SUSTAINABILITY AND 10-YEAR STRATEGY OF THE SPANISH CITRUS MARKET

José-Antonio García. AILIMPO
THANKS FOR THIS OPPORTUNITY

Renee Goodrich. Program Organizer ICBC
Elizabeth Webb. Vincent Corporation
Mandy Stage, Conference Coordinator ICBC

Tim Eyrich. Southern Gardens
Carlos Fernandez & his team. JBT

Manuel Parra from Lemon King Spain
Roberto Vilaplana from Citromil SL Spain

Venera Raffa. Coca-Cola

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2. Citrus Global Overview.
5. Sustainability and 10 years Roadmap
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Who is AILIMPO?

Interprofessional Association representing the Spanish Lemon and Grapefruit sector officially recognized by:

Spanish Ministry of Agriculture

European Commission

Representing all the value chain

Production

Fresh

Processing
José-Antonio García – Director of AILIMPO

**Expert economist in agri-food, specifically in the fruit, vegetables and citrus sector.**

“I believe in teamwork, effort and consensus building as formulas for solving problems and conflicts”

“Sustainability as a key point”

- **19 Years** as a Director of Ailimpo.
- **12 Years** as a Secretary General and Technical Adviser at AIZCE. Citrus Processors Spanish Association.
- **11 Years** as a National Expert at the Citrus Group of the European Commission.
- **10 Years** as a Member of the Board of Directors at Freshfel Europe.
- **4 Years** as a Chairman of the Civil Dialogue Group Horticulture, olives and spirits at European Commission.
Reasons to Visit Spain

- Extraordinary culture
- A vibrant natural landscape
- Quality of Life
- Good weather
- Universally admired gastronomy
- Celebrations and traditions

And... Lemon key player
About Spain

**Population**
47 million inhabitants (FL-21), with a population density of 238 people per sq mi (FL-353)
2nd in life expectancy of the world.

**Geography**
Total área of 194,897 square miles.
Spain is four times the size of Florida.
Member of the European Union.

**Economy**
GDP 3.1% and Inflation Rate 1.9%.
The 5th largest economy in the UE and the 14th in the world.
Citrus Global Overview

- Global Citrus Figures. World Production.
- Orange.
- Easy Peelers.
- Lemon.
- Grapefruit.

Data: Average 2010-2017
Sources: Public&Private: USDA, FAO, EUROSTAT, FRESHFEL, CIRAD...
Global Citrus Figures > 100 Mill. Tons

- 62% ORANGES
- 30% EASY PEELERS
- 5% LEMON
- 3% GRAPEFRUIT

1st CHINA
2nd BRAZIL
3rd INDIA
4th USA
5th SPAIN

Data: Average 2010-2017
Easy Peelers production in the world (Tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>19,000,000</td>
</tr>
<tr>
<td>Spain</td>
<td>2,222,600</td>
</tr>
<tr>
<td>Japan</td>
<td>1,115,000</td>
</tr>
<tr>
<td>Morocco</td>
<td>1,065,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,040,000</td>
</tr>
<tr>
<td>Egypt</td>
<td>948,500</td>
</tr>
<tr>
<td>Brazil</td>
<td>910,800</td>
</tr>
<tr>
<td>USA</td>
<td>876,000</td>
</tr>
<tr>
<td>Others</td>
<td>5,790,600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>32,968,500</strong></td>
</tr>
</tbody>
</table>

Data: Average 2010-2017

Korea, Iran, Pakistan, Argentine, Peru and others.
Lemon production in the world (Tonnes)

<table>
<thead>
<tr>
<th>Country</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentine</td>
<td>1,388,000</td>
</tr>
<tr>
<td>Spain</td>
<td>975,000</td>
</tr>
<tr>
<td>USA</td>
<td>853,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>756,000</td>
</tr>
<tr>
<td>Italy</td>
<td>499,000</td>
</tr>
<tr>
<td>RSA</td>
<td>285,000</td>
</tr>
<tr>
<td>Others</td>
<td>890,000</td>
</tr>
</tbody>
</table>

Total: Production 5,646,000

Data: Average 2010-2017

Egypt, China, Mexico, Bolivia, Brazil, Australia, Uruguay and others.
### Grapefruit Production in the World (Tonnes)

#### Data: Average 2010-2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>682,000</td>
</tr>
<tr>
<td>Mexico</td>
<td>432,000</td>
</tr>
<tr>
<td>RSA</td>
<td>363,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>253,000</td>
</tr>
<tr>
<td>Sudan</td>
<td>198,000</td>
</tr>
<tr>
<td>Israel</td>
<td>148,800</td>
</tr>
<tr>
<td>Argentine</td>
<td>102,000</td>
</tr>
<tr>
<td>Spain</td>
<td>81,000</td>
</tr>
<tr>
<td>Others</td>
<td>540,200</td>
</tr>
</tbody>
</table>

