

Horticulture CRSP - Projects in Kenya

Indigenous African Leafy Vegetables (ALV) for Enhancing Livelihood Security of Smallholder Farmers

(Ending May 2011)

Principal Investigator: Stephen C. Weller, Purdue University

Collaborators: Kenya Agricultural Research Institute and Moi University, Kenya

This project enhances the potential for production, utilization and marketing of ALVs like: spider plant, African nightshades and amaranths, in Eastern Africa. These indigenous species contain higher levels of nutrients than common exotic species like cabbage. This project focuses on establishing a base of information and experience for greater production and use of indigenous vegetables. In the long-term this project will improve nutrition, health and economic security for Africans.



African Leafy Vegetables Workshop, participants and trainers.

Agricultural Technology Transfer in Kenya: A New Approach to Training & Engagement

(ending October 2011)

Principal Investigator: Steve Fennimore, University of California Davis

Collaborator: South Eastern University College (Nairobi)

This project engages urban professionals in the development of rural-based agricultural businesses by equipping them to serve as a link between farmers and agricultural experts. The project will be mutually beneficial to professionals and farmers. Professionals will be exposed to opportunities to invest in agriculture and farmers will be exposed to business and scientific networks. The project benefits rural and urban communities by promoting steady employment. The training strategies implemented in this project will be gender tailored to promote leadership among women as well as men.



Farmers prepare soil for sterilization.

Increasing Smallholder Vegetable Farmer Utilization of Grafting, and Low & High Tunnel Microclimate Management Tools in Kirinyaga District, Kenya.

(ending October 2011)

Principal Investigator: Matthew Kleinhenz, The Ohio State University

Collaborators: Kenya Agricultural Research Institute, Kangai Tisa Horticultural Farmers, and Agro Farm Services.

This project seeks to identify strategies and information to improve tomato and pepper production through the increased application of grafting and tunnel techniques among smallholder growers in Kirinyaga District, Kenya. Tomato and pepper production are important sources of income and nutrition in the region. There is potential for production to increase if cropping systems are made more efficient. However, the availability of regional resources is undocumented and guidance for farmers to apply improved production tools is lacking. This exploratory project seeks to fill these gaps.

Low Cost Pest Exclusion and Microclimate Modification Technologies for Small-Scale Vegetable Growers in East and West Africa

(ending October 2013)

Principal Investigator: Mathieu Ngouajio, Michigan State University

Collaborators: Kenya Agricultural Research Institute, Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Egerton University

This project utilizes alternative pest management techniques, microclimate modifications, and grower's education and training to improve small-scale vegetable production in East and West Africa. In this region, 33% of the population is undernourished and vegetable farms are routinely devastated by pests and drought conditions. Participatory methods will be used in this project to improve crop yields and quality and alleviate some of the grave agricultural problems that affect these farmers.



Microclimate modification for seedling growth .

Extension of Appropriate Postharvest Technology in Sub-Saharan Africa: A Post Harvest Training & Service Center

(ending October 2013)

Principal Investigators: Diane M. Barrett, University of California, Davis

Collaborators: Kenya Agricultural Research Institute (KARI), Kenya Plant Health Inspectorate Service (KEPHIS), and Moi University, Kenya

This project combines a wide variety of training programs, adaptive research, and demonstrations of post harvest services to reduce post harvest losses, and improve food quality, safety and nutritional value in Sub-Saharan Africa. Thirty postharvest specialists from six Sub-Saharan countries will be trained to implement and teach postharvest techniques to approximately 1,000 women farmers in their home countries. This project will result in increased consumption of higher quality produce and better returns of investment to women farmers.

For more information on Horticulture CRSP, visit <http://hortcrsp.ucdavis.edu>

