

## **The History of Olive Oil in Italy: the “Puglia Case”.**

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Huge olive trees, that for centuries have occupied the red earth, dry stonewalls that border the access path, old farms whose white walls are silhouetted against the blue of the sky. This is Puglia, in the "heel" of Italy, the chief region for the growing of olive trees and oil production.

Olive oil is a distinctive product, characteristic of all the countries that surround the Mediterranean basin. The Phoenicians were the first to introduce olive cultivation in the Mediterranean, followed by the Greeks, who cultivated the *Olea europea sativa*, and finally the Romans, who contributed to the expansion of olive cultivation in all the territories conquered by the Empire. These processes confirmed that olive cultivation was to be more than just an ancient tradition and that it would represent, together with the oil it produced and other Mediterranean products, a culinary and social identity known all over the world as the “Mediterranean diet”. Italy identifies itself with this culture and tradition, inasmuch as olive cultivation has created an important feature of Italy's own cultural identity. The many different quality productions of olive oil in Italy satisfy the needs and expectations of different consumers. This extraordinary diversity represents one of the strengths of the Italian oil industry, where the richness in the variety of olive trees goes together with the wide range of pedoclimatic conditions. The protection of this priceless heritage ensures the preservation of natural resources, so that the olive tree is able to produce and protect the “Italian food style”.

### **The Italian situation**

The world production level of olive oil in 2001-2002 was equal to near 2.68 million tons; this number testifies to an increase in production of around 9.6%, compared to the average of the last four-year period. The increase is mainly due to the introduction of new systems of production in the E.E.C, which remains the primary world producer of olive oil, contributing a total of 2.33 million tons. Spain, the no.1 world producer, contributed about 1.4 million tons in 2001-2002, while Italy produced 575 thousand tons with a smaller increase, considering its potential, as a result of a period of drought in the south of Italy (Source: Elaborazioni Ismea su dati COI).

Supporting the great international interest in this cultivation are encouraging elements such as the small quantity of vegetable fat in olive oil and its health-giving benefits.

Olive oil production in Italy corresponds to close to 2,037 million euros, equal to 4.6% of its total agricultural production. In the last four years, southern regions in Italy have contributed an average of close to 87% of this production. Of the regions that most stand out, we think of Puglia, Calabria and Sicily, that together contribute 71% to the total production. The central and northern regions cover a share of 13%, mainly in the regions of Lazio, Tuscany and Umbria. In the south, olive production corresponds to 11% on average of the southern agricultural economy.

### **The Puglia case, “the Green Gold”**

Olive culture represents for Puglia a strategic component of its economic and agricultural scene. Numbers speak clearly: 230,000 olive companies, production in 2001-2002 of 2,274,410 quintals, equal to 39.6% of the total national production (assessed by ISMEA). All the provinces of Puglia (Bari, Lecce, Brindisi, Foggia, Taranto) are interested in oil production, but they differ in their methods of cultivation, their harvest techniques and their primary varieties.

There is an ancient tradition behind olive cultivation in Puglia: 1200 olive-presses located in Puglia are equipped for the milling of the fruits of the olive trees that occupy an area of about 370,000 Ha. Olive production in Puglia is characterised by a wide range of varieties, somewhere close to 53 in total. Puglia's olive growing region can be subdivided into three areas: the north zone corresponds to the province of Foggia, where there are varieties such as the ogliarola barese, the coratina and other local varieties; the centre zone corresponds to the province of Bari; here the prevalent varieties are the coratina and the ogliarola; and lastly, in the south of the region (corresponding to the remaining provinces, and called "Salento") the most widespread varieties are the ogliarola leccese and the cellina di Nardò.

Puglia has obtained recognition in Europe with four PDOs (Protected Designation of Origin) to protect its typical quality products: Dauno, Terra di Bari, Colline di Brindisi and Terra d'Otranto. Yet to be certified is the product specification Terre Tarantine, currently being examined by the Minister for Forest and Agricultural Policy.

