

## **WHICH ARE THE POSSIBILITIES TO PRODUCE AN AUTOCHTHON OLIVE OIL IN ALBANIA?**

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**Key words :** olive oil, territory product, PDO, PGI, autochthon cultivars..

**Abstract.** Olive orchard is considered as one of the main sectors of agriculture and an inseparable part of the nutrition regime in Albania. Actually the country is facing with a lot of problems with the quality of olive oil, which is related to the cultivation methods and agronomic techniques. In the other side olive genetic patrimony of the country is considered very rich (Kafazi & Muço, 1984; Osmani, 1993), considering the small area of cultivation. Last years, Albanian consummators are skeptics in using Albanian olive oils, because of the absence of quality norms. In this frame one of the possible solutions will be the promotion of the olive oil as a territory product. (PDO, PGI).

### **Introduction**

Albania is a country with a production capacity of about 70 000 tons of olives per year and about 7800 tons of olive oil. The olive grove occupies 41 000 ha with 4 298 000 productive olive trees spread in approximately 118 000 small farms. Since years ago the olive production has been considered an important sector of agriculture and an important part of the Albanian nutrition diet among with its derivatives.

Since years ago olive oil trees are considered a basic sector of agriculture, and also an integral part of the Albanian nutrition diet among with its products. Also the olive oil is considered one of the main products of the Mediterranean diet, significantly used even in Albania. The quality of olive oil in Albania suffers a lot of problems which are related with the way of olive is cultivated and the agronomic techniques related with processing and storage phases, which directly affect the end quality of the olive oil.

Actually the Albanian consumer has a weak relationship with the domestic olive oil, because of the lack of security for the product he consumes. One of the

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ways to be followed to increase the relationship among the consumer and the product is promoting the link of the olive oil with a territory and a specific variety.

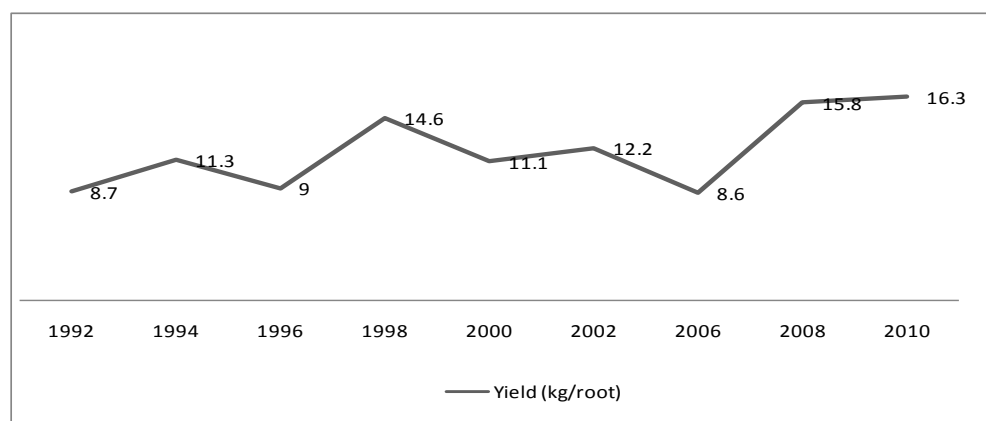
In this context this article aims to identify the actual producing capacities in Albania to produce autochthon olive oil identified as territory (PDO, PGL)

Its constituent parts are: i) olive oil production in Albania and the level of olive oil production, their main difficulties, ii) the general overview of territory products as a possibility for income increase at a farm level, iii) the methodology of olive variety identification which has the chance to be classified in one system PDO, PGL, iv) the domestic production potentials, classified under the same quality using three possible scenarios.

### 1. A general overview of the distribution of olive in Albania

Albania has an important production of olive oil. The olive efficiency has seen a significant increase country wide from 8.7 kg / root in year 1992 in 16.3 kg /root in 2010 (fig. 1). Despite the variation of the efficiency during the period, we still can observe a significant increase for year 2008 and 2010. The olive grove is spread in nine districts and the olive groves takes approximately 5.9% of the arable land at the national level.

