

## **Report of Mission Saint Vincent 21-23 November 2011 Claire AMAR**

### **Presents :**

C. Amar, CIRAD Martinique  
P. Meynard, CIRAD Guadeloupe

### **Objectives of the mission :**

- Observations on the plantation of the 2000 hybrids CIRAD (500\*4 varieties) sent on Mai 2011 reception at St Vincent 6th Mai
- Observations on pieces with cover crops
- Installation of the evaluation of the resistance of new hybrids against Black Sigatoka

**Guide:** Mickaël DELPECHE, MOA, Plant Protection Officer  
Karomo BROWNE absent for vacation

### **November 21**

14:30 Arrived at St Vincent

- Ministry Meeting (MOA), S. VAN LOO Banana Section Manager, Mr. DELPECHE Plant Protection Officer, C. SAMUEL Leaf Spot Coordinator, R. HARPER R&D Crop Research, R. ROBERTSON Chief Officer Agriculture
- Meeting Hotel Mariners, Mr. DELPECHE, C. SAMUEL, R. TO GRIP, R. ROBERTSON

### **November 22**

7:30 - Visit of piece NFTO in Langley Park (new hybrids)

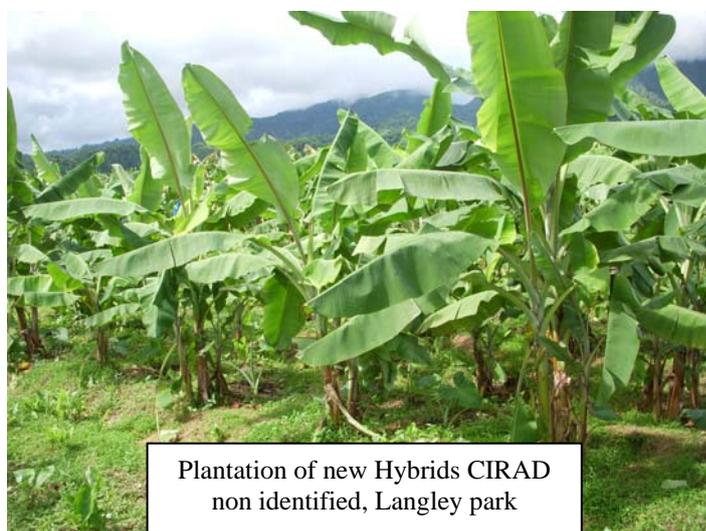
- Visit of the station (laboratory vitroplantlets) of Hill Orange
- Visit of the governmental piece of Demonstration of Irrigation, Hill Orange, National Authority off Irrigation
- Visit of the piece of Gideon GILBERT, Mesopotomia Valley
- Visit station of spreading Orange Hill

### **November 23**

7:15 departure to Fort de France and Pointe à Pitre

### **Observations on the new hybrid, Langley Park: grower pertaining to NFTO, Carlos BYNOE**

On the 300 remaining seedlings of new hybrids at the time of the last visit there remain only 138 seedlings divided into 2 unequal batches (104 + 38).



Plantation of new Hybrids CIRAD non identified, Langley park

Each batch is planted on 2 different lines, but the 2 varieties are not identified. It will be possible during the harvest of the fruits to identify the varieties. The plantation of the new hybrids took place the same day, on June 13, 2011 with much delay. It is difficult to carry out observations, because the plantation is not so maintained, the piece is invaded with grass. It was not envisaged to establish statements of data, this plantation was made starting from the surviving plants of the 1st batch. Varieties 'Jaffa' are planted on the piece, but with different ages. In spite of these difficulties, one observes a different behavior from the hybrids, which appear much more tolerant against the Black Sigatoka. This piece is fungicidal treatment free.

**Nursery of Orange Hill : Person in charge: Rohan Mc DONALD**

The seedlings are transferred from the greenhouse of Orange Hill, Taiwanese Mission, the same day of our visit for plantation on the piece of the governmental piece of Demonstration of Irrigation to Orange Hill (Technician Responsible for the station, 12 acres: Wendy Laverne JACKSON).

