

**OPTIMIZING PRODUCTION WORKSHOP -
ULTRA NARROW ROW COTTON FOR THE
SOUTHEAST**

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Abstract

Interest in ultra narrow cotton (UNR) has grown over the last year in the Southeast. With this in mind we attempted to conduct some preliminary research that will enable growers to better manage their UNR cotton. Studies were conducted to evaluate growth and development of UNR compared to conventional cotton, thrips control, and weed management systems.

In terms of growth and development, plant mapping data provide insights into the differences between UNR and conventional cotton. UNR cotton set a higher percentage of first position bolls. The percentage of vegetative bolls and number of vegetative branches for UNR was much less than conventional cotton. UNR plant height was less than conventional and the peak of the bloom period was earlier than conventional. Basically UNR compared to conventional cotton seems to be earlier, shorter, more columnar, and set almost all first position bolls. Plant mapping data also indicated that early boll retention was lower for UNR cotton. This may not be the case every year, and may have been caused by a dry period early in the year because UNR began to fruit earlier than conventional. Lint yield was not significantly different between UNR and conventional cotton.

For thrips control, treatments applied were an untreated check, Gaucho seed treatment, Gaucho + Orthene, Orthene as needed, and Temik at 14.5 lb./acre. There were no significant differences between the thrips control treatments with the Temik treatment yielding the highest numerically, and significantly greater than the check. Temik at 14.5 lb./acre is probably not a feasible option in UNR, therefore further evaluations are needed to investigate thrips control effects on earliness and management options in UNR cotton.

Weed control studies looked at various systems, including a standard PPI and PRE program followed by Staple, a BXN system with Prowl PPI, Cotoran PRE, and Buctril or Buctril plus MSMA postemergence, and Roundup Ready

systems with and without soil-applied herbicides, The standard system generally was inadequate. The BXN system worked well except where sicklepod was a problem. Overall, Roundup systems were best. In contrast with wide-row cotton, however, there was a benefit of soil-applied herbicides in Roundup systems on UNR cotton.

After one year of work with UNR cotton we believe that there are certain advantages that can be gained with the system. UNR can be planted later than conventional cotton because there seems to be an earliness advantage to UNR cotton. The earliness advantage may also allow growers to double crop in some situations with small grain. There also may be more inherent flexibility in farm management options due to lower equipment costs in UNR cotton. There does, however, seem to be problems with UNR cotton. They include, but may not be limited to, weed control, getting a stand, higher seeding rates, desiccating for harvest, and increased Pix rates. The above findings are from only one year's experience with UNR. Future research needs to confirm some of these observations, and investigate areas of concern.