Chapter

The Olive Tree: A Symbol

Stefano Grego

Abstract

The olive tree is not only the typical plant of the Mediterranean but it is also a tree that constitutes the only culture of global importance. From very old times through the centuries, the traditions of the great oil-growing areas of today were born and consolidated—Greece, Italy, and Spain. The olive tree and oil are an indispensable presence for our daily well-being, as well as a reminder of our oldest and truest history. Olive tree became a symbol of peace and value, an element of strength and purification, of resistance to the ravages of time and wars, the olive tree has always been a transcendent symbol of spirituality and sacredness.

Keywords: multifunctionality, symbol of peace and valor, spirituality and sacredness, significant role in religion

1. Introduction

No other tree or plant, with the exception of wheat, has had the same importance in the history of our species as the olive, capable of influencing nutrition, culture, and religion and contributing to the birth of modern Mediterranean civilization [1]. The unmistakable gnarled and curved branches of olive trees have shaped the Mediterranean landscape and their fruits have provided sustenance to numerous civilizations, from the Middle East to Greece, from Italy to Spain. "Two are the liquids particularly pleasing to the human body: inside the wine, outside the oil," wrote Pliny the Elder in his famous treatise Natural History. "Oil is an absolute necessity and man was not wrong in dedicating his efforts to obtain it."

2. A short history

To understand when the olive tree became essential for the peoples of the Mediterranean, it is necessary to take a journey into the past, going back thousands of years, trying to understand the origins of this special plant. It is believed that the first cultivation of olive trees, as we know them today, began about six to seven thousand years ago in the regions of the Middle East, in an area corresponding to ancient Persia and Mesopotamia. Here, the wild olive tree was domesticated and the oil was produced for the first time. From the Bronze Age, this precious substance spread like wildfire, thanks to merchants, moving between Syria, Lebanon, Israel, Palestine, Egypt, Greece, and Italy, and over time it acquired a growing socio-economic value. Terral et al. [2] analyzed the genetic differences between wild and cultivated olive trees, to trace the

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origin of the modern European olive tree, the European Olea [3]. According to the scholar, the birth of the modern olive tree is more complex than one might think, deriving as it does from the crossing of 11 different varieties. One thing is certain, however, the olive tree has been part of the Mediterranean flora since time immemorial, fossil pollen of the genus Olea has in fact been found in several Mediterranean countries, such as Macedonia and Greece, while fossilized leaves dating back to about 37 thousand years ago have been found on the Greek island of Santorini (**Figure 1**) [4].

In 2500 BC within the Babylonian code of Hammurabi, the production and trade of olive oil were regulated, while around 1300 BC olive branches embellished the tombs of the pharaohs.

Thanks to the Greeks, the olive tree spread around the Mediterranean. It was considered very important in Greek culture and is mentioned in Greek mythology, "Poseidon, god of the sea, and Athena, daughter of Zeus, goddess of wisdom", competed to win possession of protection over Athens [5]. Poseidon hit the rock with his trident (on which the Acropolis would later rise) and from this, he made a source of seawater come out and a horse faster than the wind. Athena planted the first olive tree, a tree that, for millennia, with its fruits would give a wonderful juice that men could use for the preparation of food, for the care of the body, for the healing of wounds and diseases, and as a source of light for homes (**Figure 2**).

Thucydides (fifth century BC) wrote that "The peoples of the Mediterranean began to emerge from barbarism when they learned to cultivate olive trees and vines."

After the Greeks who favored the spread of the olive tree in the Mediterranean, the Romans took on the task of bringing the cultivation of this plant to greater development. The olive tree was planted everywhere in the empire, so much so that the Roman Empire imposed the payment of taxes in the form of olive oil. Also thanks to them the production process improved, there was a distinction made between different types of oil connected to the moment of pressing, (5 species of oil were identified). Even in Roman mythology, oil had a certain importance in fact it was Hercules who introduced the olive tree from North Africa and then the goddess Minerva would have taught men the art of cultivation and extraction of oil. As usual, with the fall of the Roman Empire, olive cultivation also experienced a period of decline,

The olive tree played an important role in various fields, including in sport— Greek athletes anointed themselves with olive oil before fighting and the winners of the Olympics were crowned with sacred olive branches and rewarded with



Figure 1.
Olive Grove in Santorini.



