

## CRSP

## **COLLABORATIVE RESEARCH SUPPORT PROGRAMS**

## Learning from Success



Eliminating hundreds of fruit flies daily, pheromone traps reduce the cost of pest control and increase crop yields. When Bangladeshi cucurbit farmers used pheromone traps with mashed gourd traps, IPM CRSP research showed that they increased net returns by over 300 percent.



Initiated by Title XII of the Foreign Assistance Act, Collaborative Research Support

Programs mobilize the capacities of landgrant universities to address issues of food security, human health, agricultural growth, trade expansion, and sustainable use of natural resources in the developing world. For more information, visit www.crsps.net.

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## **CRSP Research Increases Agricultural Productivity**

Achieving increases in productivity, defined as deriving greater output per unit of input, is a central feature of USAID-funded agricultural programs and to the work of the Collaborative Research Support Programs (CRSPs). Productivity gains can come from improvement in breeding, from changes in cultivation practices, and from reducing losses post-harvest. Productivity per unit of labor can also be improved through the use of more efficient tools.

Collectively, the CRSPs contribute significantly towards increasing agricultural productivity while raising producer incomes and improving the natural environment. A few recent examples include the work of the AquaFish CRSP which has developed higher yielding sustainable rice-fish ponds in Mali. Using a different approach in the Philippines, AquaFish researchers have helped to reduce the cost of supplemental feed by developing alternative feeding regimes. The options included delaying until the fish are older to start the feed, feeding less than typically recommended amounts, or feeding 100% of feed but only on alternate days. These techniques have helped fish farmers to save money while maintaining production levels.

The **SANREM CRSP** is working in western Kenya and eastern Uganda on conservation agriculture techniques to arrest soil degradation and erosion and ultimately to reverse declining yields of maize and beans.

Plant crop yields are being increased through the work of the **Dry Grain Pulses** CRSP, which combines conventional and molecular approaches with participatory farmer research to increase resistance to both biotic and abiotic stresses in beans in Ecuador and Rwanda. The Peanut CRSP has used traditional breeding methods to achieve higher yields of groundnuts in Uganda by creating resistance to the Rosette Virus, adding an estimated US\$50 million in farmer incomes. INTSORMIL CRSP has successfully launched new, higher-yielding varieties of sorghum in Central America for use as cattle fodder and has helped breed Striga-resistant varieties that have been released through national programs in Africa.

New technologies often prove to be the pathway towards higher and more secure harvests. The **IPM CRSP** is testing ecologically-based IPM techniques to raise the productivity of high-value horticultural crops in East Africa. The **Horticulture CRSP** is promoting the Coolbot™, an inexpensive option for creating cold storage for fruits and vegetables.

