Soybean Innovation Lab Newsletter

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Our Mission
The Feed the Future Innovation Lab for Soybean Value Chain Research is USAID's only comprehensive program dedicated to soybean research for development. Our international network of tropical soybean experts provides direct technical support to researchers, private sector firms, non-governmental organizations, extensionists, agronomists, economists, and technicians tasked with soybean development.

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Two Success Stories, One Mission

Tropical soybean varieties evaluated in Africa-wide testing platform

The Soybean Innovation Lab Germpmap & Plant Breeding research team is collaborating with the Syngenta Foundation for Sustainable Agriculture (SFSA) and the African Agricultural Technology Foundation to implement coordinated soybean variety tests across several countries in Africa. SFSA’s trialing platform, known as Seeds2B, began in 2013 evaluating tomato and sunflower seed varieties. SIL researchers Dr. Brian Diers and Dr. Randall Nelson from the University of Illinois approached SFSA to include soybean in the Seeds2B trialing platform. SIL provides the best African soybean varieties from research partners across Africa in an effort to identify the highest yielding, best-performing, and most locally adapted soybean varieties for the market. The Seeds2B platform facilitates the testing and registration of modern varieties and the establishment of distribution systems for quality seed in Africa. Dr. Diers and Dr. Nelson solicited and provided a total of 38 soybean varieties from its African research partners and Brazilian partner for entry in the SFSA evaluation.

Three regional tests in Africa are being conducted in 2015 in (1) Kenya, (2) Senegal and Mali, and (3) Malawi and Zimbabwe. Varieties will be grown in up to 6 locations within each region with 3 replications in each location test. Breeder’s rights are protected in the evaluations. SIL researchers focused on submitting soybean lines that will be available to growers by 2016. SIL entries include information on variety or strain designation, origin of seed material, ownership of germplasm, morphological descriptors, desired locations in which the lines should be evaluated as well as all performance data.

SIL research partners at the Savanna Agricultural Research Institute (SARI) in Ghana, the International Institute for Tropical Agriculture (IITA) in Zambia and the Jimma Agricultural Research Center in Ethiopia all provided soybean lines for the evaluation. See the trial results on www.tropicalsoybean.com.

Soybean Success Stories Distributed in northern Ghana

1,200 soybean success kits were assembled and distributed by SIL in April 2015. Dr. Kerry Clark with the University of Missouri collaborated with Catholic Relief Services, the Savanna Agricultural Research Institute (SARI) and the Ghanaian Ministry of Agriculture to assemble and distribute the 1,200 soybean success kits to farmers in three districts in northern Ghana.

As in the previous seed kit distribution in Mozambique, the Ghanaian soybean success kits contained 2.5 kilos of locally produced soybean variety (Jenguma), 2 kilos of fertilizer, a bag of inoculant as well as pictorial instructions on inoculating, planting and harvest, printed on the soybean success kit bags. Also included in the kits was a small bag of sugar for making a sticky solution for use in mixing the seed and inoculant.

Recipients of the kits received extension on soybean agronomy and, in some villages, extension on soybean nutrition and human utilization. In each village SIL researchers provided a demonstration on how to inoculate soybean; SIL is working within communities identified by the USAID Resiliency in Northern Ghana (RING) project, implemented by Global Communities and designed to contribute to the Government of Ghana’s efforts to sustainably reduce poverty and improve the nutritional status of vulnerable populations in 17 districts in the Northern Region. SIL researchers are also collaborating with other USAID initiatives in the region like the Agricultural Technology Transfer (ATT) project led by the International Fertilizer Development Center to expand the awareness and utilization of locally produced, low-technology soybean threshers. These machines can thresh approximately 1,000 kilos of grain per day and can be used for soybeans and many different grains. The threshers represent a potential solution to harvesting bottlenecks faced by smallholder soybean producing communities.

An example of a low-technology thresher which can be used to thresh many types of grains and soybean. These threshers represent a locally-produced harvesting technology at a suitable scale for smallholder farming communities, benefitting both local agriculture and manufacturing economies.

Soybean seed of the variety Jenguma at the Savanna Agricultural Research Institute (SARI) in Ghana. Jenguma is the most widely cultivated soybean variety in Ghana and was one of the entries in the SIL and Syngenta Foundation for Sustainable Agriculture (SFSA) varietal evaluation program.

Photo credit: Kia Alexander, University of Illinois

Philip Atim of Catholic Relief Services (CRS) works with Ghana Ministry of Agriculture Extension agents shows soybean success kit recipients the pictorial instruction for inoculating, planting and harvest.

Photo credit: Kerry Clark, University of Missouri

A Soybean success kit recipient shows the thresher used to harvest soybean in Ghana and one of the entries in the SIL varietal evaluation program.

Photo credit: Kerr Clark, University of Missouri
Meet a SIL Researcher & Collaborator

The Soybean Innovation Lab brings together U.S. and African researchers to address the most challenging issues facing soybean production and adoption in Sub-Saharan Africa. Here we introduce the U.S. and African experts committed to providing a sound research foundation to achieve the development to commercialization process of soybean in Sub-Saharan Africa.

Dr. Kerry Clark is a Senior Research Specialist with the Bradford Research Center in the University of Missouri’s College of Agriculture, Food and Natural Resources. Dr. Clark and her colleagues at the University of Missouri lead the Soybean Innovation Lab’s efforts to assemble and distribute the soybean success kits in Ghana and Mozambique, including coordinating the assembly and distribution with local partners and Ministry of Agriculture extension agents. Dr. Kerry Clark has an MS in agronomy and PhD in soil science from the University of Missouri and has twenty years of experience as a soybean breeder. She has co-released seven public varieties and many more branded varieties.

Philip Atiim is the SIL Project Liaison with Catholic Relief Services (CRS) in Ghana. Philip has been an integral partner in the SIL gender research and socio-economic research efforts. Philip has coordinated the implementation of the soy-adapted Women’s Empowerment in Agriculture Index (WWEI+) survey with SIL researchers from Mississippi State University and the soybean success kit distribution with SIL researchers from the University of Missouri, including Dr. Clark. Philip has a Master of Science Degree in post-harvest loss technology and has tremendous experience and knowledge of agriculture in Ghana. His expertise in creating seed storage methods to improve seed quality and germination.

SIL Hosting Soybean Kick-off Event in Tamale, Ghana October 2015

The Soybean Innovation Lab is working with partners at ACDI/VOCA leading the Agricultural Development and Value-Chain Enhancement (ADVANCE) project and at the International Fertilizer Development Center leading the Agriculture and Technology Transfer (ATT) project to implement a Soybean Kick-off Event prior to their annual “Pre-Harvest Event” in Tamale, Ghana on October 14, 2015. The goal of the event is to engage the private sector, government, academic research agencies and farmer communities in the soybean value chain.

The event will include sessions focused on the role of soybean in poultry feed; the integration of gender, savings and credit services and small-holder relevant technologies in the soybean value chain; engaging input suppliers; and a tour of the Soybean Innovation Lab germplasm, breeding and agronomic research efforts underway in northern Ghana. The event will bring together feed formulators, poultry and soybean farmers, processors, researchers, extension agents and input suppliers to address the constraints and bottlenecks facing the soybean value chain in Ghana and solutions to addressing these challenges.

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