**TOTAL**  

Production 2,800,000

- Thailand, India, Tunisia, Cuba, Brazil, Egypt and others.
Citrus in Spain

- Spain’s Citrus Position Worldwide.
- Citrus Production Calendar in Spain.
- Citrus Fresh / Processed.
- Evolution of Production.
Spain's Citrus Position Worldwide: 6.8 Mill. Tons out of 100

- Lemon: Spain 17.3% of world output, 2nd
- Orange: Spain 5.4% of world output, 5th
- Easy Peelers: Spain 7.3% of world output, 2nd
- Grapefruit: Spain 1.4% of world output, 8th
Citrus Production Calendar in Spain

Expanding Availability
ES Citrus: Main Focus >> Fresh / Processing is Subsidiary

26 citrus processors in Spain but...

13 of them are making 85% and the other 13 are making 15% of the volumes
Evolution of production in the last 40 years

An Increase Of 57%

An Increase Of 86%

An Increase Of 92%

An Increase Of 93%

Fresh & Processed Reliable Supplier
Spanish Lemon Sector: 1 Mill Tons out of 6.8
(Total Citrus)

Main data.

Varieties.

Processing Lemon.

Production
Spain 17.3% of world output
1,000,000 tonnes.

Fresh
Spain 20% of world output
750,000 tonnes

Industry
Spain 12% of world output
250,000 tonnes

2nd 1st 2nd
Where the Old and the New Come Together

“Traditional”

“Technified and Modern”
Spanish Main Lemon Varieties

“Fino”

From September to April
Spherical Fruit
Fine Skin
Higher content of Juice
High Acidity

“Verna”

From May to July
Elongated Fruit
Thick Skin
Few Seeds

Spain Main Supplier
Processing Lemon in Spain

What Can be Obtained From a Spanish Lemon?

- Cold Pressed Lemon Oil (0.30-0.40%)
- Lemon Essence Oil (0.1%)
- Direct Juice (30-40%): NFC+Concentrates
- Pulp Cells (1.5-2%)
- Wet peel (50-55%) >>> Dried Lemon for Pectin / Animal feeding
Lemon Processed in the world.

TOTAL lemon Processed in Tonnes

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentine</td>
<td>55%</td>
<td>1,100,000</td>
</tr>
<tr>
<td>Spain</td>
<td>12%</td>
<td>250,000</td>
</tr>
<tr>
<td>EE.UU</td>
<td>11%</td>
<td>220,000</td>
</tr>
<tr>
<td>Italy</td>
<td>4%</td>
<td>85,000</td>
</tr>
<tr>
<td>RSA</td>
<td>4%</td>
<td>80,000</td>
</tr>
<tr>
<td>Mejico</td>
<td>3%</td>
<td>50,000</td>
</tr>
<tr>
<td>Others</td>
<td>11%</td>
<td>215,000</td>
</tr>
</tbody>
</table>

Data: Average 2010-2017
10 Years Roadmap.

- Organic.
- Solving unclear technical regulations
- Phytosanitary protection in the EU.
- Trioza Erytreae & HLB
- Sustainability: THE BIG CHALLENGE
ORGANIC LEMON >> LEADING A NEW NICHE MARKET

Organic lemon surface in Spain (2012 to 2017)

SPAIN >> KEY SUPPLIER WORLDWIDE +100,000 TONS TOTAL PRODUCTION

<table>
<thead>
<tr>
<th>Year</th>
<th>Planted area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,708 ha</td>
</tr>
<tr>
<td>2013</td>
<td>1,818 ha</td>
</tr>
<tr>
<td>2014</td>
<td>2,227 ha</td>
</tr>
<tr>
<td>2015</td>
<td>2,579 ha</td>
</tr>
<tr>
<td>2016</td>
<td>3,087 ha</td>
</tr>
<tr>
<td>2017</td>
<td>4,091 ha</td>
</tr>
</tbody>
</table>
U.S. – European Union Organic Equivalence Arrangement

- This recognition signed in 2012 eliminates the need for EU organic operators to have a separate certification to the U.S. standards and vice versa.

- The EU accepts the USDA organic seal and the U.S. accepts the EU organic logo.
U.S. – European Union Organic Equivalence Arrangement

February 15, 2012

Dacian Cioloș
Member of the European Commission
Rue de la Loi 200
B-1040 Brussels
Belgium

Dear Mr. Cioloș:

The United States Department of Agriculture (USDA) is in coordination with the United States Trade Representative (USTR), has reviewed the European Union’s (EU) organic system for agricultural products produced and handled in accordance with Council Regulation (EC) No 834/2007 and Commission Regulations (EC) No 889/2008 and 1235/2008. Based on that review, USDA has determined pursuant to the Organic Foods Production Act of 1990 (OPPA) (7 U.S.C. Sec: 6501 et seq), under authority delegated to the Secretary of Agriculture by the President, that agricultural products produced and handled in accordance with the EU’s organic system, as in effect on June 1, 2012, are produced and handled under an organic certification program that provides safeguards and guidelines governing the production and handling of such products that are at least equivalent to the requirements of OPPA.

