Feed the Future Country Fact Sheet

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Soybean Testing Trials Hold Key to Better Yields in Sub-Saharan Africa

AATF

Field technicians manage pre-trials in Kenya, evaluating varieties from the Soybean Innovation Lab's research partner, the Savanna Agricultural Research Institute.

Third-party testing provides the degree of transparency that smallholder farmers need to access truly improved seeds that perform in their local environments. It is the foundation for creating a verified, reliable and transparent seed system, yet it has been a critical missing component in African agricultural development.

The Feed the Future Innovation Lab for Soybean Value Chain Research, led by the University of Illinois, Urbana-Champaign, is partnering with the Syngenta Foundation for Sustainable Agriculture to implement the first third-party testing of soybean in Sub-Saharan Africa—more precisely, coordinated soybean variety tests across several countries. The Soybean Innovation Lab is contributing to increased productivity of smallholder soy farmers by addressing improved varieties, supporting local best production practices, enhancing processing technologies, and promoting development of the soy value chain.

Soybean has been the fastest growing broad land crop in the world for the last 15 years. Yet farmers in Sub-Saharan Africa—who produce less than one-half of one percent of all soybean—have not yet been able to tap into the soybean revolution. Farmers from this region achieve only 20 percent of the yields compared with other tropical regions, partly because they do not have access to improved high yield soybean varieties.

The research team is using the Syngenta Foundation’s trialing platform, known as Seeds2B, which began to evaluate tomato and sunflower seed varieties in 2013. Soybean Innovation Lab researchers Brian Diers and Randall Nelson, from the University of Illinois, approached the Syngenta Foundation to include soybean in the Seeds2B trialing platform.

The Seeds2B platform provides testing and registration of modern varieties and establishes distribution systems for quality seed in Africa. Diers and Nelson provided a total of 38 soybean varieties from the Soybean Innovation Lab’s research and private sector partners across Africa and in Brazil for entry in the variety trial evaluation.

Varieties were tested in a pre-trial in Malawi over the 2014/15 winter season, and pre-testing began in 2014 in Kenya. The full variety trial evaluation will be implemented in 2016 in three regional tests: one in Kenya, one in Senegal and Mali, and one in Malawi and Zimbabwe. Varieties will be grown in up to six locations in each region with three replications in each location. Breeder rights are protected in the evaluations. The Soybean Innovation Lab and Syngenta Foundation are focused on repeating the trials in the current locations, including more varieties from interested partners, and expanding testing sites and countries.

To learn more about the soybean trial results, visit the **Soybean Innovation Lab's Tropical Soybean Information Portal**.