Figure 2.
Poseidon and Athena.



Figure 3.
Symbolic wreath of olive branches.

richly decorated oil ampoules. Both the Greeks and the Romans used olive oil in the preparation of numerous recipes; moreover, it was widely used for therapeutic, medicinal, balsamic, and detergent purposes or as a fuel for votive lamps (**Figure 3**).

With the advent of the dominion of Rome, the olive tree had one of its greatest moments of glory and extended its range to reach areas in which until that moment, also due to the unfavorable climate, its cultivation had been marginal or nonexistent. The context in which the Berber populations of northern Africa learned the art of grafting olive trees is not known, but we know from Latin sources that they already practiced it when the Romans conquered their lands.

Finally, in the New World, olive trees were introduced soon after their discovery at the end of the fifteenth century. The first olive trees arrived in the Antilles from the port of Seville after the discovery of the New World and since 1560 olive groves have been observed in Mexico and later also in Peru, California, Chile and Argentina [6].

3. The olive and the monotheistic religions

The presence of the olive tree as a symbol and in myths goes back a long way and has its roots in prehistory. Over time, these plants have lent themselves to numerous

interpretations—for Homer, the olive tree was a symbol of peace and life. The Greek poet also included it in the Odyssey—it was in fact an olive tree trunk, a plant sacred to Athena, the one with which Ulysses blinded the Cyclops Polyphemus. It was also considered an emblem of strength and victory, in ancient Greece, the winners of the Olympics were offered a wreath of olive trees and a cruet of oil. The deep bond between the Hellenic country and the olive tree is certified by the legend according to which the goddess Athena struck the rock with her spear, giving birth to the first olive tree in the world. Even in ancient Rome, olive oil, an indispensable product in daily life and an ingredient of Roman cuisine, and the plant from which the precious fruits were born were revered. The myth has it that Romulus and Remus, the twin protagonists of the Roman mythological tradition, were born right under an olive tree. The ancient Egyptians believed instead that it was the goddess Isis who revealed the properties of the olive tree to man and taught him the art of cultivating and producing oil.

The Olive tree is so strongly associated with peace, rebirth, and victory, that it is hardly surprising that it has become one of the main symbols of Easter, a sign of rebirth and regeneration [7].

According to the scriptures, it was after the Great Flood that Noah received an olive branch from a dove, which from that moment became the symbol of the promise of rebirth, of a new beginning, and of regeneration [8].

The history of the Olive tree is lost, intertwined, in the history of humanity. All we can get from the symbolism of this tree are some Greek/Roman customs and practices that attest to its importance also for polytheistic religions.

For example, in Greece, the olive tree was considered a sacred tree, to the point that anyone caught damaging or cutting it was exiled. At the Olympics, an olive crown was given to the winner, along with an oil cruet. But not only—in Athens, a particular olive tree was recognized as the first olive tree in the world, which was, therefore, treated with great respect and considered sacred, as connected to the goddess Athena, Patroness of the city.

The custom of crowning with an olive tree was not lost and it seems was also imported to Rome, where this particular crown was used to honor the most valiant citizens, against the more famous laurel wreath which was instead taken as a symbol of victory and domain.

More likely, however, the Catholic symbolism of the Olive tree derives from a synthesis of these pagan meanings and the more well-known Hebrew meaning, mentioned earlier in reference to the Old Testament [9].

It is not clear whether the Olive Tree has any connection with the Tree of the Knowledge of Good and Evil, as when Adam – dying – sent his son Seth to bring him the three seeds of the Tree of Sin, he obeyed and, after his father's death, he planted the seeds on Adam's tomb, from which a cypress, a cedar, and an olive tree grew.

Whatever the origin of the symbol behind this particular plant, it teaches us the need for renewal and regeneration, as well as the great ability to pacify one's feelings with those of God or the Universe, however you want to call it (**Figure 4**).

