

September 17, 1999

Strawberry Information

Strawberry Plasticulture Advisory (Vol.1, No. 1)

Welcome! This is our first "on-line" strawberry plasticulture newsletter for the Southern Region's Virtual Small Fruit Center web site. A number of us at NC State, Clemson, UGA, VA-Tech, and Univ. of Ark. are very excited about having access to a "dynamic newspage" where specialists have a fast and easy way of submitting information to the web. Mr. Mike Bonnette, Assistant Information Manager at Clemson, has been utilizing this technology for the last eight weeks to support the Cotton entomology program there, and says, "It puts the information in the hands of the extension offices and growers very quickly, saving hard copy mailing costs and most importantly, time. This time lag, now diminished, is the key to making successful farming decisions in South Carolina."

Traditionally, we have communicated information through hardcopy newsletters, faxes, bulletins, meetings, site visits, and in more recent years, many specialists, agents and growers have found it easy and convenient to use the internet. Because this Web site is "so new", I know that many of us are feeling some apprehension about taking on "one more thing", such as a dynamic newspage column here in the BerryInfo section of www.smallfruits.org. But, hopefully, some of this worry will disappear as we discover in the next week or two how incredibly fast and easy it is to enter a crop advisory - almost at the speed of thought!

So here goes!

Hurricane Floyd leaves North Carolina awash!

The eye of Hurricane Floyd made landfall near the tip of Cape Fear, NC, at about 3 am 16-Sep-99, its winds had diminished to 110 mph; it was quickly greeted by a low pressure system that was moving from west to east across the state, which immediately began pushing it north. It was a fast storm and raced northeast and back out to sea near Virginia Beach by 11 am. Needless to say, when Bill Cline and other NC State Extension Specialists scheduled an In-Service Agent training for September 16th at the Hort.

Crops Research station in Castle Hayne (near Wilmington) a year ago, they had no idea about Floyd! Damage assessments were only beginning yesterday, but we do know that this massive, 520 mile wide storm is responsible for killing five, knocking out power for more 1 million people, tearing down beach homes and dropping up to 23 inches of rain in eastern North Carolina. Damage assessment efforts were underway Thursday, and one state official was confident that the tally "will easily surpass Bertha," a hurricane that caused \$1.2 billion in damage. With rivers still draining from Hurricane

Dennis (Labor Day weekend), the water that got dumped on dozens of towns throughout Eastern North Carolina was more than the land and rivers could handle. Thousands of homes along the Neuse and Tar Rivers had water up to their rooftops. At this point we do not have any direct reports from strawberry growers in the southeastern knot of counties in North Carolina

(Brunswick, New Hanover) that were hardest hit, but rainfall totals were greater than 18 inches for much of this area! That's about three times as much water that is needed to establish a new crop of fresh dug strawberry transplants (assuming 1/10th inch per hour irrigation application rate; 9 am to 5 pm daily for 7 days). Transplanting dates for fresh dug plants in this milder winter region are usually in early to mid-October.

Flooded plasticulture beds in the southeastern NC - damage is extensive! The storm flooding that caused water up to the rooftops of homes also did major damage to strawberry plastic beds that were laid this last week, prior to Floyd. One large grower I spoke with 7:30 am (17-Sep) had just returned from his field, and said, "The good news is that the storm is past and the sun is out, but I've got a 25 acres of plastic that has just blown away". The New Hanover county strawberry grower also shared that the beds were now standing about "half as high as they should be (10-12 inches)". This whole area is still without power, and I was able to reach this producer on his mobile phone. His plan was that soon as field conditions improve enough, they are going to "pull the remaining plastic", and go in and re-bed, fumigate and lay plastic over the same rows. The one major concern right now is the longer waiting period needed for using the 67 % methyl bromide + 33 % chloropicrin fumigant which has a longer waiting period before safe planting (double the length of time for 98% methyl bromide + 2% chloropicrin). Most of the industry was forced to switch to the 67:33 because of the need to extend remaining supplies of the methyl bromide fumigant.

Making the best of a tough situation in the Carolinas and Virginia aside from the extra expense and work associated with "starting over" with plastic laying operations in the southeastern areas, there are many producers in Tidewater Virginia and northeastern NC who have been plagued by almost non-stop wet field conditions since Hurricane Dennis. Overall accumulations from both storms are in the areas of 22 inches. Luckily, there are some local supplies of 98% methyl bromide + 2% chloropicrin still available, and growers who have not yet fumigated, or need to re-fumigate, are strongly urged to use this product given the "critical situation" we are now in. As one grower/supplier I spoke to said this morning, "The situation is now critical for a lot of growers who have not been able to fumigate because of Dennis, and with heavy drenching from Floyd it is really going to be tight this year". He further mentioned, "Some of the producers up in the Virginia Beach have still not been able to make their beds, and they are usually planting by the end of next week (around 25-Sep)." Luckily, for these growers, there are some supplies of 98:2 still left. He continued to say, "24 to 36 hours after the fumigation, holes can be punched (for planting), and then planting can be done within one week of fumigating with the 98:2". Apparently, supplies of plastic and drip tape supplies are also good, but it will be vital for growers who need to re-fumigate, to get in touch with their dealers for plastic, drip tape and fumigant suppliers as soon as possible.

