

Olive and Olive Oil in Albania, From Antiquity Until the Middle Ages



Archaeology

Keywords: olive tree, olive oil, trapetum, antiquity, oil presses, antiquity, middle ages.

Suela Xhyheri

PhD student at the Institute of Archeology
Centre for Albanological Studies, Sheshi "Nënë Tereza", Tiranë, Albania.

Abstract

The olive it's the most important tree of the Mediterranean, its domestication has begun during the Neolithic in Greece, 6000 years BC, and about this time in Albania, due to its closeness with continental Greece. Planting increased in the 8th and 7th centuries BC and from the 5th century BC the olive was the tree of the Hellenistic world. The cultivation of olive and preparation of olive oil in Albania was the same as that of the neighboring territories; the most popular was the roman milling system, trapetum. This evidence is attested in the cities, small centers or rural settlements that are located in the Adriatic and Ionian Coast, which have a suitable climate for its cultivation. For the medieval period the cultivation, production and the circulation of the olive oil is in less in amount and regional. In the preparation of olive oil, in the family setting, were used the same procedures as in antiquity. The milling was done with millstones that perpetuated the roman trapetum, powered by animals. From the number of olive trees per family and of the olive mills used in the Albania is attested that their dimensions were mostly for family production or at most for the regional market. In the beginning of the modern era, the cultivation of the olive was consolidated and increased helped by the repopulation of the areas when the olive was cultivated. Apart from the written sources an important place takes the archaeological finds, like the oil mills found in Bylis, Kostar, Kamenicë, Sinjë, ect., which belong to late antiquity and the middle ages. At the beginning of the modern era, olive cultivation was consolidated and expanded due to the repopulation of the olive-growing zones, to general demographic growth.

Introduction

This study aims to trace a short history, based on the data given by the archaeological excavations and some sparse information from the ancient sources and other fields, of the spread of the olive tree and the production and uses of its oil. The olive is the most important tree of the Mediterranean as described by *Columella* in the 60 AD: "*Olea prima omnium arborum est*"¹⁷ (of all the trees, the olive is in the first place).

The Origin, Spread and Cultivation of the Olive, A Short History

The olive tree belongs to the family of *Oleacea*, in the subspecies of *O. e. ssp. europaea*, which is divided into two varieties: the wild olive and the domesticated one. The origin and spread of *O. europaea* is still argued, although it is demonstrated to have appeared in the Tertiary¹⁸ and its presence in the Mediterranean goes back some 3.2 million years¹⁹. The oldest remains of carbonized wild-olive wood have been found in Israel in the Negev Desert and could be 43.000 years old²⁰. In the Aegean, the most ancient find is from Thera (Santorin), this being fossil prints of olive leaves found in the layers of lava dated to 37.000 BC²¹. For these earliest periods in the territory of Albania is a lack of research and evidence, and some sparse written sources, which unfortunately gives information only indirectly; dates from very late periods.

The domestication of the olive has begun during the Neolithic as shown by the archaeological excavations in eastern Spain²², and in southern France²³. The agricultural role of the cultivated olive, during the Neolithic and the Bronze Age can be supposed that was the same as that of the cereals²⁴.

¹⁷ *De Re Rustica*.

¹⁸ Palamarev, 1989.

¹⁹ Suc, 1984.

²⁰ Liphshitz et al., 1991.

²¹ Friedrich and Pichler, 1976.

²² Terral, 1996. In la Cova de les Cendres, Alicante.

²³ Terral and Arnold-Simard, 1996. In La Cova de l'Espèrit in the western Pyrenees.

²⁴ Blanco, 1994.

In Greece, the appearance of the olive tree has begun the Neolithic, some 6000 years BC²⁵, firstly in Crete, Cyclades and later in the continental Greece²⁶. And we can suppose that even in the territories of Albania, due to its closeness with continental Greece, its appearance begun during this time. The very first documents for the olive cultivation are from the region of Canaan, in today northern Syria²⁷, dating in the 1500 BC and evidenced by the archeological excavations. Later the olive spread from Syro-Palestine to Turkey, the Aegean Islands and through all the Mediterranean²⁸.

