



International Citrus and Beverage Congress.

Clearwater (FL), 21 of September, 2022.

Good morning, I am Erich Faber from Spain. I'm very happy to be here. Today I would like to talk about the Spanish citrus industry I am part of. Before I keep with this presentation, I want to thank the University of Florida and all the people involved in the organization. As well, to recognize the Ailimpo Associaton for providing relevant data from the sector and contributing to the transparency and professionalization of the Spanish Citrus segment. Finally I thank Riverbend and all the workers we are , for making it possible to stay here today.

I would Like to begin by pointing out that the fresh market is the driver of the lemon production in Spain. We are all clear that the production of the fruit orchard is strongly related to the availability of the land, the right soil conditions, the climatology and the availability of water. In Spain, we are suffering severe problems in this matter due to the decrease of rains. Consequently, we suffer the adjustments given by the necessity of the primary, and specially the secondary sector, as well as the human consumption needs.

We are all concerned about the challenges all the production chain faces, and that will be similar for the rest of the world:

- Continuous legislation changes affect in one or another way the production chain.
- Food safety.
- Certifications demanded by the consumers of different countries.
- Land and sea transport issues.
- Lack of water.
- Reduction of the active principles used for the cultivation and post-harvest.
- Sustainability.
- Waste management.

I have been related to this sector for 30 years working in the company Riverbend in Murcia. We have been witnesses of the evolution of the industry, its ups and downs, the change of trends and market demands, new legislation and challenges for the entire segment. All these have led Spain to be a citrus producer in the European Union with more than 50.000 Ha that yields up to 1.370.000 tonnes. We reach more than 80 countries with the exports. The production of the fruit is primarily focused on the fresh market. In this context, Spain produces around 6% of the citrus but it accounts for 22% of fresh citrus exports worldwide.

In this frame, Riverbend has been playing for 30 years, supplying juices, concentrates and others to the European market mainly. We are a reflection of the Spanish Citrus business evolution towards modernity, sustainability and professionalization.

The aim of this presentation is to show the positive prospects of the Spanish citrus Industry for a medium and long time. To do so, I will describe the evolution of the Citrus Industry in parallel with the fresh and agricultural sector. In addition, I will present the pros and cons of the geographical location of the Spanish Citrus Industry.



Figure 1. Lemon production in the world 2021. Ailimpo.

Here you can appreciate the position of the industry at a worldwide level, showing that Spain, despite the Fruit being designated to the fresh primarily, is still positioned at the top of industry processors and exporters of lemon.

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

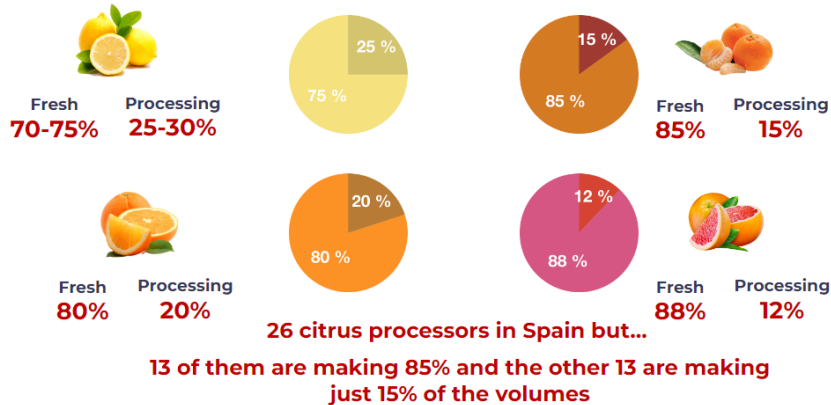


Figure 2. Spanish citrus sorting. Ailimpo.

This second figure is a perfect image of the Spanish citrus business structure, being the fresh market the one with more Fruit percentage. The rest is sorted and sent to the industry. This creates a natural and cooperative relationship between growers, packing houses and industry.

