



Science For A Better Life

Working together to
continuously improve
sustainable table
grape production



food chain partnership



How it all started

Table grapes are Greece's second most important export crop in value terms. About half of the total production of table grapes is exported, mostly to Germany, the Netherlands and the UK. Table grapes are mainly grown in the Corinthian province of Southern Greece, on the island of Crete as well as in the Kavalan province of Northern Greece and generally harvested from the end of July to mid of October.

Greek farmers who grow table grapes face a number of requirements when marketing their crops. The grapes have to be of a specified size, color and sugar content. Moreover, any residues of active ingredients have to be within the residual requirements.

Mack Multiples, a fresh produce importer, had already positive experiences working with Bayer CropScience on a Food Chain Partnership project in South Africa. When Pegasus Coop, a producer organization, was looking for a partner to improve the quality and marketability of their table grapes, Mack Multiples suggested approaching Bayer CropScience. Representatives of Pegasus Coop and Bayer CropScience Greece met at the end of 2010 and arranged to follow up at the Bayer CropScience booth at Fruit Logistica 2011 in Berlin.

What we aim to achieve

This Food Chain Partnership project primarily pursues the following objectives in order to meet the requirements of Pegasus Coop's customers in Europe:

- Improve the quality and marketability of the final product
- Optimize crop treatment and reduce the amount and level of plant protection residues
- Monitor and improve the sustainability of table grape production

Along with the mentioned goals within this project the support in achieving the following certification is also an important objective:

- GLOBALGAP (production)
- BRC* – Grade A (packing facility)
- IFS** (packing facility)
- ISO 22000:2005 (packing facility)
- ISO 9001:2008 (packing facility)



* British Retail Consortium

** International Food Standard

Who is involved

Pegasus Coop is an organization of farmers who grow, pack and export table grapes from some 80 ha of mountain land in the Corinthian province of southern Greece under the brand name **7Grapes**. They recently invested in a new packaging facility, considered as one of the most modern in the area. Their business is driven by a desire to produce table grapes in a responsible and sustainable manner.

MACK Multiples is one of the UK's leading fresh produce importers and main customer for Pegasus farmers. Supplying retailers makes high product quality and food safety essential deliverables to ensure their customers' confidence.

Bayer CropScience Greece provides integrated and sustainable crop solutions from seed to harvest that are compliant with international standards and meet farmers' needs in terms of quality, safety and cost-effectiveness. In this regard, the company strives to train farmers in the safe use of crop protection products, in application technology and spraying techniques.



CLASS I	
PRODUCT	GRAPES
VARIETY	SULTANINA
NET WEIGHT	5KG
GROSS 13 1A07 11	

From left to right:
Manolis Panagiotopoulos, Food Chain Manager of Bayer CropScience Greece
Markos Legas, President of Pegasus Coop
Fanis Koliniatis, Grower of Pegasus Coop
Aristeidis Notis, Technical Consultant of Bayer Crop Science Greece

The integrated solution

The size, uniformity and low-residue requirements are rather difficult to meet because the Pegasus' growing area is made up of many small plots of land averaging only a hectare and featuring different altitudes, varying microclimates and differing crop protection needs. However, the main threat to table grapes in Greece comes from downy and powdery mildew, two diseases that can totally destroy a crop. Therefore, Bayer CropScience amongst others recommended the use of new crop protection products such as Flint®, Profiler®, Teldor®, and Envidor® in order to control the wide range of pests and diseases affecting the table grapes.

In addition, Bayer CropScience organized training courses for farmers in spraying application technology which were based on the analysis of spraying techniques in order to achieve a more efficient spraying application. Furthermore, the farmers received training on the importance of taking specific protective measures while handling and using crop protection products.

Additionally, Bayer CropScience set up meteorological stations to facilitate monitoring and estimation of downy and powdery mildew pressure. This helped to evaluate the risk of disease and optimize application timing. These measures have been accompanied by frequent field visits and residue analyses that were carried out to optimize harvesting times.



What we achieved

The most obvious outcome of the food chain partnership project was a higher percentage of marketable table grapes than the previous year. Moreover, this was achieved despite unfavorable weather conditions and irregular downy mildew infestations. The success was based on ongoing and honest communication with farmers, regular weekly visits and the fact that Bayer CropScience already had three years of experience with pilot projects in the region.

The project has also benefited from the involvement of Bayer CropScience staff from different fields with multidisciplinary expertise: a local sales representative, local technical consultant, development trials coordinator and Food Chain Partnership manager.

Next steps

This Food Chain Partnership project represents a big step forward in continuously improving sustainable table grape production in Greece. Markos Legas, President of Pegasus Coop, sums up the project's progress: "As a company focused on responsible production, we have discovered that there is room for continuous improvement." Bayer CropScience and Pegasus Coop therefore intend to continue this Food Chain Partnership project answering increasingly economical, environmental and social challenges.

From left to right:
Dimitris Spanos, Area Manager of Mack Multiples
Manolis Panagiotopoulos, Food Chain Manager of Bayer CropScience Greece
Markos Legas, President of Pegasus Coop



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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