ALLEGIANCETM-FL: A COTTONSEED TREATMENT FOR THE CONTROL OF PYTHIUM SEED AND SEEDLING BLIGHT

J. L. Riggs and K. S. Arthur Gustafson LLC Plano, TX

Abstract

Allegiance-FL is a metalaxyl-based product offering seed and seedling protection against Pythium seed rots and preand post-emergence damping off. Allegiance-FL contains 2.65 pounds of metalaxyl per gallon of product and is formulated for seed treatment usage. In the United States, Allegiance-FL is labeled on over 50 agronomic crops. Registration of Allegiance-FL by Gustafson LLC followed the voluntary cancellation of the seed treatment use of metalaxyl by Novartis. While Allegiance-FL is a new product, it already has a proven performance record in the seed treatment arena.

As a cottonseed treatment the recommended label rate for Allegiance-FL is in the range of 156 to 208 ppm or the 0.75 to 1.0 fl. oz. per one hundred pounds of seed. Data for stand establishment, vigor and yield that compares Allegiance-FL to Apron®-FL shows consistency between the two products with respect to efficacy. Allegiance-FL offers the same systemic activity as the retired Apron-FL and has proven to be just as user- friendly and seed safe. Numerous field trials illustrate the excellent efficacious activities of Allegiance-FL and also demonstrate that stands with seed treatments of Allegiance-FL are equal to stands provided by Apron-FL. In a field study in the Mississippi Delta, a comparison of day 14 emergence counts showed statistically similar values for treatments which contained the 0.75 fl. oz/cwt rates of Allegiance-FL or Apron-FL. The emergence count for the Allegiance-FL plus RTU-Baytan-Thiram @ 3.0 fl. oz./cwt treatment was 72.8 compared to a count of 71 for the same treatment with Apron-FL. A direct comparison of stand on day 14 of Allegiance-FL to the same treatment with Apron XLTM (mefenoxam) also showed similar results. However, comparison of yield revealed statistically similar pounds of lint per acre for the Allegiance-FL and Apron-FL containing treatments, but yield with the Apron XL treatment numerically lower by 100 pounds. In the 1998 Delta and Pineland cotton fungicide seed treatment trials across five states, a treatment, which contained Allegiance-FL, averaged an emergence count on day 13 of 59.5 and day 32 stand established value of 63. The emergence and stand counts for the treatment with Apron-FL were 52 and 60 plants, respectively. To date, all studies done on cotton and all other crops which Allegiance-FL is registered, supports that Allegiance-FL has the same consistent efficacy of Apron-FL and provides protection equal to that of Apron XL.