In Egypt the sources for the development of the olive are from the 18th Dynasty (1550-1295 BC)²⁹, but its expansion dates only during the Ptolemaic Dynasty, it was used in pharmacopeia for the treatment of burns and cracks in the skin and cosmetics to produce essential oils and for the illumination of the temples.

In the Judeo-Palestine territories, the olive tree and use of its fruits and oil had a strong symbolic character³⁰. A dove returned to the Ark of Noah carrying “a green olive branch in its mouth”³¹. Olive oil was used to illuminate the temples and sanctuaries, even the sacred *menorah* oil lamp³² was assigned by God to Moses and had to be illuminated with pure olive oil. It was used for rite of the anointment of kings. The name of the Messiah means “*the anointed one*” and that unction is that of the body of Christ³³. The oil production in Hebrew Palestine enabled the exportation to other countries. In Spain, olive growing took hold in the valleys of Guadalquivir and Genil, while amphorae to hold the olive oil were made from the 8th century BC³⁴.

In Crete the most ancient remains of stones and wood olives date from the Bronze Age, the production of oil is reflected by the utensils for gridding the olives and the large *pithoi* jars to store the oil that was kept in villas and palaces³⁵. Planting increased in the 8th and 7th centuries BC and from the 5th century BC the olive was the tree of the Hellenistic world³⁶.

Olive Cultivation in Albania

The cultivation of olive and olive oil in the Albanian territory, as part of the Mediterranean Basin, hasn't had any changes from that of the other territories and mainly from the neighboring ones. The archeological evidence for earlier periods is scarce and mainly comes from the ancient cities and are in most part olive stones, storage vessels and amphora for the transportation of oil. This evidence is attested in the cities, small centers or rural settlements that are located in the Adriatic and Ionian Coast (*Zgërdhesh, Persqop, Dorëz, Sarag, Gradishta e Belshit, Berat, Dimal, Apoloni, Gurëzezë, Mashkëzë, Bylis, Klos, Margëlliç, Kalivaç, Oriq, Kaninë, Aulonë, Armenë, Xhyherinë, Himarë, Borsh, Foinike, Butrint, Çuka e Ajtojit*, ect.), which have a suitable climate for the cultivation of grape and olive. For the olive orchards of the Illyrian coast, Strabonis (63 BC-20 AD) writes that “*all the Illyrian coast is warm and cultivated, full of good olive orchards and vineyards, apart from some small and few pieces of land, where the soil is very arid*”³⁷.

²⁵ Bervillé et al., 2001.

²⁶ Blitzer, 1993.

²⁷ Heltzer, 1987, 1993.

²⁸ Bottema, 1994.

²⁹ Liphshitz et al., 1991; Frankel, 1994.

³⁰ *Dt.* 8, 8; *Dt.* 28, 40.

³¹ *Gen.* 8, 11.

³² *Exodus* 25, 31-40.

³³ Schäfer-Schuchardt, 1996.

³⁴ J. Mataix, F. J. Barbancho, Olive oil in Mediterranean food, in J. L. Quiles, M. C. Ramirez-Tortosa, P. Yaqoob (eds.), *Olive oil and Health*, CAB international 2006, p. 9.

³⁵ Ruzé and Amouretti, 1987; Blitzer, 1993.

³⁶ Esqu., *Pers.* 881-2.

³⁷ Strabonis, *Geographica*, VII, 5, 10.

In Albania the oldest olive trees are from the Tirana region the villages of Petrela (3000 years old), Lanabregas, Tufinë (2000-2500 years old), Prezë, Dajti (around 3000 years old) and Tujan (2800-3000 years old); they have a perimeter of up to 30 m and are estimated to be around 3000 years old. The oldest olive tree about 3000 years old is a “multiple” olive in the village of Brret, Krujë, which is thought to be even older than that of Vuva in Crete³⁸.

