

WHEAT AND GRAIN PROJECT REPORT 2005  
SUMMARY

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

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**Results:**

Two large breeding blocks were planted in early June 2005 with seed from plants selected in previous years for ability to produced good quality seed in Alabama, shorter plants and early maturity. Plant growth in 2005 indicated that there has been substantial progress made when selecting in previous years. About 600 plants were selected and individually harvested from the FCU. Strong winds created by the path of hurricane Denise broke the stems of nearly 50% of the main crossing block at PBU. Of the surviving plants, over 400 were selected and individually harvested .

A research was conducted to analyze and quantify sunn hemp seeds for several of the toxins that have been reported in seeds of plants that belong to the genus *Crotalaria* such as showy crotalaria (a weed poisonous to chicken). We determined that the toxins in our material and in the US cultivar Tropic Sun were very low, they had only a small fraction of what is found in showy crotalaria. Therefore, seeds of sunnhemp were considered to be non-toxic to chickens. Another study was conducted to determine if indeed the seeds were not toxic to chickens. Results indicated that for 21-day-old broiler percent mortality was the same for the control and the two feeding levels that included sunnhemp seed. Further research is needed with chicken using ground sunnhemp seed.