A REVIEW OF THE NEW OLIVE TREE “SUPER-INTENSIVE PLANTATION SYSTEM”, WORLDWIDE.

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REVIEW

1994. SPAIN, THE STARTING POINT.
Since February 1994 when Mr. José María Ferrer the owner of the Valonga Plantation in Binéfar (Huesca) planted the first 6 hectares of olive trees grown at 3 x 1.35 m, used the Arbequina variety, with the aim to harvest olive oil fruits by machines, until today the situation has changed a lot.

Right from the beginning Mr. Ferre’s new olive oil plantation system was the first commercial plantation system called super-intensive. In that period Mr. Ferrer followed the recommendations of Agromillora. Agromillora was a commercial plant supplier, who suggested to him to try out this system in search of possible advantage to mechanizing of olive oil fruits harvest.

Soon after, in 1996, other Agromillora customers dared to copy Mr. Ferrer’s new plantation system, like Hacienda San Miguel (Alhama de Murcia, Murcia), Duquesillo (Alcazar de San Juan, Ciudad Real), La Boella (Reus, Tarragona) and Valonga (Binefar, Huesca), planted altogether, that year 90 ha.

Over the next few years more and more companies were encouraged farmers based of the first results, the growing interest in olive oil and the enormous difficulty in finding labor. Year after year, this system of cultivation has spread throughout the Spanish region and beyond the borders of the country.

A group of French fruit growers in the region of Provence decide to adopt this technology. The idea was that our neighbor country, Spain, is the area in the world where olive oil is sold at a high price for the bulk market, and of course to be bottled.

Concerning these high prices can range around 9 € / kg olive oil, with the obligation to prove that the olive oil have been produced in Spain. This group started in 1997 planted their first acre. Today, after having overcome fierce criticism from local producers, this group has been formed as an association called Union de Provence (UOP) and has approximately 250 planted ha.

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Despite its obvious agronomic and economic success, outside the UOP such plantations have been developed mainly to the still persistent reluctance of them to use foreign varieties.

**1999: CALIFORNIA (UNITED STATES), ENTER THE MARKET.**
California is the third country in the world with olive oil import and could be the second and even first importing country within a few years or even the first. Imports of olive oil general in U.S. are around 250,000 tons. Local production is only 1%. However the state of California has the optimal conditions of olive tree cultivation. For this reason a group of Spanish investors who believed in this case thought it would be a good opportunity to invest in this type of plantation in 1999 when there was no olive tree cultivation or any relevant in the country. Thus, California Olive Ranch (COR) was born.
This was the trigger for the creation of many other plantations and oil mills. Currently, it is the area in the world with the most expectations for growth in this kind of plantation. Local production of olive oil is absolutely necessary in order to increase American consumer awareness about the product and therefore increase its consumption as has happened years ago with the California wine industry.

**2000: PORTUGAL, GOING ALONG WITH SPAIN.**
Concerning Portugal and Portuguese investors, company was Todolino form Cordoba which first promotes the realization to introduce the new plantation system. Since that time in Portugal the number of plantations has not stopped growing.
Local and Spanish investors have been attracted by the still lower land values compared with Spanish land, and have made Portugal into a country to keep in mind with regards to European olive oil production in the future.
The growth potential for the new plantations in Portugal that period was very high, probably even higher than countries with much higher production such as Italy and Greece.

**2000: TUNISIA, GREAT DYNAMISM FROM LOCAL AGRICULTURE.**
In 2000 the local company Sadira, after severa years of the first super-intensive plantations in Spain realized that it was time to make also a decision. Tunisia is the first olive oil producer of Africa, and the second country in the world in planted with olive trees surface area.
Olive cultivation in Tunisia is too important to consider alternative crops not so important. So Sadira made the first plantation of 25 ha on its own estate, and from then on become dedicated to promoting these plantations in the country. Further, it is estimated that in late 2007 will exceed 3,000 ha.
This evolution is very important given that it is a country where labor is still available and very cheap. Yet, the local producers themselves feel that this situation will be threatened in the future and prefers to use the super-intensive system in order to alleviate this variable among others.