Fig. 1 - Performance of the olive yield in kg / root, for the period 1992-2010



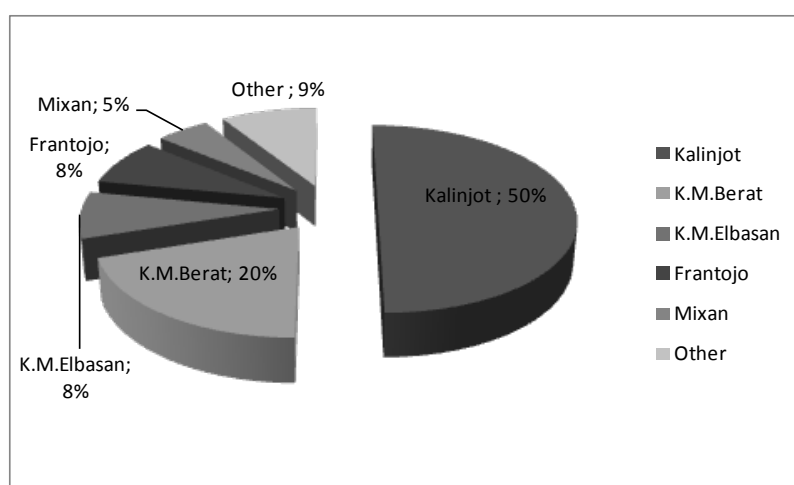
Source: Statistical yearbook 2002, 2005, 2008, 2010 MBUMK

### 2. The variety structure and the role of the autochthon varieties.

The olive tree continues to maintain an important link with the native autochthon, supported even from the agriculture policies before the 90s. (MBUMK 09). Despite the lack of a variety policy after the 90s, the autochthon varieties still dominate the olive groves.

According a study made by the Insight Consultant, about the Albanian native varieties, supported by the result of many years studies made by the Albanian researchers (Kafazi, 1980; Kafazi & Muço, 1984; Osmani, 1993; Ismaili, 1995; Kafazi, 1995), the Albanian autochthon per olive oil are Kalinjoti, Kallmet, The white olive of Kruja, The white olive of Tirana, Frëngu, etc.

Fig. 2 - The structure of the Albanian groves cultivations



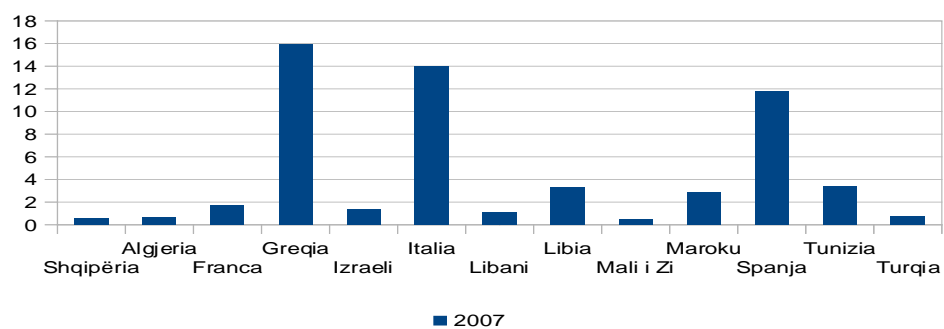
Actually country wide, the structural variety is dominated by Kalinjoti with approximately 50% of the total roots, followed by the Kokërrmadhi i Beratit with 20%.

## 2. Main problems with the olive oil processing:

Development of oil processing industry continues to reflect the problems which face the production sector of oil producing and also other sectors of agro-processing in Albania face.

The processing industry of the olive oil in year 2010 was composed by 107 concentrated enterprises concentrated mainly in Fier (35%); Vlorë (30%) and Tirana (20%), with a total production capacity of approximately of 200 tons of olive oil per day.