Thus, Puglia can be seen as "sovereign land" for olive tree cultivation. Olive production characterises the agrarian and rural scenery and in some cases also conditions the productive and settling orientation of the region. As a matter of fact, out of 40 million olive trees registered, close to 15 million are centuries old, for which a recent regional law has established rules for their protection. These same olive trees, that strike the first-time traveller to Puglia with their majesty, with their trunks that appear as sculptures, seem to hypnotise and even stop time. And then the view of the sea is even more astounding when it is seen through the silver foliage of olive trees. In those moments, the trees, the sky and the look of the observers seem to be synchronized in the same breath. Despite being surrounded by nature, the impression is ethereal. In Puglia the light unifies everything, both in summer and in winter. It is a vibrant and clear light, that along with the wind plays with the leaves of olive trees, green on top and silver underneath. It is the light that strikes anyone who comes to Puglia for the first time and who discovers how, even in the darkest corners inside houses and churches, light bounces between the limestone walls, glasses and mirrors, penetrating through the stone cracks and illuminating any shade.

### **Aiming for excellence**

This is the philosophy associated with the qualitative growth of olive oil in the Puglia region, with the aid of a community regulation towards "action that concerns the qualitative improvement of olive oil production". This initiative began in 1998 and has since been resubmitted each year. Last year it was carried out thanks to Reg. Ce 240/01. More information is available at [www.qualitaoliopuglia.it](http://www.qualitaoliopuglia.it)

The objectives of the program are as follows:

- Improvement in the quality of olive oil: rationalisation of the protection and cultivation of olive trees and the creation of monitoring networks and technical assistance,
- Qualitative growth of the olive oil sector: technical assistance and enhancement of the technical knowledge of producers and processors;
- Improvement in the conditions of harvesting, warehousing, and processing of the olives, as well as of warehousing of the oil produced;
- Assessment of the oils produced from the Puglia region: the creation of sale panels and laboratories for the chemical and organoleptic analysis of olive oil from Puglia;

- Collaboration with organisations specialising in the creation of research programs on the qualitative improvement of the production of extra virgin olive oil;
- Improvement in the process of waste depositing after milling in respect of the environment, and pomace composting.

The “Quality improvement of olive oil” program includes activities of monitoring and identifying of the presence of the main parasites in olive trees such as the olive fly (*Bactrocera oleae*), the black scale (*Saissetia oleae*), the jasmine moth (*Palpita unionalis*), the peacock eye (*Spillocaea olagina*), the otiorrhynchus (*Otiorrhynchus cribricollis*). These initiatives are carried out by the Consorzio di Difesa delle Produzioni Intensive of the five provinces of Puglia and employ about 90 technicians.

The monitoring is done on about two thousand companies evenly located throughout the whole region, with a higher concentration in the most important oil areas. The subdivision of the region in homogeneous areas was made according to the species cultivated, the method of agronomic management and the climatic conditions. This approach allowed the gathering of more homogeneous data to indicate the best methods of defence from parasites.

The detailed monitoring and the weekly surveys allow the collection of a high quantity of data about the presence of parasites and their biological stages, as well as the damage they inflict.

The use of a first class software program allows all the data collected to be processed by technicians, who then summarise, by means of charts, graphs and flight curves, the level of infestation and where the problem crosses the “threshold of intervention”. This data and processing allow to formulate a weekly phytosanitary bulletin, showing which interventions are necessary and giving meteorological news. The bulletin, after the authentication of the Observatory for Plant Diseases of Bari, which coordinates the technical scientific activity, is distributed in print, on radio or television and is published on a Web site ([www.qualitaoliopuglia.it](http://www.qualitaoliopuglia.it)). The bulletin's reports, for their comprehensiveness (the location of the councils are also indicated), have a positive fallback on agricultural operators, who often put interventions into effect only if indicated on the bulletin.

The distribution of the bulletin is also done by technicians from the Olive Oil Producers Association in the territorial areas under their jurisdiction. The technicians from the Associations also give technical assistance to companies and work on the olive-presses, in order to improve the stages of production and processing.

Supporting the activities carried out by technicians in charge of monitoring and technical assistance, a group of technicians coordinated by the Observatory for Plant Diseases of Bari was established to experiment with and evaluate the different strategies of defence applicable to olive trees in order to suggest rational and adequate interventions for the different oil realities of Puglia, with particular attention to strategies with lower environmental impact.

There have been, in fact, methods of defence created against:

- The jasmine moth with the use of *Bacillus thuringiensis*, describing also its flight trajectory in the different provinces;
- The olive fly by using attractants impregnated with piretroids (Attract and kill);
- The otiorrhynchus with the use of fibre bands to avoid the ascent of adults, also defining the atrophic curve of the insect;
- The black scale, identifying more precisely the best moments to do the checking through the use of only white mineral oil;

- The leopard moth, using the sexual confusion method, the mass capture and the active substances of synthesis;
- The peacock eye, using cupric products with low quantity of Cu in order to avoid waste in the soil.

