

MEMO

To: Agents in Tobacco Growing Counties
From: Paul Denton
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Date: 3/15/2004
Re: Burley Tobacco Variety Update

Dear Colleagues,

The following is an update on burley tobacco varieties.

Recommended Varieties 2004

The WordPerfect file link below leads to the list of UT recommended burley tobacco varieties for 2004. There are two changes from 2003.

In the black shank susceptible category, HB 04P has been added. HB 04P is exclusively produced and distributed by Rickard Seeds. It is a very high yielding variety of medium maturity and good quality. The yield potential is rated as equal to Hybrid 403. However, it has no resistance to black shank and is susceptible to the virus diseases.

In the black shank resistant category, R 610 has been removed from our recommended list. It originally had been ranked as a 4 in black shank resistance on a scale of 0 to 10, but subsequent testing has indicated that this ranking was too high. The rating has been dropped to a 3. This is too low to include in our resistant list, and the yield potential of R 610 is not high enough to place it on the susceptible list.

For further information on these and other commercially available burley tobacco varieties, see Tobacco Info Online's Timely Topics page located at <http://tobaccoinfo.utk.edu/TimelyTopics.htm>.



Tobacco Burley Variety 2004.wpd

Expected release of KT 204 LC

KT 204 LC, a new variety from Bob Miller's UT-UK breeding program is expected to be released for the 2005 season. It has been approved by the regional variety test program, and will be evaluated by the UT Field Crops Release Committee in the near future.

KT 204 LC has the highest level of black shank resistance and the highest yield potential of any commercially available black shank resistant line. It is rated as a 7 in resistance to both Race 0 and Race 1 black shank (KT 200 is rated as 6 for both races), and it is rated as a 9 on a scale of 1 to 10 in yield potential (equal to Hybrid 403 and HB 04P). It is a late maturing variety with good quality. With regard to other diseases, it is similar in resistance to TN 90 and KT 200.

Seed will not be commercially available in 2004. However, we will have some seed available for demonstrations in 2004.

Screened seed and LC varieties

You may be wondering, what's the "LC" on the new variety all about?

LC stands for "low converter". This means the seed has been collected from plants with a low potential to convert nicotine to nornicotine. Nornicotine is the most important of the TSNA's, or tobacco specific nitrosamines, in burley tobacco. I assume most of you have heard of TSNA's, but they are carcinogenic compounds that are of major concern to the tobacco industry. Seed that have been selected in this way for low conversion potential are called "screened seed." You may have heard of this; some buyers are encouraging their contract growers to use screened seed if they can find it, and some seed companies have been advertising some of their seed as screened.

Screening seed for conversion potential has been a part of the Tennessee and Kentucky breeding program for several years. However, the commercially available seed of TN 86, TN 90, TN 97 and TN 200 includes both screened and non-screened seed, and the only way for a buyer to know is to ask the seed company about a particular seed lot. To clarify this situation, the Kentucky-Tennessee burley tobacco breeding program has re-released 5 existing varieties as "LC" varieties, indicating they are screened seed with low conversion potential. These varieties are TN 86 LC, TN 90 LC, TN 97 LC, KT 200 LC and KY 907 LC. Agronomically, these LC varieties will perform just like their unscreened counterparts. In the future, all new releases from the UK-UT program will go through the screening process and will be designated as LC varieties.

If you have any questions about any of this, please contact me.