

WHEAT AND GRAIN PROJECT REPORT 2006 SUMMARY

Title: Development of a Seed-producing Sunn Hemp Cultivar for Alabama

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Results:

Two large breeding blocks were planted in May 2006 with seed from plants selected in previous years for ability to produce good quality seed in Alabama, shorter plants and early maturity. The stands suffered major losses due to the drought that affected the state despite frequent irrigations. At the Plant Breeding Unit (planted 4 May), emergence was more even and plant growth in breeding block indicated progress due to selection in the previous year. Plant growth in breeding block at the Field Crop Unit (planted 19 May) was more affected by the drought, emergence was erratic and plant evaluation was thus limited. About 600 plants were selected and individually harvested from both locations. A herbicide test indicated that sunn hemp is sensitive to Roundup but tolerant to Prowl and Pursuit. Another experiment was used to observe that sunn hemp can out compete weeds.

A second experiment was conducted in 2006 to measure the impact on broiler performance of including ground sunnhemp seed in broiler feed. Results indicated that for 21-day-old broiler percent mortality was the same for the control and the two feeding levels (0.5% and 2%) that included ground sunnhemp seed. After conducting a study in which we analyzed and quantified toxins sunn hemp seeds, and two studies in which whole and ground seeds were fed to broilers, we can conclude that seeds of sunnhemp are non-toxic to chickens. However, it is not feed stuff either.