

CARDI Dominica

Work Programme Highlights for 2005 - 2007

CARDI Dominica continued the long standing relationship with the Dominica Export and Import Agency (DEXIA) for the development and transfer of hot pepper production technologies to support the export trade of the commodity. DEXIA has narrowed down to the CARDI Green hot pepper as the pepper of choice for the fresh fruit market. Over 90% of DEXIA's contract farmers grow the cultivar, but consistently high yields are required to sustain the export market. Research work by CARDI Dominica has shown that such high yields (40 t/ha) are achievable by the adoption of technologies that promote branching, which increases the size of the pepper plant.

Yam anthracnose disease is of great economic concern to Dominica. CARDI Dominica has, therefore, during the past three years focused sustained effort to understanding the development and management of the disease. The studies have shown that the *Dioscorea rotundata* cv Ladies yam and the *Dioscorea alata* cv Babaoule yam, which are resistant and tolerant to the disease respectively, harboured the most virulent strain of *Colletotrichum gloeosporioides* and were a source of inocula for the disease. The study also established that toxins extracted from the pathogen isolates could be used to screen for resistance in the normally susceptible *D. alata* cultivars. Recommendations proposed at the end of the studies for the management of the disease included continued disinfestations of yam planting material and the introduction and screening of commercial *D. alata* cultivars with pathogen toxins from indigenous isolates.

CARDI Dominica has also partnered with the local cooperative, the Nature Island Pineapple Producers Association (NIPPA) for the development and promotion of pineapples on the island. Trials have demonstrated that although pineapples normally produce well at low altitudes, the commercial variety 'T#11' also produced high fruit weight at high altitudes in Layou Park (228 m above sea level). This means that opportunities now exist for NIPPA to further expand pineapple production in the country.

There is awareness in Dominica of the need to manage the trestiza virus disease in citrus. Hence, CARDI is providing leadership in a long term study to identify the most suitable rootstock / scion combinations for the management of citrus trestiza virus (CTV) in various agro-ecological zones. The scion is 'Tahiti lime' (TL) and the three imported CTV resistant rootstocks are 'Cleopatra Mandarin' (CM), 'Swingle Citrumelo' (SC) and Citron 'Carrizo' (CC). Data collected so far, show that the CM / TL rootstock / scion combination has the most vigorous growth with consistently higher values for plant height, foliage height and foliage width.

During the period under review, CARDI Dominica produced two manuals, Pineapple Manual and Hot Pepper Productivity Guide to contribute to knowledge on production and marketing of the two commodities.