The only certain thing about the history of the olive tree is that it could not be a more suitable plant in the vegetable kingdom to represent the Christian Easter and the whole spring period in general.

The olive tree and olive oil have always seemed to instill in the observer a profound sense of the sacred. It is no coincidence that they play an important role in the three monotheistic religions of the Mediterranean, Judaism, Christianity, and Islam. The oldest written testimony on the olive tree is found in the Old Testament, the sacred



Figure 4.
Peace dove.

book of Judaism, in the episode of the Great Flood: Noah waited another seven days and again sent the dove out of Ark. In the evening, the dove returned to him: and behold, it had an olive branch in its beak. In Christianity, we remember Palm Sunday, which commemorates the entry of Jesus into Jerusalem welcomed by the crowd waving olive branches and palm trees. The oil is also used in baptism, in the consecration of priests, in the anointing of the sick, and in confirmation. As for Islam—in Paradise, there are two taboo trees, the olive tree and the fig tree.

The very name of Christ means "anointed," a Greek translation of the Hebrew term mašíakh used as an adjective that designates the person who was anointed with oil in the consecration ceremony. In the Christian religion, the olive tree has a strong symbolic value, the olive branch pinched in the dove's beak, for example, marks the end of the flood, symbolizing peace and regeneration. Even in Jewish religious rites, oil is very important and the theme of anointing as a consecration to the Lord returns. A series of food taboos have also emphasized its importance, the Torah, the fulcrum of the Jewish religious tradition, in fact, prohibits the consumption of most animal fats, helping to make olive oil the main ingredient of Jewish cuisine. The olive tree, in addition to being present in Greek mythology in an important way, is also known in the Arab tradition, which, however, based most of its current doctrine on the teachings of Muhammad and also traces to a large extent pre-existing beliefs that, so as happened within the Christian religion regarding pagan cults, they had to be implemented by the Prophet in the global order of the new religion. In the Koran, the sacred text of Islam, the olive tree is defined as "the blessed tree," while the anthropologist Edvard Westermarck, in the essay Ritual and Beliefs in Morocco, wrote: "in Islam, it is the cosmic tree par excellence, center and pillar of the world, symbolizes the universal man, the prophet."

Generally, in religious language, the olive tree has always represented the promised land; it has always been a message of fertility and divine blessing (a message which, among other things, is common to several religions). In old times, olive growing was in fact among the main agricultural activities, and oil, obtained from this tree, along

with cereals and wine, represented one of Israel's heritage. The olive tree and the resulting oil were in fact signs of abundance and well-being.

In the Bible, more than in other religious texts, it is present in numerous episodes and has a much stronger symbolism than in other religions. However, the fact that the olive tree is present in the most ancient texts and that it is part of several different and distant cultures historically and geographically, makes us understand how important and ancient the culture is linked to this tree.

4. The olive tree in art

The culture of the olive tree and its fruits has deep ties not only in the gastronomic traditions of the different populations of the countries that overlook the sea "nostrum" but so permeates the civil and religious culture of the various nations that often they have based their own economic survival on the production of olives. Perhaps no tree like the olive has moved from cultivation to culture, each becoming an integral part of the other.

In the course of history and literature, numerous artists and writers have dedicated prose passages and poems to the olive tree, a plant that, due to its strength and structure, has always fascinated man and has become the tree par excellence, the protagonist of stories, tales, and myths.

Ode, canto, what a beautiful image comes to mind when quoting these two words. What if an ode was dedicated to food? It was Pablo Neruda, pseudonym of Ricardo Eliécer Neftalí Reyes Basoalto (1904–1973), poet, diplomat, Chilean politician, Nobel Prize for literature, who generated this great idea. In the Ode to Wine and Other Elementary Odes, Neruda celebrates wine, bread, onion, tomato, oil, potato, and other foods, apparently so mundane, of which we do not realize their immense value. The poet approaches poetry with small things, giving them a new identity.

Evergreen and millennial trees are symbols of peace, hope, and resistance, the olive tree is already present in the sacred texts of the three major religions in the world, and from then on many writers have used this plant as a subject or metaphor in their texts or in their paintings.

