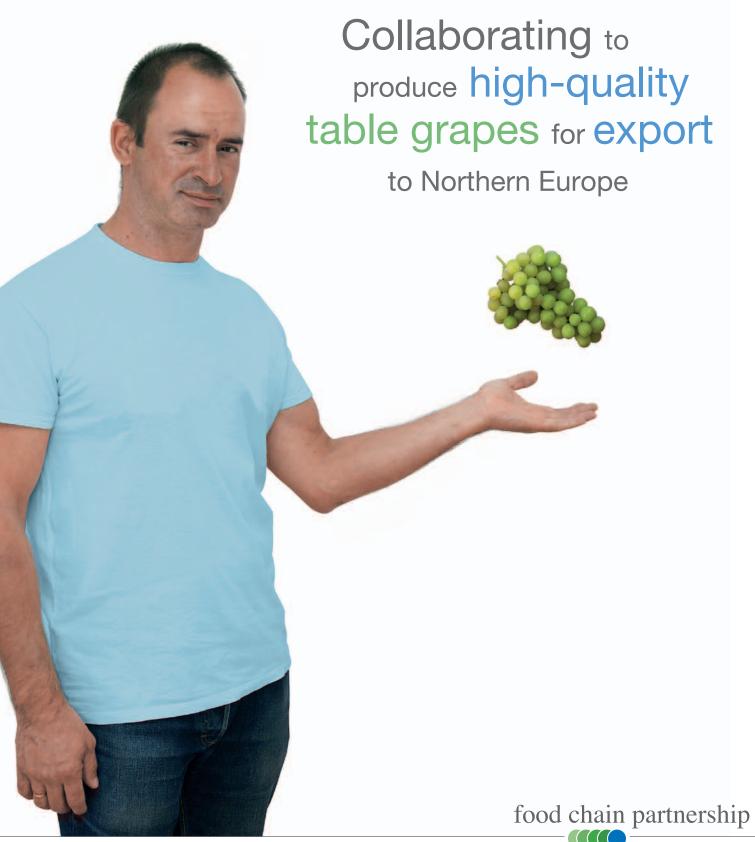


Science For A Better Life



How it all started

Table grapes are a key crop for export from Morocco and other Mediterranean countries to Northern Europe. Especially for table grapes, there is an increasing public sensitivity for high-quality table grapes, which do not exceed Maximum Residue Levels (MRLs) and can be traced back to the field.

Les Vergers du Soleil, a major producer of grapes in the Marrakech area, supplying the major European markets, was well aware of these challenges and welcomed the collaboration with Bayer CropScience who has already developed and implemented successful Food Chain Partnership projects throughout the world.

It is a voluntary approach based on transparency, traceability and shared responsibility that brings together the major players in the value chain with one objective: healthy and high-quality produce that complies with the needs of the consumers. The project started in 2008 on a test area of 5 hectares and was extended to 100 hectares over 3 years.

What we aim to achieve

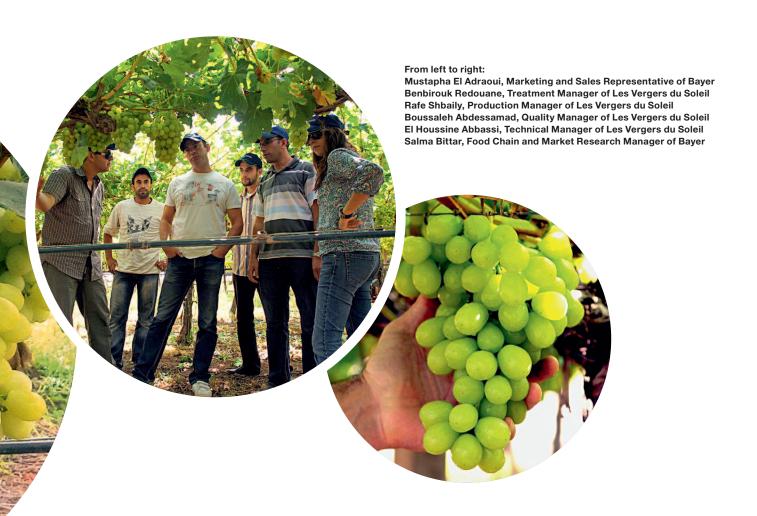
- Produce healthy, high-quality table grapes in a sustainable manner for export to markets in Northern Europe
- Optimize the use of agrochemicals in line with Integrated Crop Management (ICM) and Integrated Pest Management (IPM) principles
- Lower residue levels without compromising on the crop quality
- Meet customers' expectations for grapes that look and taste good



