The INTERREG-DEVAG project: a regional network for the development of agroecological cropping systems in the Caribbean.


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Abstract

In our Caribbean islands, increasing local food production and reducing the negative impact of agriculture is of great concern, especially regarding the most recent food crisis and the rising costs of imported food products and agricultural inputs. In this context, horticultural crops are the main target of the social demand to get access to safe, healthy and environmentally friendly products. Furthermore, horticultural products are an important source of income for small farmers. But currently these crops are still requiring highly intensive chemical inputs (fertilizers, pesticides) due to strong biotic (bacteria, viruses, insects, weeds...) and abiotic constraints (heat, humidity). It has become necessary to consider a radical change in production methods to move towards environmentally friendly systems and offering healthy products to local people, while valorizing biological resources already present in these fragile ecosystems but rich because of their high biodiversity. The objectives of the DEVAG project are (i) to develop scientific databases to accelerate the development of agro-ecological and organic horticultural productions and (ii) to create a regional network dedicated to the development of agroecology for fruits and vegetables in the Caribbean. To do so, research activities are focused on finding agroecological methods to manage pests, diseases and weeds which represent the main cause of loss of productivity and of pesticides use. Nevertheless, in order to built integrated cropping systems adoptable in our environments, it also includes researches on (i) substitution of chemical fertilizers by local organic resources, (ii) genetic plant material adapted to low-input systems, (iii) association with animals and (iv) a socio-economic approach. These researches are conducted in permanent connection with farmers and agricultural development agents who will benefit directly by participating in field experiments and technical schools.

Figure 1: Context, genesis and study cases running in the DEVAG project (oct 2009 - oct 2013)

DEVAG context

Lack of recommended agroecological practices adapted to local conditions and constraints

Weakness of links between research, extension and production to stimulate the emergence of adoptable innovation

Inadequate institutional, organizational and socio-economic environment

Underdevelopment of agroecological and organic farms despite an increasing demand from consumers for safe and environmentally friendly horticultural products.

Main activities

Identification of constraints, diagnosis

Main causes

DEVAG content

Field and greenhouse experiments, exchanges of knowledge and know-how

Main bricks at institutional and organizational levels

Main bricks at farm level

Contributing to agroecological (AE) and efficient cropping systems

Expected impacts at mid and long term

Improvement of plant health

Improvement of soil health

Better technical support at farmers level

Increasing interest of conventional farmers for these AE systems

Website of the Devag projet available soon (jan 2013) !

http://devag.tropicalecology.org