Olive Oil: Preparation Methods

One of the first used milling systems consisted of placing a large bag of ripe fruits in a wooden trough and trampling them with bare feet and the tightly twisting the sack. The oil was filtered through a lower aperture in the trough and collected in a container. This method, for olives and for grapes too, was widely used in Albania during the modern era. The roman innovation in the milling system was the *trapetum*³⁹, a mill consisting of a *mortarium*, where the fruits were placed, which was handled by two men using wooden handles (*modioli*) that passed through two semi-spherical millstones, flat on the inside and convex on the outside (*orbes*), which were inserted into an iron axle (*columella*) joined to the *mortarium* by a stone column (*milliarium*).

For the extraction of the oil firstly was done without presses, by using trampling, torsion in sacks, or compression of the pulp in a basket with a stone weight⁴⁰. The introduction of the press (*torcular*), composed of two wooden pillars (*arbores*) sunk into the ground framing by heavy beam (*praelum*) that exerted pressure by means of circular plate (*orbis olearius*) over a press table where the olives were placed (*area*) in a basket (*fiscina*) emerged at the end of the 2nd century BC and it widespread during the late Empire and thorough the middle Ages. In Albania is attested that the primitive systems for the extraction of oil were used by the women in the house for small amounts of olives until a few decades ago, instead the press was mainly used for the extraction of oil from the olive orchards. The wooden presses are still conserved in the villages, as the case of that in the village of Kakunjë, in Tirana. Olive oil must be decanted to separate the oil from its remains, for this propose were used apposite containers where the remains went in the bottom and the oil on top, sometimes were used even decantation tanks, such as them found in North Africa⁴¹.

The Olive and Olive Oil During the Late Antiquity and the Middle Ages

According to the paleo-climatic studies it is generally accepted that from the 1200 BC until the middle of the 6th century (536 AD) the climate was characterized by a warm winter, a very favorable condition for the spreading of the cultivation of the olive tree. Starting from the 536 AD and until the end of the 9th century the warm climate left the place to a longer and colder winter and to a shorter and less warm summer, which brought to a receding of the number and territory of the olive tree. Starting from the 10th century and on the climate in the Mediterranean has helped in an increasing of olive cultivation. For the medieval period the cultivation of olive is isolated and always closed behind the borders of the properties of the single nobles or monasteries, for this reason and for the difficulties of transportation (the vessels for the transportation were heavy) turned the production and the circulation of the olive oil in less in amount and regional. From the number of olive trees per family and of the olive mills used in the Albania is attested that their dimensions were mostly for family production or at most for the regional market. In this period were also used mixed parcels, where the olive was planted in the middle of the vineyards and fruit orchards like figs or nuts. Is the possession of the lands by the

³⁸ H. Ismaili, B. Gixhari, *Old olives of Albania*, p. 5.

³⁹ Cat., Agr. 23-25.

⁴⁰ Amouretti, 1986; Foxal, 1993.

⁴¹ Amouretti, 1996.

local nobles and the monasteries, the main factor of the darkest period for the olive, which based on the taxes registrations of the 15th century, 85% of the families didn't have more than 10 trees of olives.

The olive would regain its value only with the Republic of Venice, with its apices in the 17th century. In the beginning of the modern era, the cultivation of the olive was consolidated and increased helped by the repopulation of the areas when the olive was cultivated.

In Italy, despite the existence of olive orchards throughout almost the entire country, the olive did not remain preeminent in the first centuries of the medieval period, except in some southern zones, and there was a general waning during the 10th and 11th centuries. At the end of the 13th century, there was a revival in the south and during the 14th century the olive recovered its dominance in the landscape.

In the *Chrisoula* of Emperor Andronicus II Paleologus (1307) to the Episcopates of Kanina is renowned as properties the olive orchards of Mershevishta and Çika. In the statute of Shkoder (beginning of 14th century), where apart from Tivar which numbered hundreds of olive trees, is mentioned Drishti specialized for the production of olive oil.