Who is involved

Les Vergers du Soleil is one of Morocco's largest producers and exporters of seedless and seeded table grapes to markets in Northern Europe. It is a customer-oriented company, aware of the growing and changing demands of the different markets as well as of the necessity of insuring traceability and transparency of their production process.

Hars & Hagebauer markets and distributes fresh fruit and is the main importer of Les Vergers du Soleil table grapes in the UK. Besides marketing grapes, Hars & Hagebauer provides a distribution platform for their UK supermarket programs. Hars & Hagebauer is very sensitive to their customers' demands and committed to continuous quality controls from production to delivery. Bayer CropScience Morocco supports its partners through expertise, know-how and experience in the crop protection industry. The support of Bayer CropScience not only covers the crop protection program, but also offers services, such as continuous monitoring on the field, training on safe use of plant protection products, carrying out regular residue evaluations and training on wastewater management.



The sustainable solution

Plant protection program

Bayer CropScience experts worked closely with Les Vergers du Soleil to establish an optimized crop protection program that would focus on the best solution for the crops. The program was developed under the worst-case scenario and covers all eventual threats that could decrease production or negatively impact the quality of Moroccan table grapes. The program was regularly adapted to suit the local conditions, i.e. pest infestation, diseases and weather conditions.

The crop protection solution which was collaboratively developed was in line with the principles of Integrated Crop Management and Integrated Pest Management to control the most important diseases, such as powdery mildew, downy mildew and gray mold by using products with a good IPM profile. The crop protection products applied included the fungicides Teldor®, Mikal®, Antracol®, and Bayfidan®.

Continuous monitoring

Bayer CropScience organized regular visits to the field, in order to continuously monitor the development of the project in terms of quality, adaptation of the plant protection program and residue levels. Being an important element of the project, Bayer performed residue analyses through an independent and certified laboratory during the whole season. The objective was to monitor the residue levels in order to ensure compliance with legally binding MRLs for crop protection products.

Training courses

Bayer CropScience supported Les Vergers du Soleil with training on different subjects such as safe use, good agricultural practices and wastewater management. These training courses helped Les Vergers du Soleil to ensure compliance with the certification standards.



What we achieved

For 3 years in a row, the projects' objectives have not only been achieved, they have, moreover, exceeded expectations. In addition high-quality produce that met the requirements and expectations of export markets, the project completed all the objectives set:

- Reduction in the number of treatments: from 15 to 11
- Reduction in the number of active ingredients: from 21 to 11
- Residue levels below the Level of Quantification (LOQ)
- Increase in grape caliber: from 22 mm to 28 mm

One of the key factors contributing to the success of this project was, and still is, the commitment of all partners. The open communication, the shared responsibility, the transparency of the working relationship all contributed to the achievement of the goals established. Besides higher-quality grapes that comply with the different national and international requirements, the project also contributed to reinforcing the confidence of the customers. "It is comforting to know that one of our major suppliers in Morocco is accompanied throughout the production process by a company such as Bayer", Russell Parkin, technical manager from Hars & Hagebauer, values the food chain partnership project.

Next steps

Rafe Shabaily, production manager from Les Vergers du Soleil, is convinced of the added value provided by this food chain partnership: "Combining the key players in partnerships such as this offers solutions to the many challenges we face in the fresh fruit industry – today and in the future." Hence the project is continuing for the third year with the main objectives of ensuring quality and safety of the produce and focusing on the development of the sustainable agriculture concept in the field.



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.





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