

Sustainable Agriculture (Urban Gardening)

Sustainable agriculture gardening has become an increasingly popular, and some would say necessary, activity for urban households in the District of Columbia and nearby communities in Maryland and Virginia. However, this engaging, quality of life community activity is becoming more difficult due to:

- 1) the lack of land space resulting from an increase in residential and commercial constructions; and
- 2) the need to grow crops without adding harmful herbicides and pesticides to our land, air and water resources.

In assisting community urban households with methods for addressing issues relating to diminishing available land for gardening the Agricultural Experiment Station's staff conducts sustainable agricultural research; and in conjunction with the Community and Extension Services demonstrate to these urban gardeners how they can utilize sustainable agricultural techniques in order to maximize productivity and add plant nutrients in their gardens despite the small plots of land available to them.

Dr. James R. Allen, who is the Senior Researcher at the Agricultural Experiment Station, utilizes sustainable agriculture techniques that both demonstrate and train urban gardeners in the use of techniques in Integrated Pest Management (IPM) that result in the use of sustainable methods or the elimination of harmful herbicides and pesticides in order to control or eliminate plant disease and harmful pests.

Helpful techniques demonstrated and taught by Dr. Allen may include the use of composted waste materials for supplying plant nutrients; utilize IPM methods that increase plant resistance to disease and reduce attacks by harmful insects; and employ crop rotation to minimize the impact of unhealthy and unsustainable effects to the seedbeds. Dr. Allen has now expanded his United States Department of Agriculture/Sustainable Agriculture Research and Education (USDA/SARE) research to include specialty crops production of ethnic crops, alternative ethnic green leafy plants, tomatoes, beans, herbs, spices and ornamental plants.

These Agricultural Experiment Station's sustainable agriculture research programs occur in conjunction with Community and Extension Services programs. Community Outreach and Extensions Services staff assisting Dr. Allen in these sustainable agriculture research and community outreach programs include: Dr. Iveracottis Short, Mr. William Hare, Mr. Roy Lycorish and Mr. Yao Afantchao. Research is conducted at the Station's 143 acre Muirkirk Farm in Beltsville, MD.