With its leaves with iridescent, silvery reflections, whose delicate lines are high-lighted by the branches and gnarled trunk, the olive tree represents in the collective imagination a sort of sculpture made by nature itself, also for this reason, in the history of art it has been the privileged subject, a constant source of inspiration for artists, also as a symbolic representation of virtue, dogmas, images, feelings, affections, and emotions [10, 11].

The olive tree has been represented in many religious paintings. The image of the olive tree is often the element with which the artist guides the observer on a path of didactic references

In the historical-artistic context and in particular, in the iconography of the Virgin and the Passion of Christ, the image of the olive tree is often the element with which the artist guides the observer in a path of didactic references, as on the figure of Maria Regina Pacis, parent of the Savior of the world.

An example is Giotto's *Entry of Christ into Jerusalem*, in the Scrovegni Chapel in Padua. The scene is composed of an amiable realism, very evident in the figure of the donkey, placed in the foreground, and in the atmosphere that the image itself, as the artist conceived it, generates in the viewers (**Figure 5**).



Figure 5. Entry of Christ into Jerusalem *by Giotto. Scrovegni Chapel, Padua.*

In the twentieth century, the olive tree was defined, in all respects, as a natural element of the landscape, as a symbol of a pure, and authentic beauty that everyone, poets, writers, artists, can capture and be aware of its fascinating artistic significance.

Another notable example is the *Annunciazione* by Simone Martini and Lippo Memmi in 1333 (Uffizi Gallery in Florence).

The young archangel, kneeling in the manner of a noble knight, hands the Virgin an olive branch, a symbol of the peace and universal harmony that the unborn child would spread on earth. She wears an elegant damask dress (whose golden color reflects Gabriel's nickname, known as the "messenger of light") and a lively checkered cape (**Figure 6**).

Sandro Botticelli, in the painting *The return of Judith to Bethulia* (c. 1472, Uffizi Gallery in Florence), places an olive branch in Judith's hand, symbolizing the rediscovered peace after the death of the Assyrian king Holofernes. This work, together with the other protagonist of the diptych, *Discovery of the corpse of Holofernes*, constitutes one of the first narrative paintings we know of by Botticelli (**Figure 7**).

The two protagonists are portrayed by Botticelli while they are on the run, with the enemy's head covered with a sheet, and Giuditta, while with one hand she holds the murder weapon or the saber, and with the other, she holds an olive branch, a typical symbol of peace.

Another religious example in which the Passion of Christ and the olive tree are intertwined, just like one of its branches, is that of El Greco's 1590 painting Christ in Gethsemane (National Gallery of London). In his unmistakable style with elongated objects and figures, the plant is a characterizing element as it is placed in the foreground to the left of Christ, thus making the viewer participate in the story. In it, moreover, the olive tree foreshadows the death of Christ and the peace to which humanity is destined by the will of God following the sacrifice of the son.

A further tribute to the sacredness of this tree and its fruits can be found in the marvelous *Madonna dell'olivo* by the Genoese Niccolò Barabino of 1888 in which the very pure Virgin in white hugs the baby Jesus who in turn holds a twig of olive tree, once again a symbol of peace and salvation (**Figure 8**).





Figure 6.
Simone martini annunciazione.



Figure 7.The return of Judith to Bethulia. Sandro Botticelli, Uffizi Gallery, Florence.

The olive tree whose branches take on the same color as the background is placed at the back of the scene and in turn, completes the triad of the embrace (Madonna, Jesus, olive tree) in a global way, thus framing the picture and letting you imagine its continuation. beyond the perimeter.

Still in the same century but 50 years earlier, the landscape current of Realism and Naturalism spreads in France, connected to the school of Barbizon, a small town near the forest of Fontainebleau, whose painters, despite differing in style and temperament, are strongly linked because they share the same desire to discover the



Figure 8.Madonna dell'olivo by the Genoese Niccolò Barabino. Church of S. Maria della Cella in Sampierdarena – Genova.

beauty of Nature. This will be the backbone of a new movement that will soon spread, Impressionism, through which painters bring to completion "[...] the accentuation of the perceptual moment over the fantastic" by painting en plain air.

