



## **EcoFungi EcoFlora & Ecosil in bananas DOLE Best Quality Fruit Award 2004**

**Products: ECOFUNGI, ECOFLORA, ECOSIL**  
**Farm: Maria Helena. Owner: Pablo Baculima**  
**Crop: Bananas *Musa* sp. Var. Valery**

**Setting: Commercial Farm**  
**Location: El Triunfo, Ecuador**

Treated area: 50 hectares  
Control area: 50 hectares

### **Objective**

Increase banana fruit production using an organic program instead of a chemical program.

### **Method of product application**

Banana trees were planted at a density of 1,500 per hectare in 100 hectares. Traditional culture methods based on applications of chemical pesticides were carried out in 50 hectares and used as control treatment. The other fifty hectares were managed with a program based on the application of EcoMicrobials' products (ECOFUNGI, ECOFLORA and ECOSIL).

### **Inoculation with ECOFUNGI**

ECOSIL (5 liters) was diluted in 50 liters of a humic acid solution (100 grams of dry product with 21% fulvic acid and 50 % humic acid). ECOFUNGI (15 kilograms) was added to the solution. Tap water was added to bring the final volume to 200 liters and the mixture was left for 48 hours. At the end of this period, the solution was further diluted to 500 liters with water and used to immerse the roots of 75,000 banana plantules prior to planting in 50 hectares. ECOFUNGI was applied only once during the crop cycle.

### **Application of ECOFLORA**

ECOSIL (8 Liters), ECOFLORA (25 kilograms) and humic acids (50 liters) were diluted to 80 liters with tap water, left for 48 hour and then diluted to 800 liters with water. This solution was sprayed by means of a fumigation aircraft over the foliage of the 50 hectares of banana crop previously inoculated with ECOFUNGI. The foliar application of ECOFLORA was repeated once every month. Banana plants in the control plot were sprayed with foliar fertilizers and fungicides once every month.



Mr. Pablo Baculima, owner of the plantation, shows a banana plant grown using conventional chemical methods (control plant). Notice the small diameter of the trunk of the mother plant, small size of the banana bunch (half of the bag is empty) and the small size of the daughter plant that represents the next crop.



The plant treated with EcoMicrobials' products shows a thick trunk, a bunch of bananas that fills completely the plastic bag, and a daughter plant that is half way to its production size.



Banana plants with fruits grown with EcoMicrobials' products, filling the largest plastic bags in the market in Ecuador.

<b>Banana fruit production</b>		
Control plot Boxes/ha/year	EcoMicrobials plot Boxes/ha/year	% increase in fruit production
1,900 - 2,100	<b>2,300 - 2,500</b> <b>DOLE BEST QUALITY FRUIT</b>	20 %

Mr. Pablo Baculima won the **2004 DOLE Best Quality Fruit Award in Ecuador** with the banana fruit produced in the 50 hectares treated with EcoMicrobials' products.