



Science For A Better Life

Effective integrated
banana solution to
comply with **European**
standards



food chain partnership



How it all started

Bananas are grown for export on around 7,000 hectares of land on two islands of the French West Indies (FWI), Guadeloupe and Martinique. Some 270,000 tons of bananas are harvested each year, mainly for export to Europe where, for example, 40% of the French banana market is supplied. The bananas exported to Europe require GLOBALG.A.P. certification and compliance with the European Union's MRLs and quality standards. There are approximately 650 growers on the two islands, with the average size of their holdings being around 12 hectares.

Bayer CropScience has been supplying crop protection products to banana growers in Guadeloupe and Martinique since the 1970s. Since bananas were being increasingly affected by Black and Yellow Sigatoka and post-harvest diseases, the banana growers' association (UGPBAN) asked Bayer to help them to find a solution to these problems.

What we aimed to achieve

Besides achieving compliance with the EU's MRLs, fulfilling the requirements of GLOBALG.A.P. and UGPBAN's own BANAG.A.P. certification scheme, and ensuring the bananas meet the quality standards of grade, color, shape, and size, the specific goals of this Food Chain Partnership project were as follows:

- Find solutions to control the growing problem of Black Sigatoka in the context of the very strict regulations in the EU and France
- Introduce a biological product for post-harvest treatment
- Implement the economical Phytobac® solution to deal with the problem of contaminated water after post-harvest treatment

The overall aim was to implement an integrated banana solution from Caribbean fields to European supermarket shelves.



Photo credits: UGPBAN

Who is involved

UGPBAN (*Union des groupements des producteurs de banane de Guadeloupe et Martinique*) is a joint association of two banana grower organizations: Banamart in Martinique and Les Producteurs de Guadeloupe (LPG) that exports the fruit to France.

Fruidor, a commercial organization that belongs to farmers, farmer organizations, and UGPBAN, ripens and sells the bananas to supermarkets in France and other EU countries. Fruidor is the market leader in France, selling around 200,000 tons in a total French market of 500,000 tons. The remaining 70,000 tons of UGPBAN bananas are sold to other European countries.

Banana growers involved in this project are all members of one of the two grower organizations and sell their fruit through UGPBAN and Fruidor.

Thanks to a long history of collaboration with banana growers in Guadeloupe and Martinique, **Bayer CropScience** not only provides sound solutions to the specific problems banana growers face on these two islands, but is also fully aware of the regulatory pressures in the EU as a whole and France in particular.



The integrated solution

The integrated crop solution introduced in the course of this Food Chain Partnership project involved a spray plan with various measures, such as the introduction of a conventional fungicide with a new mode of action (the active ingredient trifloxystrobin marketed as Consist®) and a biological fungicide (*Bacillus subtilis* marketed as Serenade®). UGPBAN and Bayer CropScience joined forces to set up demonstration trials in order to assess the efficiency of this intended solution against Sigatoka.

Furthermore, a new mode of application at the armpit of the second leaf was tested with the aim of finding alternatives to aerial sprays. This measure was developed in cooperation with the *Institut Technique Tropical (IT2)*, which is responsible for agricultural developments in the FWI and the *Centres*

Techniques de la Canne et du Sucre (CTCS) of Martinique and Guadeloupe, and certified GEP (Good Experimental Practice). Bayer CropScience is working with the latter to adapt the well-known Phytobac® biodegradation process to tropical conditions in order to eliminate the post-harvest treatment mixture in the context of EU rules.

The quality of the bananas produced in accordance with the integrated solution was tested by UGPBAN's own system for quality control and residue levels in order to ensure compliance with the EU requirements. As the fruit marketer in Europe, Fruidor is the important link to the European retailers, and therefore permanently driving the willingness to build innovative solutions that comply with retail requirements and consumers' expectations.



From left to right:

Rigoberto Estrada, Bayer CropScience Central American & Caribbean Fruits Crop Manager

