

In the case of horticultural productions in Caribbean, the implementation of agroecological cropping systems in insular environment needs to take into account the following restrictions :

- Strong biotic and abiotic restrictions within a fragile environment where the pest pressure (new strains more virulent, new introductions of dangerous organisms via transportation or vegetal material exchanges) strongly increases and still disables more and more horticultural crops, weakening the small familial agriculture.
- Environments already damaged by intensive crop practical work (soil degradation by losses of fertility, erosion, pollution...)
- Additional costs linked to the insularity, in particular for the fertilizers or the commercial composts importation, costs which continue increasing with the rise of the oil products necessary for their synthesis and their transportation.
- The necessity of assuring food security to populations to reduce the dependence of imported food products, encouraging a local agriculture respectful of its environment.

The specific objectives of the DEVAG project are :

- Implementing cropping methods based on ecological intensification to facilitate the development of the horticultural organic or agroecological productions
- Creating a regional network of exchange dedicated to the development of agroecology on fruits and vegetables in Caribbean.

As such, the project targets to respond at the expectations formulated by the professionals (producers and technical services of rural development) of the partnering countries :

- A demand of technical solutions to reduce the biotic constraints of the Caribbean horticultural productions. The tasks lead aim to create cropping systems adoptable by producers, systems which will have to combine :
 - Genetic resistance to the pests when it exists (in particular on both main crops which are tomatoes and yams which will be the subject of specific research actions) and a certain form of "hardiness" in low inputs systems.
 - The use of alternative methods to fight against pests: cover crops and/or integration of animals to control weeds in orchards; sanitizing plants to reduce telluric diseases; border crops to encourage the useful entomofauna ; or traps and natural substances to prevent the pests attacks on crops or to manage intestinal parasite of sheeps.
 - An optimal use of local organic material such as manures, composts or green manures to contribute to the improvement of soil fertility and plant nutrition. All this should contribute to

reduce the dependence to imported fertilizers and promote organic resources, sometimes important, available at the local level.

- A need to share and exchange with other producers involved in a similar production mode. The training sessions planned including Cuban and Haitian producers with others from Martinique and Guadeloupe will answer at this expectation enabling to meet each other on different fields while offering common theoretical basis.