

# 2007 University of Arkansas at Pine Bluff Combined Research and Extension Plan of Work

## Alternative Crop Production

---

### V(B). Program Knowledge Area(s)

#### 1. Program Knowledge Areas and Percentage

- 203 20% Plant Biological Efficiency and Abiotic Stresses Affecting Plants
- 205 40% Plant Management Systems
- 211 20% Insects, Mites, and Other Arthropods Affecting Plants
- 601 20% Economics of Agricultural Production and Farm Management

### V(C). Planned Program (Situation and Scope)

#### 1. Situation and priorities

Small Farms, particular Limited Resource Farmers (LRF's), in the lower Mississippi River Delta need increased profits. Improving alternative crop production practices and increasing crop diversity on these farms have high priority. More efficient and sustainable production of vegetable and ornamental plants should increase profit on these farms. The LRF's need information on the most profitable vegetable crop rotations for farmers in their situation and effective integrated pest management systems. Adoption of innovated production practices and management schemes discovered in this program should reduce the number of LRF's going out of business. The target clientele who face the problem of growing vegetables on the same acreage each year are the LRF's (mostly black) in Eastern and Southeast Arkansas. The LRF's are reluctant to visit the FSA office to set aside additional acreage for vegetable production.

### V(D). Planned Program (Assumptions and Goals)

#### 1. Assumptions made for the Program

Small farms in the lower Mississippi Delta will increase alternative crop production and use production practices to increase farm profits. Increased profits would come from use of more adaptable and sustainable production practices such as rotation/sequence planting of vegetables, and development of insect control methods to avoid disease and insect build up. The assumption is that by adapting practices developed in this research, LRF's will be able to avoid disease and insect problems by proper rotation of vegetable species and use of alternative insect control methods on their land area set aside for vegetables. LRF's in the UAPB clientele areas are not producing ornamental crops. This research will recommend plant species and production practices that will allow selected LRF's to be successful in ornamental horticulture production.

#### 2. Ultimate goal(s) of this Program

Expected goals and outcomes are vegetable crop rotations and information that allow LRF's to continue to produce high yield good quality vegetables and good profit from their vegetable acreage, while continuing to enroll maximum row crop acreage in the DCP program.

### V(F). Planned Program (Activity)

#### 1. Activity for the Program

Conduct research experiments; make presentations in conferences and meetings; conduct workshops and field days, etc.; develop Extension publications; and develop research publications.