Later an important resource is the Ottoman Register, starting from that of 1431, when for the different villages is given the number of oil trees, as that of the Vilajet of Vajonetia: Kamenica 400 olive trees, Cerkovicë 300; Shëndre 100, or in Berat, where the village of Vodicë, even if it is on the border of the olive zone numbers 50 olive trees.

In the registrations of the 16th century, starting from the olive taxes of 1/10, it can be verified that the production and the area of its cultivation has increased, but still the number of trees for family is still between 10-12 olive trees⁴², but weren't scarce the cases of the properties with more than 30 trees⁴³.

Apart from the written sources an important place takes the archaeological finds, like the oil mills found in Bylis, Kostar, Kamenicë, Sinjë ect., which belong to late antiquity and the middle ages. In France, there were no olive orchards until the 11th and 12th centuries⁴⁴. In Spain, the situation improved in from the 8th to the 9th centuries during the Moorish period⁴⁵.

At the beginning of the modern era, olive cultivation was consolidated and expanded due to the repopulation of the olive-growing zones, to general demographic growth. In the preparation of olive oil, in the family setting, were used the same procedures as in antiquity. The milling was done with millstones that perpetuated the roman *trapetum*, powered by animals.

As is the case of the oil mill, of the 14th century, found still in its place, from a "*dwelling with mill*" in the village of Kamenicë, Delvinë and a completely preserved oil mill of the 13th-14th century, located in the courtyard of the church of St. Mary, in the village of Sinjë, Berat.

⁴² A woman from the village of Shals, in the Kaza of Elbasan in 1606?, sells apart from some other properties even 12 olive trees, a property this inherited by her grandfather, from her mother part; for the sum of 300 *akçe*. From a collection of the acts of the Shahria of Elbasan. A. Q. H. Sher. Elb. Dok. Nr. 707.704 (copy of the original in Turkish). Burime të zgjedhura për historinë e Shqipërisë. Shqipëria në sundimin feudal-ushtarak otoman (1506-1839), vol. 3, Tirana 1962, p. 79.

⁴³ A noterial act made in the presence of the *kadi* in 11 January 1606, for the selling of 30 olive trees, which are located in the village of Shën Gjini, Elbasan; for the sum of 1350 *akçes*. From a collection of the acts of the Shahria of Elbasan. A. Q. H. Sher. Elb. Dok. Nr. 707.664 (kopje e originalit në turqisht). Burime të zgjedhura për historinë e Shqipërisë. Shqipëria në sundimin feudal-ushtarak otoman (1506-1839), vol. 3, Tirana 1962, p. 78.

⁴⁴ Stouff, 1988; Comet, 1993, 1996.

⁴⁵ Vallvé, 1982.