Based on these assumptions, Van Gogh, the movement's leading exponent, in 1889 dedicated approximately 18 canvases to the representation of the olive tree in the autumn during which he was hospitalized in the psychiatric hospital of Saint-Rémy-de-Provence for serious emotional and nervous difficulties. For him, the olive trees represent life and its cycle, the divine, and how the relationships between man and nature can connect the former with the divine. Furthermore, for the painter, being in harmony with nature means creating moments of idyll and contemplation (**Figure 9**).

National Gallery of Art in Washington summarizes this series:

"In the olive trees – in the expressive power of the ancient and gnarled forms – Van Gogh found the manifestation of the spiritual force that he believed to reside in all of







Figure 9.Representations of olive trees by Vincent Van Gogh.

nature and his brushstrokes make the ground and the sky alive with the same movement of the rustling leaves, mixed to a shimmer by the Mediterranean wind. The energy in the continuous rhythm communicates to us, in an almost physical way, the living strength that Van Gogh found among the olive trees; that spiritual force that he believed took shape there."

5. A second product: landscape

In reality, the "landscape" is a vast and difficult subject to circumscribe also because it is a concept that has undergone a profound evolution over time. The European Landscape Convention, Florence, 20.X.2000 defined that "The member states of the Council of Europe signatory hereto,.... Noting that the landscape has an important public interest role in the cultural, ecological, environmental, and social fields, and constitutes a resource favorable to economic activity and whose protection, management, and planning can contribute to job creation; Aware that the landscape contributes to the formation of local cultures and that it is a basic component of the European natural and cultural heritage, contributing to human well-being and consolidation of the European identity;...." [12].

The landscape is, therefore, the heterogeneous set of all the elements, processes, and interactions that make up the ecosphere, considered in its unitary and differentiated structure and in which the activities of nature and man are integrated, in their historical dimension. Material, cultural, and spiritual.

"Cultural Route of the Council of Europe" certified in 2005 that "The presence of the olive tree has marked not only the landscape but also the everyday lives of the Mediterranean peoples. As a mythical and sacred tree, it is associated with their rites and customs and has influenced their lifestyles, creating a specific ancient civilization, the "Olive Tree Civilization": the Routes of the Olive Tree follow in the footsteps of this civilization, from Greece toward the Euro-Mediterranean countries. The olive tree dates back millions of years. Wild olive trees, ancestors of the domesticated ones, can still be seen in the Peloponnese, Crete, North Africa, and the Middle East, their places of origin. The relationship between this tree and human civilization has produced an immensely rich, living cultural heritage, embedded in the everyday habits of the Mediterranean people. From gastronomy, with the crucial influence of olive oil, to art and traditions, the social development of these areas has been largely shaped by the olive tree" [13].

The olive tree participates in the formation of a multiplicity of landscapes in relation to the different cultural structures that have been defined in the long process of adaptation of the species to the different environmental characteristics of the places. uneven orography of the most disadvantaged areas, to the more or less specialized systems of the hilly areas, to the intensive monoculture of the plains. In addition to the landscape diversity dictated by the cultivation practices, strongly changing aesthetic connotations are impressed on the territory by the different olive models adopted, the result of that continuous centuries-old adaptation of cultivation techniques to environmental conditions, whether linked to the company structure and to the edaphic and climatic conditions or the economic and social structure that has gone through human history, where the olive trees were associated with a myriad of other crops, which ensured the livelihood of peasant families, reinforcing the typical geometries of poly-cultural systems (olive trees placed at the edge of the vineyards or between the rows, inserted together with almond and carob trees, confined within the

vegetable gardens or placed at the edge of citrus groves) or interrupting the monotony of progress of arable land (**Figure 10**).

