

**EFFICACY OF FUNGICIDE SEED
TREATMENTS IN NO-TILL COTTON**
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Abstract

Three experiments were conducted during 1992 and 1994-95 to evaluate fungicide seed treatments for their effectiveness for controlling cotton seedling diseases and helping to secure acceptable stands under no-till planting conditions. Getting and keeping an adequate stand is usually more difficult in no-till planting than in conventional planting. Treated seed used each year were from the seed lots provided for the Cotton Disease Council National Cotton Seed Treatment Program. Plantings were made into cotton stubble from the previous year with a four-row no-till planter equipped with cone units to plant the same number of seed/ft in plots of each treatment. Plantings were made on three areas with histories of stand problems. Planting dates were May 1, 1992; May 6, 1994; and April 26, 1995. In 1992, stands of 'Stoneville 453' were significantly improved over those in plots receiving untreated seed by 8 of 19 treatments evaluated. Yields were increased following planting of seed treated with 10 of the 19 treatments. Stands of Stoneville 453 were increased significantly over untreated seed by 8 of 15 seed treatments evaluated in 1994. Plots of 10 of the 15 treatments had reduced skip levels. Plant vigor was increased following use of 12 of the treatments. Yields were significantly improved with 10 of 15 treatments. Stands of 'Deltapine 50' were significantly higher in 1995 following planting of seed with 17 of 19 treatments included for evaluation. Skip levels, plant vigor, and yields were also improved by the 17 treatments. More optimum conditions for disease developed following the 1994 and 1995 plantings. Baytan 30 + Apron FL + Thiram 42S and Apron 350FS + Dividend 3FS + Maxim 4FS at two rates each were very effective both years (1994 and 1995) that they were included. NuFlow ND + Apron TL was effective at two rates in both 1992 and 1995. Vitavax-PCNB + Apron FL (single rate) gave stand and yield improvement in 1994 and 1995. Results obtained indicate the effectiveness and importance of fungicide seed treatments, even without supplemental soil fungicide treatments, in obtaining and maintaining a stand of cotton under the disease-conducive conditions likely to be experienced in no-till plantings.