Accordingly, except as provided in Appendix 1 to this letter, and subject to the conditions set forth in Appendix 2 to this letter, agricultural products produced and handled in conformity with the EU’s organic system, as in effect on June 1, 2012, are deemed by USDA to have been produced and handled in accordance with the OPPA and USDA’s organic regulations under the National Organic Program (NOP) (7 CFR part 205). These products may be sold, labeled, or represented in the United States as organically produced, including by display of the USDA organic seal as well as the EU organic logo.

The United States is also pleased to acknowledge the EU’s recognition of the United States’ organic system. USDA’s Agricultural Marketing Service and Foreign Agricultural Service and USTR are committed to working with the European Commission’s Directorate General for Agriculture and Rural Development to carry out the terms of the determination as described in this cover letter and Appendices 1 and 2 and the arrangement regarding an Organics Working Group described in Appendix 3.

Sincerely,

[Signature]

Kathleen Merrigan
Deputy Secretary
U.S. Department of Agriculture

Dear Deputy Secretary Merrigan,

Dear Ambassador Siddiqui,

I would like to confirm that the European Commission has examined the United States request for recognition of the U.S. National Organic Program (NOP) in accordance with Article 15G of Council Regulation (EC) No 834/2007. Based on this review, the Commission has recognized that the NOP complies with principles and production rules equivalent to those laid down in Title II, III and IV of Regulation (EC) No 834/2007 and that its control measures are of equivalent effectiveness to those laid down in Title V of Regulation (EC) No 834/2007.

As a result the Commission has amended Regulation (EC) No 1235/2008 and added the United States to the list of recognised third countries in Annex III of that Regulation. The relevant Regulation will be published in the Official Journal of the European Union on 13 February 2012.

In addition to the mutual recognition of our respective organic standards and control systems, I am delighted to further strengthen our regulatory and standards co-operation on organic agriculture in general.

The Deputy Secretary of Agriculture
Dr. Kathleen Merrigan
U.S. Department of Agriculture
1400 Independence Ave., SW.
Washington D.C. 20250
United States of America

The Chief Agricultural Negotiator
Ambassador In A Siddiqui
Office of the U.S. Trade Representative
650 17th Street, NW
Washington D.C. 20549
United States of America
UNCLEAR REGULATION ON PESTICIDES ON CONVENTIONAL
REACTION: A COMMON APPROACH

EXAMPLE. PRESENCE OF PESTICIDES IN LEMON OIL

Industry faces unclear / no legal certainty situation.

- CPLO >> Grey / Black area around pesticide residues in B2B contract specifications >> Distortion of the market.

- NEED to coordinate accepted reference values

- OECD / CODEX / USA / EU / Guidelines...

- AILIMPO Study.
Why is Plant Health so important in the EU?

“Plants form the basis of our food chain: without plant production there would be neither food for humans nor feed for animals. They are also a part of the natural environment in which we live, as well as the landscape of our daily lives. Therefore outbreaks of plant diseases may have devastating effects on the quality of our lives and our economy. Plant diseases may affect the livelihoods of farmers, nursery owners or traders, the quality and prices of our food as well as the condition of our forests and parks.”

Main Potential Risks, NOT Present in the EU BUT present in other producing areas in the world:

- HLB
- Citrus Canker
- Citrus Black Spot
- False Codling Moth
P&PP Phytosanitary Protection, Rules on the EU

1. Regulates the **introduction** of P&PP into the EU from countries outside the EU.
2. Regulates the **movement** of P&PP within the EU.
3. Imposes **eradication and containment measures** in case of outbreaks, and co-finances them.
4. Places **obligations on countries outside the EU** which want to export P&PP to the EU.

**NEW** Plant Health Regulation (REG (EU) 2016/2031) into force 14 DEC 2019 >> **Focusing on PREVENTION & IMMEDIATE ERADICATION**
Ensuring Phytosanitary Protection in the EU >> A Global European approach

Monitoring / Alert System Erophyt

- Controls
- Import
- Intra-EU

Audits In

- Member States
- Non-EU Countries

Analysis of Information and Measures Applied by Trade Partners

Emergency Measures When Needed eg CBS
Mediterranean Basin: free of HLB
Spain / Portugal STATUS on HLB and its vectors

- **Trioza Erytreae present** in Atlantic Ocean Islands (Madeira-1994, Canary-2002) and in Peninsula (Galicia Region and North Portugal – 2014).

