

Gardeners planting large fruited tomatoes now should be using heat tolerant varieties. Most garden centers have plants specifically labeled for setting in warm temperatures. Cherry and grape tomatoes are not as sensitive to high temperatures and do not require changing varieties now.

Be very careful using glyphosate (Roundup, Eliminator, Eraser and many other brands) around tomato plants. The sensitivity is eight grams per hectare or about a ninth of an ounce per acre to cause yield losses. If you use glyphosate in your landscape be sure to thoroughly wash the sprayer with soap and water and be sure to spray soapy water through the system to remove it from the lines and nozzles, then wash the outside of the sprayer.

## **Dr. Rick Snyder – Vegetable Specialist**

### **Green Shoulder**

This appears as a dark-green area at the top (calyx end) of ripening fruit, which never turns red. Often, the area may turn yellow as the remainder of the fruit ripens. The disorder is genetic, but is brought out especially in conditions of high light and temperature. Recommended procedures include increasing ventilation during warm periods, being sure that plants are not defoliated above developing clusters, using some type of shading system, and adequate phosphorus and potassium fertility. Also, some varieties are immune (non-greenback) or partially immune (semi-greenback) to this defect.

### **Blossom-End Rot (BER)**

Although referred to as a rot, this problem is not caused by an organism. It appears as a light tan, brown or black sunken area at or near the base (blossom end) of the fruit. It is not soft, but is firm and somewhat leathery and may be accompanied by a dry rot. Sometimes it appears only inside the fruit as a blackened area, with no symptoms on the outside. Occasionally, a secondary organism invades the tissue causing a soft rot. Remove and discard any immature fruit that show symptoms.

BER is caused by insufficient calcium in the fruit. Even though adequate calcium may be applied in the nutrient solution, it may not be reaching the fruit because of insufficient water. If plants wilt, it is difficult for nutrients to reach the fruit. Although BER is a calcium problem, it can result from water stress. Rapidly growing plants suddenly exposed to drought are especially susceptible. Any stress condition interferes with the uptake of calcium, and may cause BER. Some stressors are excessive salinity of the growing medium, high nitrogen, rapid plant growth, high temperature, high humidity, and root damage.

To prevent BER, maintain steady plant growth, and avoid wide fluctuations in water and temperature. The calcium level in the nutrient solution should be at least 125 ppm. Once BER occurs, it can be prevented in

non-affected fruit with a foliar spray of calcium chloride (36 percent calcium) at the rate of 14 to 64 ounces per 100 gallons (or 4 tablespoons/gallon) of water. Or, use calcium nitrate (20 percent calcium) at the rate of 17.5 pounds per 100 gallons (or 9 tablespoons/gallon) of water. For a small-scaled operation, a commercial product called “Stop Rot” is available. Use 1 pint per 7 1/2 gallons, and spray twice per week until the problem is corrected. Avoid excess nitrogen fertilizer, especially the ammonium forms. Ammonium increases the demand for calcium, limiting the amount available. Some varieties may be more resistant to BER.

Base variety selection on these criteria:

- size of fruit desired
- yield uniformity of fruit size
- lack of physiological problems, i.e., cracking, catfacing, blossom-end rot
- disease resistance
- market demand

### **MSU-ES Contact info:**

Below are the contact names and numbers that are directly related to the association and your production issues. Please start with your local county Extension agent to help find answers to your questions. They are capable of handling your request and have access to all of our resources

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