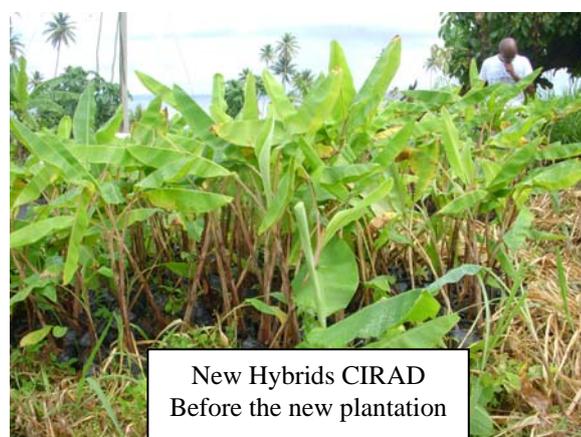
R. Mc DONALD transmitted the figures to us the numbers of surviving plants for each variety:

Cultivar	Number planted	NUMBER DEAD@ 1 <sup>ST</sup> HARDENING	NUMBER SENT TO STAGE 2 HARDENING	NUMBER PRESENT AT 2 HARDENING STATION	REMARKS
F916	877	368	509	509	HIGH MORTALITY RATE IN 1 <sup>st</sup> hardening stage is due to length of time spent at this stage (4 months)
F918	653	03	650	500	
F920	636	208	428	410	
F924	616	116	500	436	

For each variety, between 400 and 500 hybrids, will thus be planted, which constitutes a correct sampling for the evaluations.

**Visit governmental piece of demonstration of irrigation (Authority National off Irrigation)**

The plantation thus took place the day of our visit on a piece of 1-2 acres (0,4-0,8ha). The vitroplantlets were planted by batch, each variety is clearly identified. The hybrids will be separated by lines from Cavendish 'CV 902 '. On the selected piece there are a strong presence of adventitious and particularly with "*commelina*". It is agreed that these adventitious must be destroyed in order to limit the risks of Banana Streak Virus (BSV).



We have to notice there exists one hundred of banana trees of 'Golfinger' (hybrid FHIA AAAB resistant to the Black Sigatoka) on this station.

### **Evaluation of the hybrids**

The meeting of November 21 at the ministry enabled the presentation of the agronomic protocol of evaluations. Mr Karomo BROWNE (NFTO) and Sylvester VAN LOO (MOA) remain the chiefs of the project in Saint Vincent and gave the names of the following technicians (MAO) in order to record the datas: Feldman BROWN and Philman ALLEN.

### **Follow-up hybrids & Crops System (CS), visit of the piece of Gideon GILBERT**

The follow-up of CS could not be realized because of Gideon GILBERT's abandonment of its exploitation at Mesopotamia Valley. G. GILBERT also was to accomodate 1000 new hybrids on one of its pieces for testing Impatiens as cover crops. We unsuccessfully sought to join G. GILBERT in order to know his possible motivations for a resumption of its activities. It was envisaged to establish Impatiens, with the assistance of the MOA, in order to evaluate a test with this type of plant of cover under banana plantation. Consequently it will be necessary to envisage other tests of cover crops.

### **Evaluation of the acceptability of the market**

There remains planned that the first harvest will be intended for the local market. A weekly follow-up by the technicians of the ministry near the supermarkets will make it possible to evaluate the marketing of the hybrids: delivered quantities, sold, origin of not-sold, appreciation of the consumers,... A questionnaire CIRAD will be proposed before the harvest of the first fruits. The fruits resulting from the first cycle will be tested on the local market. The fruits could be collected at a late stage and will be tested with the voluntary supermarkets according to a questionnaire CIRAD.

### **Visit station of spreading Orange Hill**

A single-engined aircraft, equipped with special tubes, carries out fungicidal treatments on the island. The company which carries out spreadings is named Southern Aviation. The pilot, Duncan RICHARDSON, informs us that the organization of the treatments remain not still coordinated.