According to a study made in year 2009 from MBUMK (2009), for the olive sector in Albania the actual production of oil from the industry in our country is 6000-8000 tons, while the consumed quantity is 2-3litre/ capita/per year, 10 times smaller than the quantity consumed in Greece.



direct relationship to the consumer to the product, it is not enough only the quality increase toward lowering the level of acidity (the European rate is lower the 0.8%) but also the relationship of the product with a variety or a specific area at the national level.

In our country it exist some autochthon varieties which are mainly related with a specific geographic area.

Therefore the main objective of the policies will be to create homogeneous areas (in terms of varieties) that later could apply in terms of quality or the relationship among the product and production territory.

### **3. The methodology of product identification based on territory**

Europe is known for the multiple varieties of agriculture and alimentary products. These products, which originate from the European nature, or from the methods of land cultivation which have been developed over centuries. Food products, beverages, along with household foods, represent a substantial part of the cultural identity of the European regions populations. One of the main priorities of the European agriculture is its reputation to produce high quality food products.

In this context for the territory food products exists a long experience, in which people are trying to orient and specialize in agriculture production techniques, processing techniques and storage techniques, valorizing as high as possible their natural potentials. The concept of product territory firs appeared in France for an important products, such as wine, which was facing a difficult time, because of some problems, such as competition, phylloxera, and lack of a book of standards etc. On August 1, 1905, came out a law that condemned all falsifications and alimentary product imitations, especially viticulture and wine production that in the period was in a deep crisis.

Among other things in this law was required the geographical origin of products filing, in order to define the boundaries of the production areas etc. This experience was followed also by other European countries. The origin protection policies were established, through instruments such as IGP (Protected Geographic Indicators) and (rates of origins protection).

In the new context of Common Agriculture Policies and World Trade Organization the geographic indication have interest not only for European farmers, but also for those in developing countries Ilbert, H. et al (2005).

One of the policies that tend to increase the production quality is also the qualification quality. This policy is closely related to the product origin identification, through territorial brand names such as controlled origin label, Protected Geographical Identification, Biological Agriculture etc.

It takes a new dimension through quality differentiation strategy which takes European approval on February 14, 1992 with Regulation 2081/92 concerning the

protection of origin for agricultural products and foodstuffs. This regulation has a great importance for countries, which are closely related to quality and reputation of their territory products.

They have received assistance for promoting products that have an IGP.

On the other hand the development of PPB was associated with a low protection level for the European farmers from the market risks, but meanwhile it has become more real, by taking into consideration the advantages of diversity and product quality, through origin quality. Although such policies should be trustable for all the stakeholders, consumers, producers, public institutions etc (*Barjolle et al(1998)*). (That is why clarification of product-territory connectivity is very important. A lot of research studies are realized and many others are in process, because actually the product- territory usage has become very abusive. (*Bérard, L. Marchenay, Ph. (2007)*). Normally the physical characteristics are as a result of specific agronomic practices, technique practices and the way of processing that influence the different characteristic levels of the final product. The idea of the black box is related with a series of elements which overlap to reach the territory product. These elements are of environmental, technical, historical, cultural, social nature. To understand better the changes and the elements taken into consideration to determine the territory products, we make a comparison to this product with what is called a farmer product.

Farmer products are often considered as territory products, which present produced products at a farm level using raw materials from the farm (*Bérard, Marchenay, 2005*). As a matter of fact the products may have a defined origin, but if they do not participate in the local culture we can not name them as territory products. So therefore, this product has a geographical and historical origin. Studies are trying to show a direct physical relationship (*Renée Morlat INRA, 2005*) of product with the territory in which he is produced, we must necessarily describe the exactly its taste, smells, and texture of the product. For this purpose are built a series of sensor analysis, that enable recognition of the product tasty characteristics. Through them we can identify the organoleptic qualities and also the texture of the product (acid, salty, brittle, granular etc), the intensity of different characteristics and the consumer assessment. There is a question that naturally arises: Is there any link among the Albanian geographical position and these products, so do we have an approach which resembles more the northern or southern Europe?