In the case of the lemon fruit, the 70% for the fresh market makes us be the 1st fresh fruit exporter, contributing 22% of the total output. Likewise, the 30% of the fruit for processing position us at the second place of the processors worldwide.

I would like to continue showing the reasons to state that the Spanish Citrus Industry is solid and reliable. In order to do so, it is necessary to start explaining the very beginning of the chain: agriculture.

In the last 30 years, during the outstanding development of the industry in general, and the citrus one in particular, we have been able to witness the move from minifundios and traditional irrigation to extensive cultivation and modern irrigation techniques, integrated pest management or precise farming. We have gone from traditional farms to modern ones with all the technical advancements and managed by specialized professionals.

All these changes have impacted the quantity and quality of the Fruit available. In the last 40 years, we have seen a significant growth at the level of the Fruit available. Especially since late 80s and early 90's, when most of the current citrus industry appeared as a need for capitalizing the Fruit that was exceeding the fresh market. It is clearly pictured in the graph where the exponential growth began in the 90's decade and continues up to now.

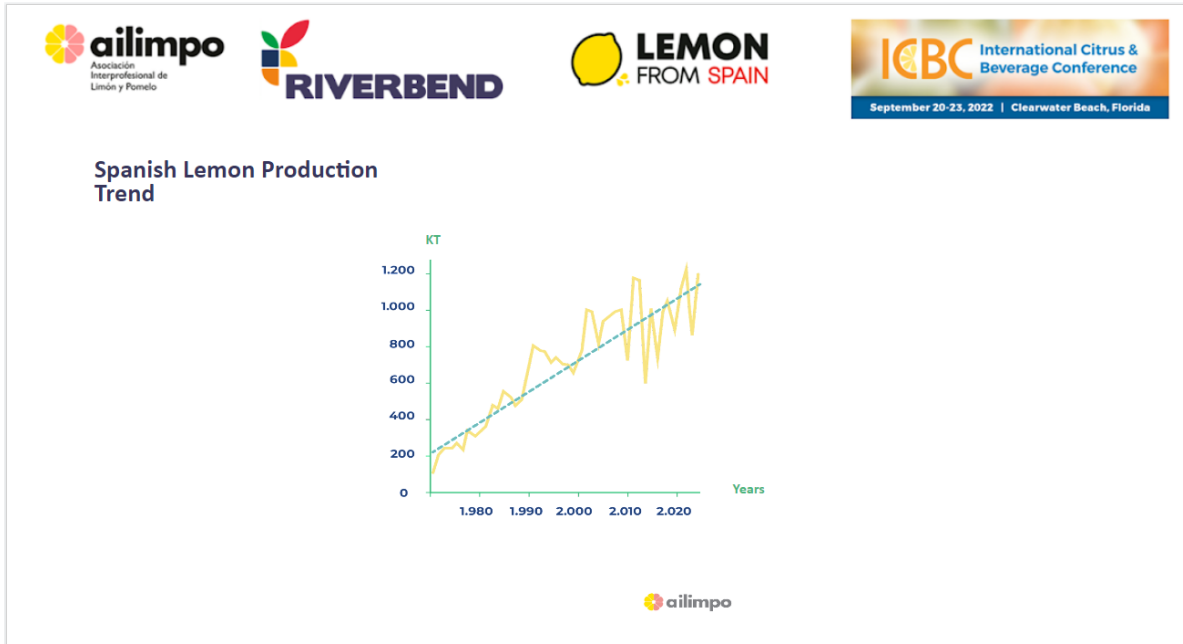


Figure 3. Spanish lemon production trend. Ailimpo.

This emergence of most of the citrus industry is not coincidental in time. It is linked to the fact that the European Union clearly envisioned that, in order to develop the fresh market, it was necessary the creation of a regulatory mechanism of the fruit volumes. In that context, the industry was aimed at taking the excess fruit from the orchards. Looking at the present day results, we can say their plan was successful.