1. Hemispherical oil mill of the late antique period, discovered in the Pontifical Complex, city of Byllis.



2. Oil Mill, XIV century, Kamenicë, Delvinë.



3. Oil Mill, XIV century, Kamenicë, Delvinë.



4. Modern oil mill, Kakunjë, Tiranë.



5. Modern oil press, Kakunjë, Tiranë.



6. Oil Mill, XIII-XIV century, church of Shën Mërisë, Sinjë, Beratit.



7. A *mortarium* from the church of Shën Mëhillit në Kostar, Sarandë.



8. Oil Mill, Monastery of Kamenos, Delvinë.



9. Oil Mill, Monastery of Zvërnec, Vlorë, XIII-XIV century.



10. Part of an oil mill reused, village of Armen, Vlorë.



11. Part of an oil mill reused on a modern wall, Ohër, Maqedoni.



12. Part of an oil mill of the modern period, XIX century, village Tragjas, Vlorë.



13. An oil mill of the modern period, village Vesqi, Tiranë.



14. An oil mill of the modern period, village Pajovë, Kavajë.

References

1. Burime të zgjedhura për historinë e Shqipërisë. *Shqipëria në sundimin feudal-ushtarak otoman (1506-1839)*, vol. 3, Tirana 1962, 78-79.
2. Lucio Giunio Moderato Columella, *De Re Rustica*.
3. Bible of Jerusalem, *Dt.* 8, 8; *Dt.* 28, 40.
4. Bible of Jerusalem, *Gen.* 8, 11.
5. Bible of Jerusalem, *Exodus* 25, 31-40.
6. Cato, *De Agri cultura* 23-25.
7. Sophocles, *Pers.* 881-2.
8. Strabonis, *Geographica*, VII, 5, 10.
9. Amouretti, M. C., (1986), *Le pain et l'huile dans la Grèce antique; Evolution des techniques agraires d'Hésiode à Théophraste*. Les Belles Lettres, Paris: 41-45, 158-192.
10. Amouretti, M. C., (1996), *La fabrication de aceite de Oliva: una historia tecnica original*. In: Consejo Oleicola International del Olivo (ed.) *Enciclopedia Mundial del Olivo*. Plaza y Janes, Barcelona, 26-29.
11. Baçe A., Meksi A., Riza E., Karauskaj Gj., Thomo P., *Historia e Arkitekturës Shqiptare. Nga fillimet deri në v. 1912 (Maket)*, Tiranë 1979.
12. Bervillé A., Besnard, G., Baradat, Ph., Khadari, B., Breton, C., (2001), Origine et domestication de olivier. In: Actes des Ière Rencontres Internationales de l'Olivier (19 et 20 octobre 2000) *L'olivier dans l'espace et dans le temps*. Institut du monde de l'olivier, Nyons, 8-9.
13. Blanco, A., (1994), Los primeros espanoles, *Historia* 16 1, 20-31.
14. Blitzer, H., (1993), Olive cultivation and olive production in Minoan Crete, in Amouretti M. C., Brun, J. P., (eds.) *La production du vin et de l'huile en Méditerranée*. École française d'Athènes, Athens, 163-176.
15. Callot, O., (1993) Le huileries et l'huile au Bronze Récent: quelques exemples syriens et chypriotes, in Amouretti, M. C., Brun J. P., (eds.) *La production du vin et de l'huile en Méditerranée*. École française d'Athènes, Athens, 49-54. 55-64.
16. Friedrich W. L., and Pichler H., (1976), Radiocarbon dates of Santorini Volcanics, *Nature* 262, 373-374.
17. Heltzer, M., (1987), Olive growing and olive oil in Ugarit, in: M. Heltzer, D. Eitam (eds.), *Olive oil in Antiquity*, University of Haifa Press, Haifa, 106-120.
18. Heltzer, M., (1993), Olive oil and wine production in Phoenicia and in Mediterranean trade, in Amouretti, M. C., Brun J. P., (eds.) *La production du vin et de l'huile en Méditerranée*. École française d'Athènes, Athens, 49-54.
19. Ismaili H., Gixhari B., *Old olives of Albania*, 5.
20. Liphshitz N., Gophna R., Hartman M., Biger G., (1991), The beginning of olive (*Olea Europaea*) cultivation in the Old World: a reassessment, *Journal of Archaeological Science* 18, 441-453.
21. Mataix J., Barbancho F. J., Olive oil in Mediterranean food, in Qulies J. L., Ramirez-Tortosa M. C., Yaqoob P. (eds.), *Olive oil and Health*, CAB international 2006, 9.
22. Palamarev, E., (1989) Paleobotanical evidences of the Tertiary history and origin of the Mediterranean sclerophyll dendroflora, *Plant Systematics and Evolution* 162, 93-107.
23. Terral, J. F. (1996), Wild and cultivated olive (*Olea Europea L.*): a new approach to an old problem using inorganic analyses of modern wood and archaeological charcoal, *Review of palaeobotany and Palynology* 91, 383-397.
24. Terral, J. E., Arnold-Simard, G. (1996), Beginnings of olive cultivation in Eastern Spain in relation to Holocene bioclimatic changes, *Quaternary Research* 46, 176-185.