#### **4.The material and method**

For this article it will be used secondary data collected from different databases from MBUMK, INSTAT, FAOSTAT etc. Through a simple design, we will aim to identify, what are the possibilities of producing oil from authentic

varieties and how public policies affect the strengthening or weakening this positive characteristic of the Albanian olive groves. To make calculations, and given the lack of accurate data we have established, some hypotheses which limits the generalization level of our work.

Among the main hypotheses, we can mention:

The yield of different varieties is assumed to be similar and comparable, also it is not taken into consideration the age and the trees conditions, without affecting their level of production which is partial with their aging and vegetation conditions.

It is assumed that the young olives are planted when they enter in the production phase and will achieve similar yield with the average yield of the region.

It is assumed that the young olives that are planted, when go into production will be similar to the average yield of the region, which is not necessarily true for the agro-technical conditions under which new surfaces are cultivated with olives. Although we are aware that these assumptions are important, we should accept to overcome the shortcomings of the data.

## 5. Results

The level of olive oil production keeps the same variety structure characteristics of the Albanian groves. The most important part of the production capacity is composed by Kallinjot variety, which presents the main level of production at the national level, which constitutes over 70% of the structure of Vlora region.

This map offers us two important information: the concentration level of varieties at a regional level, where in our case we distinguish regions in which dominates a variety (Vlore, Tirane, Lezhe), regions where dominate two varieties and regions, where dominates three main varieties and the possibility of production according varieties. It is important that the regions who have a significant concentration of varieties offer a limited amount of production (Tirana, Lezha), here is an exception of Vlora.

The main areas of production are divided into two main varieties, which are mainly autochthon varieties (Kalonjoti, K. M. I Beratit and Minxani). Regions which have their olive groves spread over three varieties have a limited importance in national production.

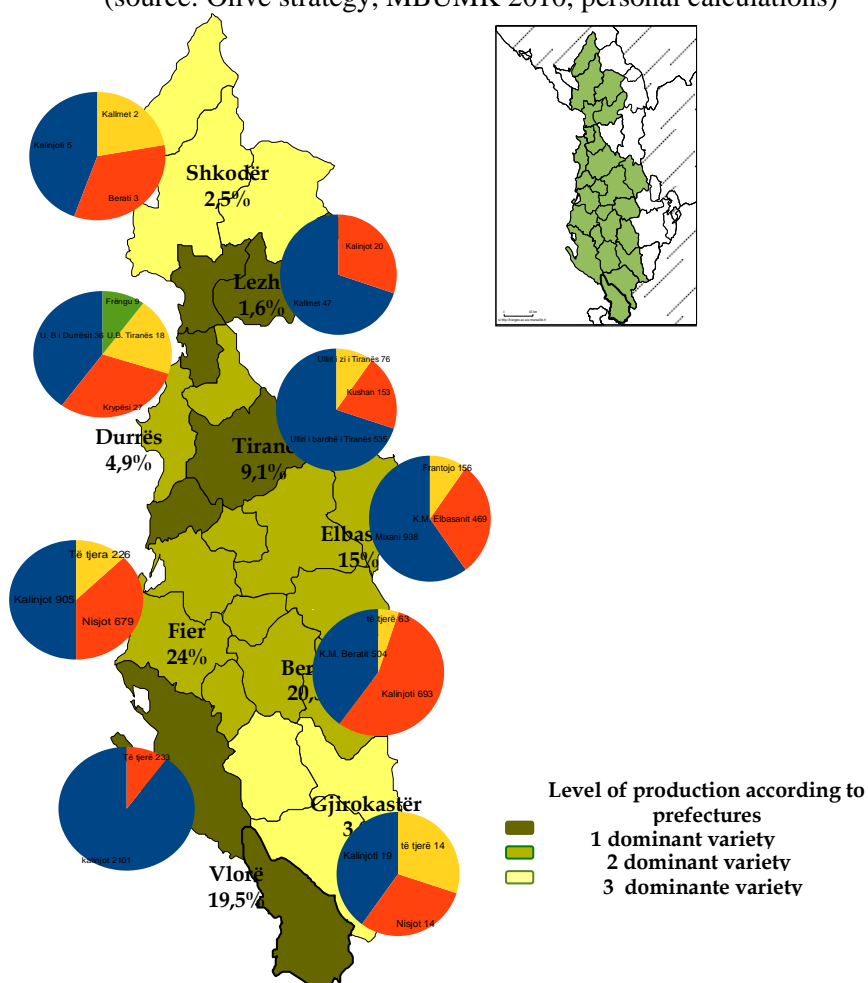
From our analysis we can say that at the national level we can determine two varieties for the production quantity and characteristics that can play the role of indigenous varieties and can be promoted to the rank of the products of the territory.