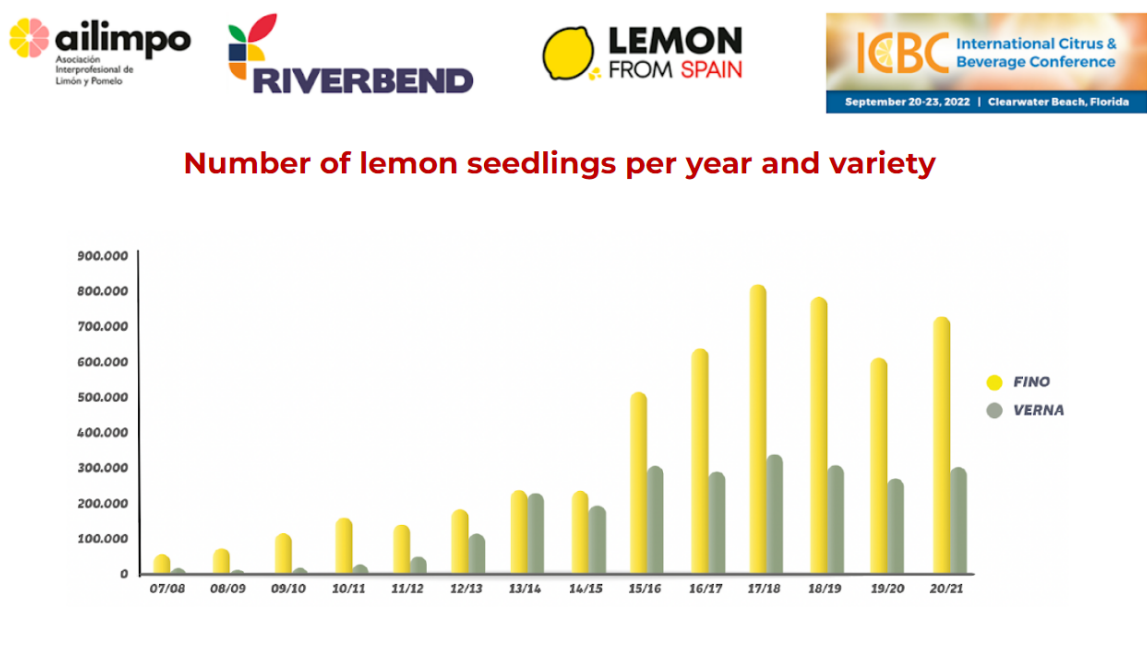


Figure 4. Lemon seedlings per year and variety. Ailimpo.

This graph perfectly reflects the positive tendency of seedlings being grown and how this will continue in the future.

There is a distinction between varieties. On the one hand, we find the Fino, which is the Winter season lemon. It can be found from November to April. It represents the biggest volume of Fruit being planted. On the other hand, the Verna variety stands for the summer season, from April to July. The most remarkable difference between both varieties is the aroma, the juice content and the level of acidity, being the Fino the most appreciated one for its processing in the industry. In addition, Fino oil is also the most desired in the fragrances industry.

Considering the previous positive tendency shown for the seedling, we can conclude that the prospects for the lemon seem quite positive. In fact, it has been forecasted a production by 2026 of 1,772,609 tonnes of lemon in Spain.



Figure 5. Forecast of the production potential: Lemon. Ailimpo.

Likewise, an increase in production leads us to think about the management of a bigger amount of peel. We need to think about how to manage it as waste or how to capitalize it. I believe we are all looking forward to finding a way to manage the peel in a sustainable and economically profitable way.

The industry supply system implies Competitive advantage. Changes in the last sixteen years evolved in the direction of a growth in the cultivated fruit, as previously stated. But there is also a simultaneous growth in the capabilities of the industry for processing fruit and the quantity available for this purpose, as shown in the graph below.