With the development of olive growing in vast territories of the island, and particularly starting from fifteenth to eighteenth century, the presence of plots with higher specialization, it begins to become more consistent, to the point of characterizing, in subsequent phases, the crop structure of entire territories, especially hilly areas. This singular olive type, defined as "traditional," still constitutes wealth for the area today due to the important role it fulfills in hydro-geological defense and in the qualification of the landscape. As a result of the millennial interaction between different environmental, social, and cultural factors, it is still possible today in many countries to find the numerous systems and landscapes of the olive tree that have accompanied its history.

In the most marginal conditions, on sloping land, on the narrowest terraces, the olive tree participates in the formation of the systems and landscapes of mixed cultivation where these systems survive the rural exodus of farmers.

These olive-growing systems frequently constitute tiles within a mosaic formed by very fragmented agricultural systems of different types and with high landscape diversity. Olive groves which, thanks to the capacity of self-regeneration, typical of the species, have resisted over time giving rise to specimens of large and very large dimensions defined by Pirandello Saracens for their almost legendary antiquity. Where the orographic conditions are more favorable to productive rationalization processes, the olive cultivation becomes more specialized while only partially maintaining the characteristics of traditional olive-growing systems. Some modifications of the cultivation model which concern the containment of the volume and height of the canopy contribute to differentiate it, to favor and economize the practices of defense, pruning and harvesting, and a reduction of the planting distances, which become regular, to increase the productivity of olive groves. It is amongst the olives grown for oil that it is difficult to indicate a single type of plant. As a result of the different densities adopted, the distances and the planting width vary, with evident reflections on the geometry of the olive groves. In many cases, the plant model and its landscape impact depend on the genotype and, in particular, on the bearing of the plants, on their vigor as well as on morphological characteristics, such as shape, size, and color itself, of the leaves.

Literature also highlights the qualities and prerogatives of the olive tree: its resistance to time and bad weather, the usefulness of its fruit, the sense of peace and serenity that it gives to men with the soft and pale green of its branches. The olive tree is a resistant plant—it sinks its roots firmly into the stony ground, it takes many years to become a plant that bears fruit, but, as it was slow in growing, it lasts a long time.





Figure 10.Some examples of landscapes characterized by the presence of olive trees.

It binds several generations together, giving fathers the satisfaction of having planted a tree not for their own good, but for that of their children and posterity. The fruit of the olive tree is precious because the oil not only gives nourishment but also light in the lamp; and like light, it accompanies us to the deathbed. Undoubtedly the olive tree is a plant that inspires feelings very close to those of the poet: peace, which is the opposite of the hatred depicted in old castles (manors); generosity toward others (the precious gift of its fruit); goodness, which is the opposite of badness.

6. Final considerations

Traditional olive-growing agroecosystems constitute tiles within a mosaic made up of agrarian and semi-natural systems of different types, very fragmented and with high landscape diversity. Even at the farm level, biological diversity remains high both in the case that the olive tree is part of a poly-cultural system and in the case of olive groves conducted in conditions close to semi-natural. Olive trees are grown according to the knowledge and practices that include the use of different types of terracing, cultivation techniques, and genetic varieties that have been maintained for centuries by local communities. This extraordinary landscape made up of olive trees was shaped by the ancient interaction of farmers with the environment.

The countries of North Africa have their own landscape defined by the olive tree. A typical example is the desert area of Tunisia and Morocco where the olive tree naturally grows mainly in the valleys using the little humidity present. Tunisia is a land of olive trees, a place where the olive tree over the millennia has been infused with the culture, economy, cuisine, habits, rhythms, seasons of the nation. Some Tunisians even anoint babies with olive oil (**Figure 11**).

Multifunctionality has now become the strategic choice undertaken by many farms which, at various levels, carry out various activities to respond to the negative effects deriving from a system mainly oriented to the production of material goods of industrial origin. For agricultural enterprises, multifunctionality represents a "new" way of organizing production factors (internal resources) and interacting with external resources (the territory), aimed at pursuing economic, environmental, and social objectives in the medium and long term. Seen from a more general perspective, multifunctionality represents one of the key points in the development process of the agricultural sector and the rural world. The role of agriculture, in fact, for several



Figure 11.Olive Tree in Tunisian landscape.

years now is no longer exclusively attributable to its function of producing basic necessities but expands through the recognition and performance of other environmental, social, landscape, historical, cultural, etc.

