

March 13, 2000

Strawberry Information

Strawberry Frost Alert for Early Tuesday Morning

Dear Agent,

We had a significant frost in many parts of NC early Monday morning, and we are going to have widespread frost again tonight. Many growers I have spoken with late this afternoon (after their nap) were pleased with their frost protection efforts last night. A few minutes ago I spoke with one strawberry grower in Monroe who had a low of 24 F last night, and 15 miles away the Charlotte airport had 30F. That is quite a differential, but whenever we hear of a forecast of 30-31 for an airport or major metro area, it never seems to fail that an outlying area in the country will record a temperature that is 5 or 6 degrees colder! Play it safe!

Classic radiation frost (3/13/00): There were virtually no winds last night at Clayton once we cut on at 5 am (temperature was 32 at start-up). We did not actually make ice right away, but by 6am there was a good ice load. The system was shut down at about 8 am. Protection was excellent. A number of growers in colder locations were turning on as early as 12:30 am.

The crop is now developing at a very rapid pace, and it is not uncommon to see 10 plus quality blossoms per Chandler plant. It is also noteworthy how similar the crop is in its stage of development across the state. Plasticulture fields in the northern piedmont and even up into Virginia are remarkably advanced, and everyone is at a pretty vulnerable point this week.

Similar conditions tonight: The minimum temperatures being forecasted for early Tuesday (3/14) are similar to what we experienced this morning. I have had a few requests today to reproduce the precipitation rate table for various temperatures and wind speeds (Table 1). An irrigation rate of 0.10 inch/hr should be successful for most growers this evening - winds should not be a problem.

Precipitation Rates:

Table 1. Required irrigation rates, in/hr, for a critical temperature of 28 F and relative humidity of about 70%.

Air Wind Speed, mph Temp. F 0-1 2-4 5-8 9-14* 27 0.10 0.11 0.14 0.16 26 0.10 0.13 0.16 0.17 25 0.10 0.14 0.18 0.21 22 0.10 0.18 0.24 0.29 20 0.11 0.21 0.28 0.34 18 0.12 0.23 0.31 0.38 16 0.13 0.26 0.35 0.43 *If wind speeds are above 15 mph it is unlikely irrigation for frost protection will be successful.

Here is the forecast we received today courtesy of SkyBit:

E-WEATHER FROST/FREEZE ALERT FOR THE SOUTHEAST Issued: 03/13/00

GENERAL SUMMARY

Chilly weather will continue through early Tuesday morning with frosts and freezes. Milder weather should return Tuesday afternoon, making frost unlikely Wednesday through Friday.

STATE-BY-STATE SUMMARY

NORTH CAROLINA, SOUTH CAROLINA, GEORGIA Clear and cold again early Tuesday morning with scattered frost and in some locations a freeze. Low temperatures 27-33F. Dew points will be in the upper 20s with light and variable winds.

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Good luck, Barclay Poling Extension Small Fruit Specialist (Strawberries and Muscadines)

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