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concentration in a limited area and the quality of oil they produce, make these varieties potential product territories with all the required elements.

But is it having in mind the new plantings made in Albania?

Fig. 4 - Distribution of oil production according varieties in the area of olive growing  
(source: Olive strategy, MBUMK 2010, personal calculations)



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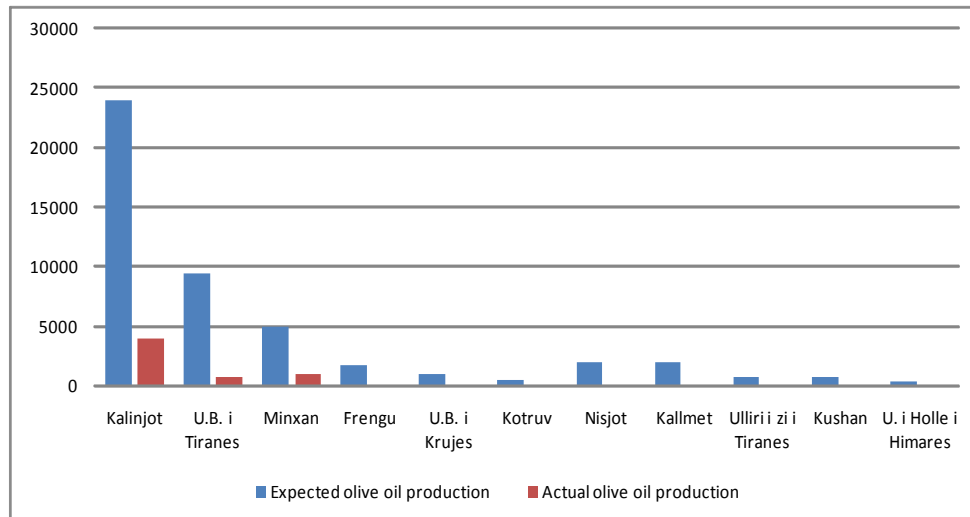
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In the below graph are presented the expected quantities of oil production, after the olive grove planted in the last years will enter into production compared with the actual yield of production.

Fig. 5 - Expected level of oil production Kalinjoti, U. I Bardhë i Tiranës, and Minxani



This graph raises many questions that need answers from product processing units which take into consideration the significant increase of the raw material must undergo a significant conversions not only quantitative but also structural, replacing current production units with much larger units with more modern technology.

According the given data we could say that the new grove trend will continue also in the future and we will have three main varieties.

This trend seems to fit a concentration in three or four main varieties

Thus the expected production level only for the variety Kalinjot expected to be as quadruple as the national output in 2010 (according to the data of the olive study).

### Conclusions

Structure of the variety of Albanian groves enables rapid development in the territory products, areas in which varieties are clearly defined, with historical and cultural tradition cultivation, make very positive for further evaluation of this crop. It seems that in Albania, we can define as important to an evaluation process three main varieties: Kalinjotin, white and olive Minxanin Tirana seems to be the variety that will play an important role in the future.

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