Multifunctionality actually places agriculture, in its renewed value as a producer not only of traditional goods but also of other goods, at the center of the interest of the economy and citizens. Among other things, multifunctionality is not an exclusive trait of small businesses nor, much less, of marginal agriculture, although multifunctionality can be a strategy aimed at improving the remuneration of the small family business. In the countryside and the primary sector, new economic models are being developed that, looking at the past, at peasant values, at traditional resources and methods, are innovating, revisiting schemes, creating new perspectives, including economic ones; it is agriculture in which future and tradition merge and are declined in retro-innovation—drawing on the experience of the past and enhancing previous knowledge, reinterpreting and using them in contemporary contexts and circumstances, to try to give answers to the needs of the present and above all to ensure that they do not turn into the emergencies of the future.

Author details

Stefano Grego Interuniversity Centre for Research on Sustainable Development (CIRPS), Rome, Italy

*Address all correspondence to: gregostefano2@gmail.com

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References

- [1] Schicchi R, Speciale C, Amato F, Bazan G, Di Noto G, Marino P, et al. The monumental olive trees as bio cultural heritage of mediterranean landscapes: The case study of sicily. Sustainability. 2021;13(12):6767. DOI: 10.3390/su13126767
- [2] Jean-Frédéric T, Breton CM, Newton C, Ivorra S. In: Barbieri G, Ciacci A, Zifferero, editors. Les apports décisifs de la morphométrie (écoanatomie et morphométrie géométrique) et de la génétique (marqueurs moléculaires microsatellites) dans la reconstruction de l'histoire de le culture et de la domestication de l'olivier. Le origini dell'olivicoltura in Toscana: nuovi percorsi di ricerca tra archeologia, botanica e biologia molecolare. In book: Eleiva, Oleum, Olio. DonChisciotte; 2010
- [3] Breton CM, Medail F, Pinatel C, Berville A. De l'olivier a l'oléastre: Origine et domestication de l'Olea europaea L. dans le Bassin méditerranéen. Cahiers Agricultures. 2006;**15**(4):329-336
- [4] Breton CM, Warnock P, Berville AJ. Origin and history of the olive. In: Olive Germplasm The Olive Cultivation, Table Olive and Olive Oil Industry in Italy. IntechOpen; 2012. DOI: 10.5772/51933
- [5] Morford MPO, Lenardon RJ, Sham M. Classical Mythology, International Edition. 10th Edition. Oxford University Press, Academic. 9780199997398Paperback 07 August 2014
- [6] Torres M, Pierantozzi P, Searles P, Rousseaux MC, García-Inza G, Miserere A, et al. Olive cultivation in the southern hemisphere: Flowering, water requirements and oil quality responses to new crop environments. Frontiers in Plant Science. 2017;8:1830

- [7] Moselle Bryan R. The symbolic and theological significance of the olive tree in the ancient near east and in the Hebrew scriptures. PhD Thesis. Pretoria: University of Pretoria; 2016
- [8] Lupis J. The Olive Tree. Xulon Press; 2014. Paperback. ISBN: 1629521620
- [9] Frank CH. Grafted onto the olive tree: The Biblical Basis for a Cross-Religious Mission Strategy. Create Space Independent Publishing Platform; 2013. p. 106. Christian book
- [10] Gixhari B. Olive in history and art. In: International Conference 'The Adriatic Olive Grove: Risk Prevention, Sustainability, Learning'. Vlora, Albania; 2014. DOI: 10.13140/2.1.1760.2885. ISBN-13: 978-1482635188
- [11] Ebrahim N, Motavali H, Branch G. Olive, the symbol of resistance in contemporary Arabic poetry. International Journal of Humanities and Cultural Studies. Special Issue 1 February 2016:880-890. ISSN: 2356-5926
- [12] Council of Europe. Landscape and sustainable development: Challenges of the European landscape convention; 2006
- [13] Available from: https://www.coe.int/en/web/cultural-routes/the-routes-of-the-olive-tree 2005