Stay in close touch with your plant supplier!

Under these circumstances where everyone is running so far behind, it will be vital to stay in close contact with your nursery supplier so that plants don't show up at , and you are not ready to plant! It is possible to safely hold fresh dug for up to one week in a cooler (34-36 F), but holding them longer is not generally advised. The plug plant may have an important advantage over the fresh dug transplant this season as plugs can be transplanted up to 5 days later without any detectable yield reduction relative to the fresh dug plant.

Special Report from Eastern North Carolina - Eric Bish, Extension Associate, Dept. of Hort.

I went down through Castle Hayne, Wilmington, and Calabash yesterday. Damage was extensive - primarily from flooding. I visited one strawberry grower in Calabash, Sam Bellamy. They received over 20 inches of rain from the hurricane. Sam was fortunate in that most of his land drains well and is on higher ground. The high winds removed some of the plastic that he had already laid for strawberries. We are conducting a fall fruiting experiment at Sam's that was partially planted last week. Much of the plastic had to be laid back on the beds and the plants pulled back through the plastic. One of the major problems for Sam's family is the loss of electricity. Sam's family rushed to harvest as many of their fall crops as possible, before the storm. Now that the storm knocked out their electricity the cooler that the produce is stored in is not working. Muscadine grape growers were also hard hit. Most of the fruit that had not been harvested yet was knocked off the vines. The day before the hurricane hit I was in the Western Mountains. Many of the mountain growers are suffering from an extended drought. It was quite distressing to see the extreme dry conditions in the mountains one day and then extensive flooding on the east coast the next day.

South Carolina

I received the following advisory from Powell Smith, Area Agent, Clemson on Friday of last week (10-Sep). At this time our web site was not running, but much of the information is still very timely. In the upstate (Piedmont/Mountain) region, field prep including fumigation/mulch laying are complete or underway. Tips are stuck and rooting. Plug use is predominant primarily due to the excessive drying conditions prevalent in the fall lately. In the Midlands, most growers are waiting for rain to fumigate and lay plastic as it has been EXTREMELY dry. Tips have been recently stuck. Plugs still predominate here, although there is interest in bare root due to the excessive number of crowns produced on the plugs after the very warm winter weather last year. Coastal plain growers are fumigating and laying plastic after recent rains, although some areas in the NE coastal plain are too wet to get into the field. Tips are arriving or have been recently stuck. Once again, here there is some interest in the bare root plants as many grower suffered from excessive crown production last winter. 'Chandler' and 'Camarosa' are the leading varieties with 'Chandler' still holding a slight edge in acreage.

'Sweet Charlie' is a distant third. Problems last year were a Phytophthora cactorum root and crown rot noticed more on plants from certain suppliers than others and general spider mite problems. Growers are being encouraged to chose well-drained sites, practice good water management, and scout early and often for mites.

Georgia

A number of us will be involved in the South Carolina-Georgia Strawberry Meeting next week. Please contact Dr. Gerard Krewer, 912-386-3410 (gkrewe@uga.edu) for this important strawberry plasticulture program (yoU can go to Events page and click-on this meeting and date to see the full program). We're all pleased that Georgia growers were spared the fury of Floyd! Hope to see many of you September 25th in Griffin, GA for this important program!

Question and Answer Section

Question

"I called down to Wilmington and they have over 20 inches from this hurricane, I'd like to probe your thinking Dr. Miner (Soil Scientist, NC State) on what we can tell our farmers about the status of the pre-plant fertilizer in these beds after the heavy flooding?" (Barclay Poling)

Answer (Dr. Gordon Miner, Professor, Soil Science, NC State)

Even with 16 inches of water, the question we have to ask ourselves is "How much passed through the holes in the plastic?" I guess you could say a column of water measuring 2 inches in diameter (size of holes) by 16 inches long went through each hole. The volume of this water is 650 cm³ which is 0.650 L. Since there are 17,500 holes/acre, the total water that passed through the plastic would be about 11375 L. The area under plastic in a 1 acre field is 0.5 acre (2.5' wide bed on 5' centers) or 2023 square meters. The 11375 L of water = 11.4 cubic meters. So the depth of water passing through the soil under plastic would be 11.4 cubic meters/2023 square meters or 0.0056 M. This equals 0.5 cm which is 0.2 inch of water. Even allowing for extra water running through the holes (double the amount), it would be less than 0.5 inch. To me, this is not a problem, but I may be wrong. I don't think there has been much leaching except right under the plant. If roots extend to the side, I think they will reach N. However, if people want to hook up their drip system and apply more water, it won't hurt to inject another 20 to 30 lb N/acre."

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