

MEMO

To: Agents in Tobacco Growing Counties

From: Paul Denton
Professor and Extension Burley Tobacco Specialist
University of Tennessee
(865) 974-8839 phone
(865) 974 7997 fax

Date: 5/15/2009

Re: [Tips for Holding Tobacco Plants](#)

With the regular rainfall this spring, very little tobacco has been transplanted and growers are having to hold plants in the greenhouse much longer than they would like. This of course leads to increased incidence of pythium, target spot and other diseases. I've had several calls recently about both pythium and target spot. The message below from Bob Pearce and Kenny Seebold at UK offers several tips on holding plants in the greenhouse, which you may find useful.

~~~~~

You Got to Know When to Hold'em:

Current weather patterns suggest this will be a year in which tobacco growers may have to hold field ready transplants for periods of a few days to a week or more. Often this will coincide with periods of humid cloudy weather. Densely packed plants in a humid environment is a recipe for big problems. Below are some suggestions for holding plants until field conditions improve.

Maintain a low level of fertility: Reducing fertility levels to the 25 to 50 ppm N range will slow growth and reduce the amount of rank green leaf material that may be more susceptible to bacterial rots. At a lower level of fertility, plant may be more susceptible to target spot so appropriate controls for target spot must be kept in place. For best control of target spot, make sure that ventilation is optimal (see below for more details) and apply a mancozeb fungicide (Dithane DF, Manzate ProStick, or Penncozeb DF) on a routine basis. Use a rate of 0.5 lb of product per 100 gallons of spray solution (1 teaspoon per gallon), and apply 5-7 gallons of mix per 1000 sq. ft of bed (roughly 400 trays). Mancozeb should be applied every 5-7 days until plants are taken to the field.

Keep water levels up: The tops of the trays should be kept above the level of the boards in the bed. This will help to facilitate air movement across the tray surface and improve drying, important factors for managing foliar diseases.

Maintain regular clipping. Clipping plants down to  $\frac{3}{4}$  to 1 inch above the bud will help to slow growth and hold plants at a reasonable height for planting. Regular clipping also

improves air and light penetration into the tray surface, and this will be a great help in keeping diseases such as target spot and even collar rot in check.

Facilitate good air movement. Along with proper clipping and keeping water at optimal levels in float bays, make every effort to keep air moving on plants in float beds. This means lowering side-curtains in greenhouses for as long as possible, and running circulation fans if available.

Keep an eye out for *Pythium* root rot: The potential for severe *Pythium* root rot increases as the days become warmer. When float water reaches temperatures of 75 F and higher, disease spread is rapid and the degree of damage intensifies. It's not a bad idea to assume that *Pythium* will get into to even the most sanitary float system late in the season, so preventive Terrmaster use is the best practice. In most cases, a single application of this fungicide at 0.7 to 1 fl oz per 100 gallons of float water, made at around 3-4 weeks after seeding, will protect plants until setting time. However, if plants need to be held longer, a second application may be necessary – keeping in mind that the label prohibits use of Terramaster any later than 8 weeks after seeding. If a second (or in some cases first) Terramaster treatment is needed, get it in the float water before the 8-week restriction comes into play. If disease is present before the fungicide goes in the water, use a higher rate (1.4 fl oz per 100 gallons of float water). Keep in mind that if disease is severe, there could be a loss of useable transplants despite the curative application of Terramaster. Make sure to calculate the correct dose, and mix the fungicide thoroughly to avoid severe injury. Even at lower rates, we see things like root burn and slow growth on plants and these are more pronounced at higher rates (maybe not a bad thing if you are trying to hold plants). Due to the long periods of cool cloudy weather we can expect to see some premature blooming this season in the weeks immediately after transplanting. See Tobacco Fact Sheet Tob-03-05 for additional information on premature bloom.

<http://www.uky.edu/Ag/TobaccoProd/FactSheets/HTML/Tob-03-05.htm>

Kenny Seebold & Bob Pierce

Dr. Bob Pearce  
Extension Tobacco Specialist  
University of Kentucky  
319 Plants Sciences Building  
1405 Veterans Dr.  
Lexington, Ky 40546-0312  
(859) 257-5110