There have also been studies to verify the presence of entomofauna in the *Saissetia oleae* and on the olive fly. Other studies have concerned the presence of *Spilocaea oleagina*, for which maps showing the spread of the parasite on the territory have been designed.

### **Tribute to the culture of olive oil in the kitchen**

Which food product best represents Italy in the world? Answering “pasta and pizza” is ridiculous, purely for the banality of the answer, while wine is a product that better represents our French cousins. “Olive oil” on the other hand can be an original and undoubtedly accurate answer. The name of this typically Italian product reminds us of its immense gastronomic heritage, of the sauces, the typical produce of the various regions, the strength and passion with which this product contributes to the final stage of a dish. We need to know it, to appreciate it, to value it in all its nuances. Olive oil can have an air of exclusivity that gives a distinctive aspect to the table, by adding freshness and character, bringing food to the peak of its splendour. Olive oil can be compared to wine, in the sense that a chef of any restaurant should cook and give flavour to a dish with olive oil chosen from the rack by the customer himself.

### **Tourism, olive oil cities and routes**

The National Association of the City of Oil, which brings together institutions (Counties, Provinces, High Altitude Communities and Chambers of Commerce) and non-producers, intends to enhance the value of the areas most suitable for olive oil production in environmental, landscaping, economic and social terms. A new project sponsored by the Association has been launched, called the “Tourism of olive oil”: Italy is visited each year by a flood of millions of tourists interested in its enogastronomy. Their focus on enogastronomic districts and small inland villages instead of big urban centres is becoming more and more significant. Travelling tourists will want to rediscover the natural resources and the local popular traditions, they will want to be both the protagonists and the decision-makers of their activities during the days dedicated to one's own spare time. In such a context, the four olive oil routes of Puglia fit perfectly; Castel del Monte ([www.stradaoliocastelmonte.it](http://www.stradaoliocastelmonte.it)), Terre d'Ulivi Bitonto ([www.terraulivi.it](http://www.terraulivi.it)), Collina di Brindisi ([www.stradadelloolio.org](http://www.stradadelloolio.org)), and Daunia ([www.dopdauno.it](http://www.dopdauno.it)). These routes aim to create an alternative passage, a system whereby all the sites of the region become available to tourists. By driving a short distance along any of the Olive Oil Routes one can be literally surrounded by huge and ancient olive trees and abandon oneself to the conviction that they have been there forever. Those tortured and mutable shapes of the trees seem testimony to the historical happenings of the region.

Today the producer, who with his own dedication creates a product that can embrace religions and cultures that have populated the Mediterranean, can be described as a creative entrepreneur, capable of passing on traditions and ancient knowledge on the edge of modern technologies, guaranteeing however a product of the highest quality. The producer then becomes the custodian and guarantor of the ancient olive oil traditions, considering his oil a fundamental and healthy food product, with even medicinal qualities.

### **Future trends**

The opportunities for expansion that the olive oil industry in Puglia is capable of expressing are extremely promising. On the one hand the general opportunities, consisting of the expansion in demand of quality products in the richer countries (Northern Europe, North America, Australia), but with low pro-capita consumption; on the other hand the interest generated from the beneficial effects that this product has on consumers' health, besides the positive image of Italian food products in the world, to the extent of being defined as Italian food style.

These opportunities for the olive oil industry of Puglia are supported in particular by the presence of areas suitable for high quality production, with the possibility of differentiating the supply thanks to a large number of autochthon varieties, as well as more DOPs within a relatively small area; and innovations in product and process which result in quality improvement and lower production costs. These strengths are further supported by the vast availability of olives destined to be transformed, from the "know how" acquired in the formulation of blends that better respond to the demands of modern consumers, in addition to the innovative technologies, which are used more and more often.

Even more important is that which concerns the production of olives derived from Organic Farming. Puglia's production represents around 30% of the national organic olive cultivation, with an area of about 35 thousand hectares, managed by at least four thousand producers. If organic extra virgin olive oil was at first considered a second-rate product, it is now starting to take on a certain familiarity to the average consumer: today mediocrity is just a distant memory.

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