



Science For A Better Life

High-quality lettuce through sustainable production and GLOBALG.A.P. certification



food chain partnership



How it all started

Chile has over 83,000 ha of horticultural land, with lettuces accounting for around 7,500 ha of this total. Some 20% of the fruits and vegetables grown in the country are sold via supermarkets with high quality requirements. Lettuce is Chile's fourth-largest crop sold in supermarkets, with 33 million units a year, and it is one of the crops monitored by Chile's Department of Agriculture. As the sustainable management of crop protection to manage, e.g., aphids and fungus becomes a very important challenge.

Knowing the challenge of growing lettuce in a sustainable manner, Walmart-Chile and Bayer CropScience collaborated in a Food Chain Partnership project in 2010 by providing field support, organizing training courses, and developing quality standards to meet the requirements of Walmart-Chile. Bayer's knowledge in Integrated Pest Management (IPM) and the management of residues motivated Walmart-Chile and its producers to set up this agreement with the objective of fulfilling the global residues standards without compromising on the quality and health of the crop.

What we aimed to achieve

The aim of this Food Chain Partnership project was to ensure Walmart-Chile offers safe, high-quality lettuce, increase product traceability, reduce residue levels, and the amount of produce rejected.



Who is involved

With more than 200 outlets in the country, **Walmart-Chile** is the country's leading retailer of fruits and vegetables with a market share of over 30%. Hence, Walmart-Chile is interested in improving produce quality, minimizing risks to customers, enhancing traceability, and reducing residue levels.

The **twelve lettuce farmers** from the Chacabuco Province who participated in the project from April 2010 to December 2011 are the most important local suppliers of vegetables for Walmart-Chile supermarkets.

As the leading provider of integrated crop solutions in Chile, **Bayer CropScience** was able to help these lettuce farmers through integrated crop management measures aimed at reducing the number of lettuce rejections and ensuring quality produce. The Bayer Vegetable Seed business, commercializing seeds under the Nunhems® brand, was also involved in this project by supplying seed technology and production varieties for field trials.

“We have defined Bayer as our sustainable production partner for vegetables.”

Manuel Sagas,

responsible for the quality of perishable food at Walmart-Chile



The integrated solution

Bayer specialists set up an integrated crop management scheme and a list of suitable plant protection products to enable growers to meet Walmart-Chile's requirements, which are based on good agricultural practices, compliance with national and international residue norms, and sustainable crop management. The farmers evaluated and compared their standard crop protection programs with those proposed by Bayer from a technical and sustainable benefits' perspective before implementing the Bayer program. The main pests controlled by the program were aphids, thrips, leafminer larvae, and diseases as botrytis, sclerotinia, and mildew.

In addition, Bayer CropScience organized training sessions for the twelve farmers and their workers on the safe use of plant protection products, the handling of empty containers, equipment calibration, integrated pest and disease management, evaluation of crop protection product residues, and monitoring of pest levels on the field. Also Bayer CropScience commissioned residue analyses and quality-related tests on lettuce supplied to Walmart-Chile.



What we achieved

The results of this Food Chain Partnership project were positive and brought benefits to all the stakeholders:

- Fewer crop protection product applications and a lower dosage per ha thanks to the switch from the farmers' traditional program to Bayer's integrated pest management proposal and associated monitoring activities
- 20% reduction in the volume of crop protection products used
- 50% reduction in the visual quality rejection rate
- Compliance with Chilean Maximum Residue Level (MRL) requirements
- GLOBALG.A.P. certification for the twelve farmers supplying lettuce to Walmart-Chile

This Food Chain Partnership project proved to be a win-win situation for all stakeholders:

- Walmart-Chile registered an improvement in the quality of lettuce supplied by these twelve farmers helping, reduce any potential risks to consumers and improving the producers' compliance with health authorities' policies and regulations
- The farmers involved have seen an improvement in their Walmart-Chile quality evaluation, enjoyed fruitful technical and professional support, achieved GLOBALG.A.P. certification, and been trained in the so-called Agrovida program, environmental science and the calibration of spray equipment
- Bayer saw its market share in lettuce increasing
- Walmart-Chile customers can buy high-quality lettuce

The success of the project was primarily due to the fact that the complete food chain worked together to produce high-quality lettuce.

left:
**Rodrigo Morande, Owner of Agrícola Terranova,
Region Metropolitana, Chile**

right:
**Ernesto Nieto, Food Chain Manager of
Bayer CropScience Chile**

Next steps

This Food Chain Partnership is not only continuing but also expanding. Tomatoes were added to the project in 2012 and there are plans to include other products supplied to Walmart-Chile, such as: celery, potatoes, onions, carrots, pumpkins, and strawberries. By including other crops, the project now covers 29 growers and a total area under cultivation of 5,000 ha.

“Without this alliance it would have been very difficult to get the BPA* certificate.”

Rodrigo Montt, Agrícola Terranova, one of the twelve project growers | * “Buenas Prácticas Agrícolas” corresponds to Good Agricultural Practices

“We can concentrate our efforts and reach our objective in providing healthier and better-quality vegetables for people if we work together in a more efficient way.”

Ernesto Nieto, Food Chain Manager of Bayer CropScience Chile



left:
Ernesto Nieto, Food Chain Manager of
Bayer CropScience Chile

right:
Marina Hermosilla, Sustainability
Director of Walmart-Chile

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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