

CARDI Belize

Work Programme Highlights for 2005 – 2007

CARDI Belize is the Institute's centre of excellence for cereals and grain legumes production technologies. Evaluation of dozens of corn has identified 'Pioneer 30 K 75' and 'DKB 191' among the yellow corn hybrids and 'Pioneer 30 F 96' and 'DK 353' among the white corn hybrids, as promising varieties for commercial production.

A modern soybean processing facility has been constructed by the Government of Belize and local production, targeted to reach 8,900 ha to provide about 20,000 t of beans, would provide the raw materials for the facility. In order to achieve this target CARDI, in 2006 produced of 4,750 kg of commercial seeds to be used for planting.

In the past year, the Unit maintained and multiplied for distribution seeds of a number of soybean, cowpea, peanut and chickpea germplasm.

At its 26th meeting, the Executive Committee of the CARICOM Council for Trade and Economic Development (COTED) mandated Belize to develop ***Draft Regional Standards for Red Kidney Beans*** to govern intra-regional trade in the commodity. CARDI has provided technical expertise to the Belize Bureau of Standards to develop these standards.

The technical capacity of CARDI Belize was augmented in 2005 with the addition of a resident entomologist. The Belize Agricultural Health Authority (BAHA) and the Citrus Research and Education Institute (CRIE) of the Citrus Growers Association (CGA), have started benefiting from this expertise. The Entomologist compiled information on commonly intercepted insect pests from BAHA's pest interception records for 2004-2006, towards developing a list of reference laboratories. A compilation of relevant information on *Scirtothrips dorsalis* Hood (chilli thrips) and red palm mite (*Raoiella indica* Hirst) was done in order to facilitate the design of surveillance programmes for these pests. Also, an assessment of damage to palm trees caused by the infestation by the American palm weevil, (*Rhynchophorus palmarum* L.) has been done and recommendations made for its management. CARDI, working in collaboration with CREI, commenced investigations on the identification of the citrus trunk girdling larva (TGL), as part of its entomological service to the Belize agricultural sector.

In 2007, six fungicides (Duett 25 SC, Score 25 EC, Tilt 25 EC, Amistar 50 WG, Silvacur Combi 30 EC and Bravo 50 EC) were evaluated, using soybean var. *Huasteca* 200, for the control of the Asian Soybean Rust, *Phakospora pachyrhizi*, which was first identified in Belize in 2006 as a serious disease of soybean. The results showed significant benefits, in terms of rust control and grain yield, with the application of the fungicides. There was no significant difference between the fungicides for rust infection. Disease severity was, on average, lower, 4.6 (on a scale of 1-9) for the fungicide treatments compared to 7.2 for the untreated control. Grain yield was also higher for the fungicide treated plots (2.3 t/ha average) than the untreated plots (1.9 t/ha).