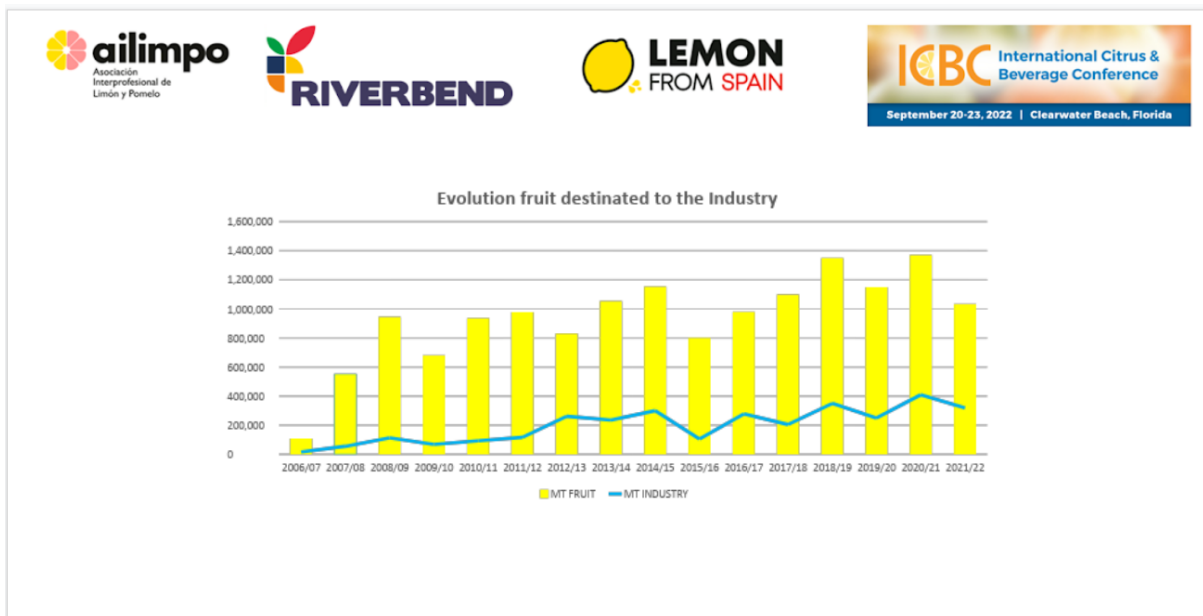


Figure 6. Evolution of fruit designated to the industry in the last 16 crops.

At the beginning of the activity of Riverbend Spain, we had about 200 fruit suppliers, being today no more than 25, of which about 10 represent 70% of the supply.

The industry has been modernized extraordinarily, starting to have the most state-of-the-art technology in the world. This is the supply base of our industry and the relationship between industry and fresh, once irregular and sometimes tense, evolving towards a relationship of understanding: we need each other.

Investments have been made in order to modernize all Spanish citrus plants, each company individually managing it. We had to adapt to the energy challenge with greater energy efficiency not only due to the current crisis, but also because it was a key point for success and sustainability.

In fact, investing in Sustainability, improving our waste and effluent management is a very important aspect in our industry and something we must be aware of.

Unfortunately we need to fight against the presence of an "excessive" number of necessary certifications required by different countries, customers or certification bodies.

All the citrus plants in Spain have made investments and have been specializing over the last few decades. Riverbend has gone from processing all citrus to focus its activity especially on lemon and organic fruit, abandoning the conventional orange and tangerine, which until 2013 represented a very important part of our production.

For our industry, the change in the fruit exporters' way of proceeding and structural upgrades, together with the stability of the fresh market, is one of our strengths for the future.

We are all aware of the operations carried out by investment funds such as Citri&Co and Freman Capital. Citri&co operates worldwide with all kind of fruits and with companies such as Martinavarro, Rio Tinto, Perales & Ferrer, Frutas Esther, Sunpack (Citrus in Morocco), Agricola Famosa (Watermelon and melon in Brazil) and finally the San Miguel operation in Argentina. Freman Capital, more European and oriented to organic fruit, with a brand sense of service, has the majority of The Fruit Fruit Company.

