

RESIDUAL CYANAZINE REPLACEMENT PROGRAMS

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Abstract

The loss of cyanazine as a post-direct and lay-by material has initiated several studies evaluating currently labeled products and products that the label has expired. Cyanazine was used primarily as a lay-by compound in cotton, and provided the cotton producer with excellent contact activity on many broadleaf and grassy weeds encountered at lay-by, and additionally provided residual control of small seeded grasses and several broadleaf weeds, including morningglory species.

Tests were conducted in Tennessee and Texas to evaluate linuron (Linex 4L) as a replacement for cyanazine in a lay-by situation. Review of the properties of linuron indicated promise for the compound to be a viable alternative to cyanazine. Linuron has a comparatively short residual, and additionally has no re-crop restrictions for soybean, corn, rice, or grain sorghum. Comparisons of university published performance data for Linuron place it nearly equal to cyanazine in annual grass control especially when tank mixed with MSMA. Linuron also provides comparable broadleaf weed control when compared to cyanazine, and additionally provides control of 8 -10" hemp sesbainia when applied basally as a post-direct treatment.

University of Tennessee data indicate 1.0 lb/A linuron provided 96% control of morningglory species (pitted and entireleaf) at 7 DAT, while 1.2 lb/A cyanazine provided 97% control, 0.6 lb/A diuron plus 0.3 lb/A linuron provided 99% control and 2 pt/A Roundup Ultra provided 60% control. Goosegrass control 14 DAT was 80% with 2 pt/A Roundup Ultra, 50% with 1.2 lb/A cyanazine, and 95% with 1.0 lb/A linuron.

Texas A&M data was equally promising. At 7 DAT Diuron at 0.5 lb/A plus 0.5 lb/A linuron provided 99% control of morningglory spp., while Roundup Ultra at 0.75 lb/A provided 75% control, 0.3 lb/A Harvade plus 2.0 lb/A MSMA provided 84% control and 0.25 lb/A Goal provided 88% control. Diuron at 0.5 lb/A plus 0.5 lb/A linuron provided 100% control of morningglory spp. at 18 DAT, while Roundup Ultra at 0.75 lb/A provided 90% control, 0.3 lb/A Harvade plus 2.0 lb/A MSMA provided 93% control and 0.25lb/A Goal provided 97% control.

Recommended Linex 4L application rates will be 0.75 to 1.5 lb/A depending on soil type. Linex 4L + Direx 4L tank mix rates will be 0.4 + 0.4lb/A to 0.6 + 0.6 lb/A, tank mixed with 1.25 to 1.5 lb/A MSMA.