

Project Summary

Title	Development, promotion and dissemination of improved Fusarium wilt resistant pigeonpea lines in drought prone areas in Uganda
PI	Dr Clare Mukankusi Mugisha Department of Crop Science, Makerere University P.O. Box 7062, Kampala, Uganda Cell: +256774884041 Email: cmukankusi@yahoo.com
Co-researchers	Dr. Emmanuel Monyo ICRISAT Malawi, Chitedze ARS P.O. Box 1096, Lilongwe, Malawi Tel: +265999308796 Email address: e.monyo2@cgiar.org Dr. Thomas Areke National Semi-Arid Crop Resources Research Institute (NaSARRI) Serere, Soroti, P.O Soroti Tel: +2560454463663; Mob:+256-77-2-584039 Email: teeareke@yahoo.com
Purpose	The major objective if this project is to contribute to improved food security in drought prone areas through the development, dissemination and promotion of improved pigeon pea varieties.
Project Summary	Pigeon Pea (<i>Cajanus cajan</i>) remains a relatively untapped food legume crop in Uganda and in many parts of Africa mainly due to lack of promotion and availability of varieties that meet producer and consumer's needs. The crop is a rich source of protein, fixes nitrogen in the soil and tolerant to drought conditions. This makes it an ideal crop for the semi-arid areas of Africa. Compared to other grain legumes, pigeon pea has received relatively little research attention. There is a great potential to grow pigeon pea more widely in Africa if varieties that are more acceptable to farmers and adaptable are made available. This project will use a participatory breeding approach to develop and promote promising pigeonpea varieties resistant to Fusarium Wilt disease (<i>Fusarium udum</i>) among farmers in northern Uganda. Recent studies point to a very limited number and capacity of high-level trained research scientists in Tanzania and Southern Sudan. Young researchers are needed to build up a depleted NARS and also to replace those who retire, move on to other employers or otherwise leave their research institutions. Training of nationals from Tanzania and Southern Sudan in crop improvement will reinforce the capacity of the National Agricultural Research Systems (NARS) in these countries to respond to both new and long-term challenges in the areas of food security, economic growth, and resource sustainability. The project will therefore train TWO MSc. students in plant breeding. This project also seeks to initiate a breeding program for pigeon pea; only one other breeding program for Soyabean currently exists at the Faculty of Agriculture at Makerere University. Through this project, we will bolster the capacity of the Faculty of Agriculture at Makerere University to do Plant Breeding research and training by establishing a vibrant pigeonpea breeding program. This will help establish the Faculty as a center of leadership for Plant Breeding in the region.
Country and Specific	Uganda,

Location(s)	
Participating Institutions	Makerere University, ICRISAT Malawi, National Semi-Arid Crop Resources Research Institute (NaSARRI) Serere
Start Date	October, 2009
End date	October, 2011
Amount of Funding	USD 59,838

