

Cottoning on to IPM

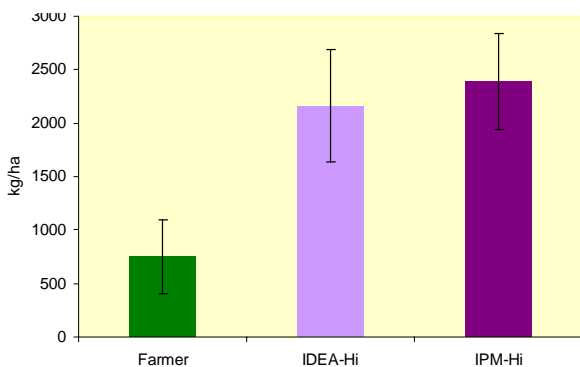
Cotton in Uganda is a smallholder enterprise and average yields fall well below the potential of the varieties. Substantial yield increases can be obtained by improvements in crop management. Insecticide is then required to protect the additional yield from pest damage, particularly by the bollworm, *Helicoverpa armigera*.

During its lifetime the CPP projects have been able to apply research across country boundaries. Outputs from the highly successful cotton IPM (integrated pest management) project have been applied in China and Pakistan (in collaboration with the Common Fund for Commodities) and are now being promoted in Uganda in conjunction with the USAID-funded Investment in Developing Export Agriculture (IDEA) project. The NRI and NARO (Serere Agriculture and Animal Research Institute) project team has access to IDEA's on-farm demonstrations (OFDs), which promote cotton agronomy, working in partnership with private-sector ginning companies.

The IDEA agronomy package promoted 4 calendar-based pesticide sprays. Through IPM techniques developed in India, pesticide applications, in the first 30 demonstration sites, were reduced from 4 to 3 or 2 without any reduction in yield. As pesticide is expensive this is a major economic as well as environmental benefit. IPM is now promoted on all 6000 OFDs, as a complete integrated crop and pest management (ICPM) system.



Cotton farmer in Uganda using the pegboard as a scouting aid for recording pest numbers



Despite using fewer pesticide applications, the IPM approach gave similar cotton seed yield to the IDEA approach

In order to target insecticide sprays at the optimum time to minimise pest damage, some form of crop scouting is required. This project designed, and produced, large numbers of wooden pegboards to help farmers to

record pest numbers or damage. The level at which spraying is required for each of the main pests is marked on the pegboard.

By 2005 all eight of the main private sector ginning companies in Uganda were participating in the project. The ginning companies provided the extension staff who were trained in crop agronomy and IPM. Each of these 'site co-ordinators' then trained ten of the farmers hosting the OFDs, in pest identification and recognition of some of the more prominent beneficial insects. More than 600 site co-ordinators were trained in IPM and, by 2007, 12,000 cotton farmers will have hosted demonstrations. Each farmer is expected to introduce at least 15 friends and neighbours to the technology, so that 180,000 farmers (60% of Uganda's cotton growers) will have been exposed to the IPM message.

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