

CARDI St Vincent and the Grenadines Work Programme Highlights for 2005 – 2007

CARDI St. Vincent and the Grenadines is the Institute's primary centre for undercover / protected agriculture (greenhouse) technologies. Two greenhouse facilities were constructed through the CARDI/IICA funding agreement and the enabling environment for the construction was facilitated by the Government of St. Vincent and the Grenadines. The facilities were used to train 20 CARICOM nationals from Montserrat, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. Thereafter, it has been used to investigate undercover production technologies. For example, it was used to determine the suitability of different media (coconut coir, promix, a commercially produced compost and mixtures of compost / coconut coir, compost / promix and promix / coconut coir) for producing seedlings under undercover conditions. The results showed that the mixture of promix / compost, and coconut coir / compost were the best as measured by the growth of sweet pepper seedlings and the incidence of algal growth.

In St. Vincent and the Grenadines sweet potato is very susceptible to pest damage, in particular the white grub (*Phyllophaga spp.*). Work done by the local CARDI Unit showed that the insecticides, Actara and Admire would successfully control the pest. However, the preferred biological control agents – Beauvaria, Natutalis T & O and Botanigard - were not as effective as the chemicals in controlling the pest.

CARDI St. Vincent and the Grenadines was the lead Unit in the project that characterised, for value added products, sweet potato varieties from Barbados, Jamaica, St. Kitts/Nevis, St. Vincent and the Grenadines and Trinidad and Tobago, and funded under the CARICOM/Japan Friendship Agreement Programme. One variety each from the island was categorised as suitable for flour ('Lover's Name') and for fries ('William's White').

CARDI St. Vincent and the Grenadines has also been spearheading the Institute's research and development work on cassava. The Unit collected baseline data for a better understanding of cassava industry, particularly with respect to farine production. Subsequently, improved cassava varieties obtained from the International Centre for Tropical Agriculture (CIAT), have been evaluated for their farine production potential. Five of the CIAT varieties produced farine to cassava meal ratio of about 50% compared to a ratio of about 25% for the local varieties. They were easy to process as well. This suggests that the CIAT varieties have the potential to impact positively on the cassava industry in St. Vincent and the Grenadines, and possibly in other Caribbean territories.

The Unit has also conducted research on other root and tuber crops. Comparison between dasheen grown from tissue culture with those grown from traditional planting materials showed that tissue culture is a viable alternative to traditional planting material.

With regards to research and development on hot peppers, collaborative work with the country's Ministry of Agriculture, Forestry and Fisheries demonstrated that thrips (*Thrips palmi* Karny) could be successfully controlled with the insecticides Neem-X and Pirate. Plastic mulching,

however, did not cause any significant reduction in thrips infestation on the pepper but it did result in higher yield of berries

CARDI St. Vincent and Grenadines also participated in the regional hot pepper varietal trial for the determination of the productivity of the eight stabilised hot pepper varieties maintained by CARDI. 'CARDI Green' and 'West Indies Red' were the most productive in terms of yield and berry weight.