Chloé Bourguoin, Plant Health Manager of Institut Technique Tropical

Philippe Ruelle, Director of UGPBAN and Fruidor

Georges Michaux Soprochim, Bayer CropScience's distributor in Guadeloupe

Vincent Gall, Caribbean Sales Manager of Bayer CropScience

David Dural, Director of Institut Technique Tropical

Sébastien Zanoletti, Director of the Sustainable Development of UGPBAN

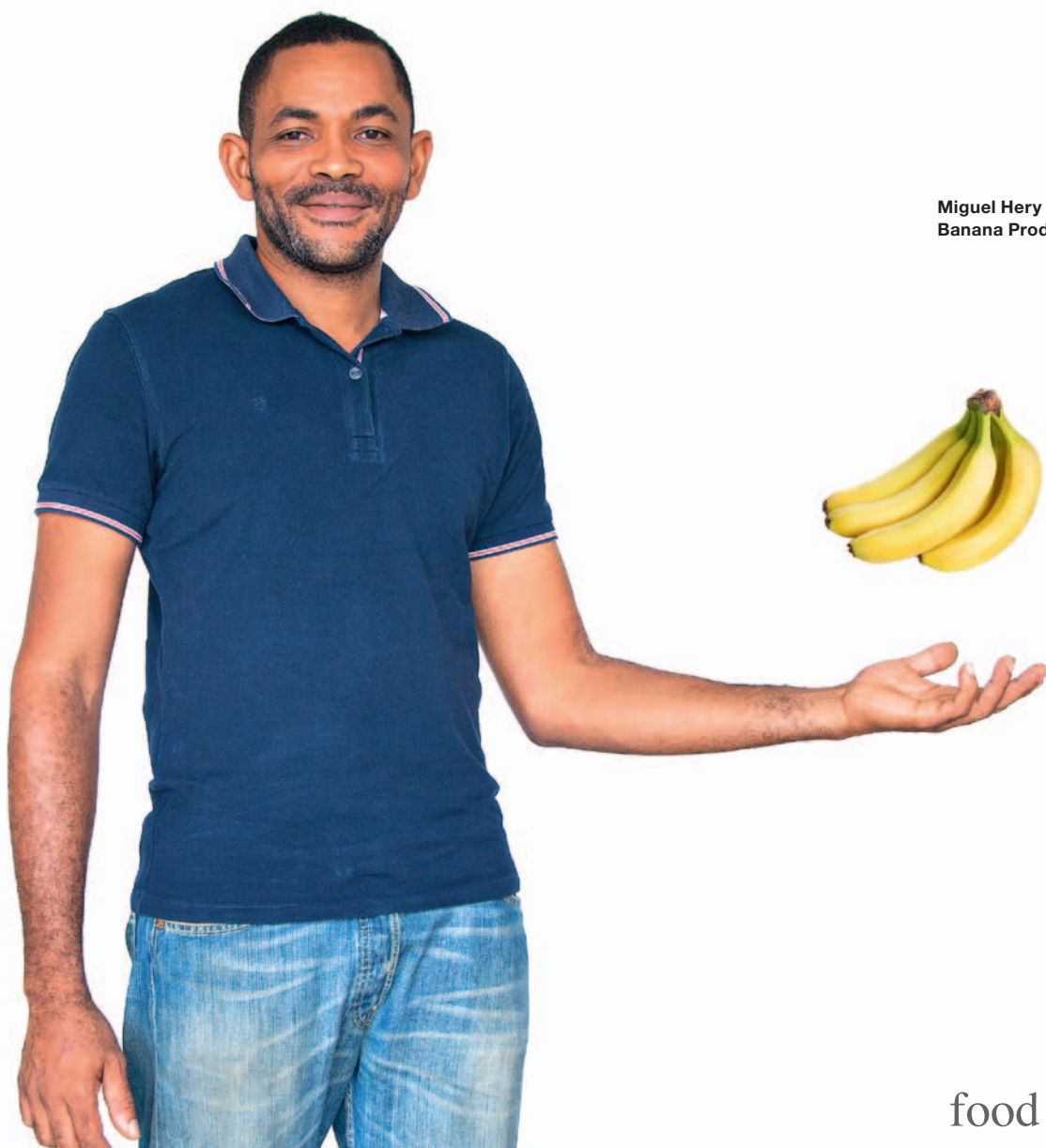
Charles De Wulf, Agro Consultant of World Banana Forum & Acorbat

What we achieved

In spite of increasing Black Sigatoka pressure and the prohibition of aerial treatment by French law, the number of treatments did not increase in 2013 – clear evidence of the efficacy of the spray program in the context of increased disease pressure. UGPBAN is very satisfied to have two new crop protection products to tackle the Sigatoka issues. The key factors in the success of the project have been the regular dialog maintained between UGPBAN/Fruidor, the Banamart and LPG managers, and Bayer CropScience personnel, and the excellent collaboration with IT2 and CTCS.

Next steps

The next steps in this ongoing Food Chain Partnership project will be the registration and introduction of Luna Privilege® with its active ingredient fluopyram, in order to effectively tackle resistance issues and thus complete the sustainable Sigatoka management system. There will also be further tests of Sonata® as a post-harvest fungicide, and final implementation of the Phytobac® solution for handling water contaminated with crop protection products.



Miguel Hery
Banana Producer

food chain partnership



Consumers are becoming increasingly conscious of the need for healthy nutrition. Food Chain Partnerships help to supply consumers with high-quality fresh produce, which forms the basis of a healthy diet. But such partnerships can only succeed if they involve every player in the food chain – from the farmer and processor to the exporter or importer and retailer. Bayer CropScience has the global experience and cutting-edge expertise to create a successful partnership at every level.



Bayer CropScience

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