

September 22, 1999

## Strawberry Information

### Strawberry Advisory

Eric Bish  
Dr. Gina Fernandez  
Dr. Frank Louws  
Dr. David Monks  
Dr. Barclay Poling

Heavy rainfall has halted strawberry field preparation in many areas. Many growers must therefore make some difficult decisions. The following advisory is made to provide growers with some of their options.

1. What might happen if you wait to Fumigate with methyl bromide / chloropicrin until land is workable.

Fumigation is meant to provide optimal disease, weed, nematode, and insect control. Dr. Louws and Dr. Fernandez have reported 10 to 30 % reduction in yield when no fumigation is used.

If methyl bromide is used, the 98:2 (methyl bromide:chloropicrin) formulation is preferred since this fumigant will dissipate quicker and allow planting in a shorter time frame. The minimum exposure time should be 48 hours after which time holes can be punched in the plastic mulch to allow for aeration. Soil in which plants are to be set should be aerated for a week to 10 days. Exposure and aeration time should be doubled if soil temperature is between 50 F and 60 F.

The 67:33 formulation has higher chloropicrin content and may require a longer aeration time of up to 14 days. The effect of late planting on crop productivity depends on our fall and winter temperatures. For example, late planting last year (extremely warm fall and warm winter) would not have significantly impacted production. However, late planting in 1995-96 (extremely cold fall/winter) resulted in the following yields at the Central Crops Research Station in Clayton:

Planting Date - lbs./acre  
Sept. 28 - 20,481  
Oct. 9 - 10,521  
Oct. 19 - 4,481

Remember to consider the cost of the fumigant when making your decision.

2. Growers need to consider the field history. If strawberries were planted in the same field this past year, no fumigation would increase risk of disease.

If growers can rotate their fields the risk of no fumigation decreases. Methyl bromide also offers weed control and this should also be considered when deciding the need for fumigation.

3. Plant type may be another important consideration. Plug plants would work best for late plantings because they establish quicker (start growing faster). "California cut-offs" would not be recommended for late plantings. These bare-root cut-offs generally grow slower than "green-top" bare-root plants.

4. If our fall is cool, growers can use row covers to increase fall flower initiation. Optimal temperatures for flower initiation are around 70 degrees F during the day. If day temperatures are in the 40's-50's very little flower initiation occurs, thus row covers can be applied to increase these temperatures. Row covers should not be used if air temperatures are 70 or greater because this may cause fall blooms to develop.

5. The best scenario for some locations may be DON'T PUT ALL YOUR EGGS INTO ONE BASKET. Consider planting part of your acreage as soon as possible without fumigation, and the other part you can fumigate and plant late.

6. Talk to your plant supplier so that they know when you plan on needing your plants.

Contributed by:

Mike Bonnette, Web Developer  
SRSFC  
109 Barre Hall  
Clemson University, Clemson SC-29631  
864.656.4048 (Phone)  
864.656.5675 (Fax)  
jmbonne@clemson.edu

[The Southern Region Small Fruit Consortium](#)

Campus Box 7533  
1017 Main Campus Drive / Suite 1100  
NCSU Centennial Campus  
Raleigh, North Carolina 27695-7553

919.515.5365