Now, we have to face a really sensitive topic. Climate change has been ringing a bell for some years. But it is now when we must focus on solutions and work together for improvement. The truth is that climate change is an easily verifiable reality in our country, and does not seem to change for the better. We have an advantage related to the field being settled in different areas of the country, although close one to another. Each area is characterized by different weather and land conditions, and connected to better resources managing in order to favor the fight against climate change.

The citrus growing areas in Spain are clearly defined in three very different regions.

1. Comunidad Valenciana, with a predominance of sweet citrus crops, with water resources, reasonable rainfall and a great infrastructure for packing fruit. It is characterized by smallholdings (minifundios) that are expensive to cultivate, with expensive soil and with a tendency to abandon or replace crops with Persimmons or Avocados.
2. Comunidad Murciana, where Riverbend is settled. It represents 65/70% of lemon production. We are a very water-deficient region with extremely low rainfall, being classified as desert. It also has a very considerable capacity for packing houses.

The increase in temperatures involves a great challenge for the future, moving crops further north and diversifying production in the Andalusian Community. There, all the great fruit exporters (packers) have farms in both regions, seeking stability and a guarantee of sustainable continuity supply.

3. Andalusian Community, one of the largest in Spain, with aquiferous resources and reasonable rainfall. There are two clearly differentiated areas: Shore [Almería, Málaga and Huelva] and Interior [Córdoba and Seville].

This diversification in the growing areas lets us be optimistic about the field sustainability, as well as minimizing the risk in the course of the crops. This geographical diversity of varieties and crop periods is one of the biggest advantages of our agriculture, oriented towards the commercialization of fresh fruit.



Figure 7. Lemon production and regions in Spain. Ailimpo.

Moving on to another key element in the Spanish Citrus Industry development, I would like to stress out one of the most significant evolutions in the Spanish citrus business for the last 10 years, that is the exponential growth of the organic Fruit, specially lemon. This benefits in an extraordinary way the Spanish Industry. The climate conditions of Spain favors this type of cultivation. Besides, their geographical location permits to smooth and to speed the Logistics between the orchards and the European customers.



Figure 8. Organic lemon growth in Spain. Ailimpo.

Figures are available only until 2020. They show that 17% of the total lemon area in Spain is organic, reaching a production quantity of 172.643 metric tonnes. Currently, we are sure the cultivation area is much larger than 2 years ago due to the number of fields under conversion towards organic.

As an example, Riverbend started processing organic 4 years ago. In fact, we left aside the production of conventional orange and mandarins in favor of processing only organic, together with lemon. Our efforts were redirected towards organic processing in a way that today we have finished this crop production having one third of the total fruit processed as organic.

Organic Fruit is treated by both packing houses and industry very carefully. In the case of the packing houses, they tend to open a separate facility handling the organic Fruit. The industry seeks to have the cleanest Fruit, with a traceability backing its quality down to the orchard.



Figure 9. Organic lemon area evolution (ha). Ailimpo.

Therefore, the growth appearing in this graph is going to raise potentially in the next few years.

Besides, there is also an increase in the final consumption of organic Fruit, either fresh or processed, particularly the NFC juice.

Compared to other origins, the Spanish citrus industry is able to supply direct NFC juices because our location is strategic for the optimal processing and later Logistics that a product like that requires. Consequently, the impact on the carbón footprint is very low.

In conclusion, after all the evidence shown, we can state that the Spanish Citrus Industry has a continuous and stable access to quality organic and conventional fruit. There is a complementary business with the packing houses looking for a win-win relationship. Besides, the supply chain: Growers, Packing Houses and Industry, can be described as sustainable. Moreover, there is a sustained Development of the Organic fruit, with a demanding and growing market. Finally, we can also point out the professionalization of everyone involved in the distribution channel: Agriculture, Packing Houses, Industry and Sectoral Organizations like Ailimpo.