**2001: CHILE, AN OPPORTUNITY THAT CAN’T MISSED.**
Encouraged by their success in production and especially export of quality wines, many producers began to wondering why they didn’t take advantage of these already existing trade channels to introduce a product that has always been very connected to wine.
The reality is that the cultivated surface area of olive trees in Chile at that time may have been around 3000 ha, most of them in wide frames with table varieties and some
Italian oil merchants with low productions and no clear direction to go in. Via Wine, owned by the Coderch family, planted the first 80 ha. in San Rafael.

After that, large families who were linked to the wine world as well as other sectors like Elvio Olave, Clemente Eblen and Alfonso Swett, threw themselves into undertaking plantations as they understood that they already had an efficient production system that would allow them to grow so as to position Chilean oil in the world.

2003: MOROCCO, OF NATIONAL INTEREST.

After observing what happened in Spain and having undertaken a small experiment in the country when the late Michel Ayello convinced Atlas Farming (Marrakech) to create the first Arbequina plantation under this model.

Some time later, the King of Morocco established olive tree cultivation as the most strategic for the Maghreb country for the future, officially announcing a new National Olive-Growing Plan which is an attempt to go from 500,000 ha of olive trees to 1 million by 2010.

The redistribution of public land (SODEA) into private hands on the condition of developing new farming projects has made it so that the number of hectares of olive trees planted using this system has grown spectacularly in very little time. Companies like Zniber, Tazi and Agrohealth have led this movement in the country. Morocco is set to be one of the new olive-growing poles in the Mediterranean.

2004: ITALY, THE LAST CHANCE.

Moreno Bernardini, a restless young Tuscan, was the first to create the first commercial plantation in the Transalpine country on his family’s Scarlino farm. Driven simultaneously by Professors Godini and Bellomo of the University of Bari, Mr. Giovanni Cantore undertook the first plantation in La Puglia. Currently, companies like Innova (Puglia) are promoting this system in a very professional manner. It is surprising that the second-leading olive oil producer in the world has become involved in modernizing his such inefficient olive groves so late.

There are basically 3 reasons: little available land, difficulty in pulling out and reconverting the old olive groves and major difficulty with the use of imported varieties in order to conserve their genuineness. Many of us fear that these problems will be too large an obstacle and except for the region of La Puglia where new olive-growing developments can be undertaken, it will not be possible to reconvert the rest of the olive groves. It is very complicated for Italy to quickly adapt its olive-growing culture without subsidies for 2013. Most likely, Italy will lose the hegemony it had in the sector to other countries.

2006: GREECE, AUSTRALIA, SOUTH AFRICA, ARGENTINA, FINALLY ARRIVES.

These countries have recently incorporated the use of this new plantation. Every country has different motivations, but in common all countries in greater or lesser extent they want to be present in the olive oil market of the future.

AND THE FUTURE

The advancement of this technology is worldwide growing fast (Table 1). Associated advantages (rapid entry into production and total mechanization of the harvest) with more than 13 years of accumulated experience on the specific plantation system is suggested as a new optimization system of olive oil plantations. This system is expected to reach the 250,000 ha planted worldwide (Fig. 1).
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Table 1.
Current olive oil consumption per person in European Union (EU) countries

<table>
<thead>
<tr>
<th>Member state of the EU</th>
<th>Current olive oil consumption in L per person</th>
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<tbody>
<tr>
<td>Greece</td>
<td>18</td>
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<tr>
<td>Italy</td>
<td>10,5</td>
</tr>
<tr>
<td>Spain</td>
<td>10,2</td>
</tr>
<tr>
<td>Portugal</td>
<td>0,8</td>
</tr>
<tr>
<td>UK</td>
<td>0,3</td>
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<tr>
<td>Germany</td>
<td>0,2</td>
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Figure 1. Super-intensive olive grown farms in the world