Project Title: Assessment of Health and Safety of Black Farmers in the Southern Coastal Region

Project description:
The purpose of this project is to investigate the health and safety of black farmers in the southern coastal region because the vast majority these farmers live in the South and agriculture is one of the most hazardous industries in the U.S. Further, since there does not exist a data base on agriculture related illness and injury in the Black farm population, this study will provide important information about how to better identify and address the health and safety disparities experienced by Black farmers, their workers and families.

Target Population: Black farmers

# Participants/Subjects/Observations: Approximately 1400 black farmers.

Specific Aims/Objectives:
The specific aims/objectives of this project are to investigate the health and safety of black farmers in the southern coastal region. The specific objectives are to:

1. Develop a database of current and comprehensive information about the rate, nature and severity of agricultural injuries and the general health status of Black farmers in the seven states of the Southern Coastal Agromedicine Center (SCAC) region (VA, NC, SC, GA, AL, MS, and FL).
2. Demonstrate the ability of the 1890 Land Grant Universities to form a collaborative multidisciplinary, multi-state, multi-university Agromedicine Alliance to work on identification and control of the common regional problem of the agricultural health and safety of Black farmers.
3. Use this project and the development of the Agromedicine Alliance as a model for the 1890 Universities to collaboratively address safety and health issues among Black farmers and thus help to reduce health disparities on Black farms.

Methods: This project involves an in-depth survey of injuries occurring on farms of Black owner/operators, and an assessment of the general health of the owner/operator and workers/family members that have been involved in injuries. The survey is being conducted with Black owner/operators of farms in seven states in the Southern Coastal region: Alabama, Florida, Georgia, North Carolina, Mississippi, South Carolina, and Virginia.

A nonprobability sample is being used to collect these data. The sampling frame consisted of counties in these states with the largest number of Black owner/operated farms. County extension agents are administering the interviews to Black farm owner/operators with whom they have good working relationships. All county agents
were trained in conducting the face-to-face interviews by the project staff at North Carolina A&T.

Descriptive statistics (frequency and percentage distributions, measures of central tendency and dispersion) are being used to analyze these data. A 0.05 level of significance is being used to compare differences.

**Results:** Preliminary sample statistics reveal that the sample data accurately reflect the population parameters. Of the sample respondents, a typical profile of a black farmer is one whose age is 59 years old, male, with income derived from livestock enterprise and farmed an average of 48 acres. Seventy-three percent of these black farmers had not had a farm-related injury in the past 12 months. However, the use of personal protective equipment (PPE) for pesticide applications was a big concern. The majority of farmers and farm workers either do not use PPE or do not use it properly when applying pesticides. During an annual pesticide recertification workshop, the project staff conducted a six-hour training session on pesticide safety, security and use of PPE to a group of farmers. Additional training in pesticide application will be provided.

Relative to Objectives 2 & 3, a memorandum of understanding establishing the 1890 Agromedicine Alliance was completed and signed in April 2006. The primary objective of this agreement was to forge a close working relationship among 1890 Association of Research Directors, the Southern Coastal Agromedicine Center and the North Carolina Agromedicine Institute that fosters collaboration and cooperation in a joint effort to conduct research, education, and outreach programs that develop solutions for the occupational and environmental health and safety needs of agriculture, forestry and fisheries communities.

**Conclusions:** The second and third objectives have been completed; however, the third objective will continue after the project duration. There were delays during data collection stage because the extension agents and technicians had to work with the farmers’ schedule and, in most cases, the interview was re-scheduled. Another difficulty that we encountered involved getting the subcontracts signed in a timely fashion.

**Products:**

Poster Session at the National Institute for Farm Safety at B.C. Canada, “issues on Farm Safety and Health: The Case of North Carolina Minority Farmers.”

A presentation of the preliminary findings was presented at the Agromedicine Research Forum sponsored by the North Carolina Agromedicine Institute, “Assessment of Health and Safety of Black Farmers in the Southern Coastal Region,” (June 14, 2006).

A presentation of the preliminary findings was presented at the Joint Summer meeting of the Association of Research Directors and the Association of Extension Administrators, “Assessment of Minority Farmers Health and Safety in Selected Counties in North Carolina, (June 2005).
**Future Directions:** Given that farm safety is one of our major program areas in Cooperative Extension, we plan to continue research and extension work in this area, including developing intervention strategies to mitigate farm injuries.

**Additional Grants:** None to date.

**Center /P.I. Contact Information:** Dr. Alton Thompson, Dean-School of Agriculture and Environmental Sciences; 111 Webb Hall, North Carolina A&T State University, Greensboro, NC 27411; (336) 334-7979; altont@ncat.edu; Dr. Jimo Ibrahim, Farm Safety Extension Specialist; Coltrane Hall, North Carolina A&T State University, Greensboro, NC 27411; (336) 334-7957; jimoi@ncat.edu.