- Trioza Erytreae **far away from citrus producing areas**, potential climatic barrier.

- **Official measures** in place to eradicate Trioza and monitor the spread of this vector.

- **NO HLB Detected.**
Spain / Portugal Presence of Trioza Erytreae

Madeira (1994)

Canary (2002)

Galicia Region And North Portugal (2014)

Mediterranean Basin

621 miles
Our vision: What benefits the lemon sector, also benefits the planet.

We are small but we can help. It is our responsibility.
SUSTAINABILITY: The new paradigm and dilemma

💡 A new WAY: to meet society’s needs in the present without compromising the ability of future generations to meet their own needs.

💡 Consumers are concerned >> the industry has to be concerned and the supply chain must react to produce “VALUES-BASED” Fresh lemon, lemon juice and lemon oil.

💡 A new CONCEPT >> lacks a concrete and uniform meaning, BUT someone who knows the consumers expectations gave us the clue... & the inspiration.

💡 It is a new attitude, a new approach, being responsible and promoting a better world.
SUSTAINABILITY: WHAT ARE WE TALKING ABOUT?

MUCH MORE THAN JUST BIRDS, INSECTS & PLANTS, ...
BUT WE ALSO TAKE CARE OF THEM

Recovering Autochthonous fauna and flora: (lizards, birds, grass, bees...)
MORE IN DETAIL

HUMAN RIGHTS AND THOSE OF WORKING PEOPLE

1. Freedom to have unions and collective negotiation
2. Child labor, forced labor and the abuse of work are forbidden
3. Elimination of discrimination
4. Working hours and salaries are to be respected
5. Provision of a safe, healthy workplace
6. Respect for community rights and traditions

ENVIRONMENT *

7. Water management
8. Energy management and climate protection
9. Preservation of natural habitats and ecosystems
10. Land management

MANAGEMENT SYSTEMS *

11. Harvest and post-harvest management
12. Management and selection of reproduction material
13. Management systems, records and transparency
14. Business management integrity
SUSTAINABILITY: Multiple Focus
Spanish Lemon® (Fresh + Processed)

= 3 PILARS

- Economic
- Social
- Environmental

Production

Fresh Processing

GRASP

GLOBAL G.A.P.
INITIATIVES ON THE ENVIRONMENTAL SIDE

- Reducing use of pesticides and fertilizers.
- Updating tree census.
MORE ABOUT NATURAL RESOURCES
(average data)

Water needs and efficient use

Positive CO₂ balance:
Net CO₂ capture

304,840 t of CO₂ captured

1 year’s diesel consumption of 140,000 cars driving 20,000 km/year
IMPROVING SOCIAL MANAGEMENT SYSTEM

19,785 Jobs

- CULTIVATION: 3,000 jobs
- HARVESTING: 7,717 jobs
- HANDLING: 8,048 jobs
- PROCESSING: 420 jobs
- OTHER: 600 jobs

+ 50% Women
On the road to MEASURE Sustainability.
The Spanish Lemon Case

**General Overview.**
- Using a scientific methodology based on Economic and Financial Analysis and Life Cycle Analysis.
- Indicators as effective and operational as possible.
- Good practices should be quantified.
- The process must be continuous (3-4 years).

**To Sum Up >> Objectives.**
- Making Better Recommendations of GAP.
- A set of easily measurable and controlable social, economic and environmental indicators to be monitored on lemon farms, all in accordance with SAGP principles.
- **Metrics available in €** (Costs + Life Cycle analysis).
TESTIMONIALS FROM GROWERS

"When you learn to grow in a sustainable way and then you visit other conventional estates, you can see the difference and you begin to understand that another production method exists"

“It is not just marketing, It is a new way of doing, living and acting. Our commitment to the next generations”

"When I found out there was another way to farm, I understood that this is the future and there is no going back.. You only need passion and vision"

"It's not a more costly technique and you don't have to work harder. Fruit quality is superb."
CONCLUSIONS & HIGHLIGHTS

Spain as a **KEY CITRUS & LEMON PLAYER** worldwide.

2 Varieties of Lemon: Fino and Verna (original from ES).

Committed with **Sustainability: 3 Pilars.**

Balance between Fresh / Processing.

ES has a large tradition on LEMONS, traditionally on the FRESH side.
CONCLUSIONS & HIGHLIGHTS

- We are young on PROCESSING LEMONS but achieving good volumes.
- Juice and oil Multinational clients are focusing more and more on Spanish origin.
- Thanks to our Traceability and Sustainability systems already in place.
- SPANISH LEMON sector as a strategic partner in the future.
- Our philosophy >> To have trust in “Make it happen”, not just “Wait it happen”
SUSTAINABILITY AND 10-YEAR STRATEGY OF THE SPANISH CITRUS MARKET

THANK YOU

José-Antonio García. AILIMPO