Zaitoon/Olive (Olea europaea) as mentioned in The Holy Qur'an

and Ahadith and its Ethno medicinal Importance

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ABSTRACT

Olive is mentioned in The Holy Qura'n as blessed tree and Holy Prophet (PBUH) mentioned it as a cure of 70 diseases. Due to its importance detailed data was collected from The Holy Qur'an and Ahadith's books and from books written on Islamic medicine. Its habit, distribution and complete morphological characteristics were discussed. Procedures for the extraction of olive oil, its chemical and physical properties were also discussed. Medicinal importance of olive was mentioned in two different ways. Firstly, a table was formulated which shows diseases and their treatments with olive along with references from Ahadith. Secondly, traditional use of olive along with its use in modern medicine for the treatment of various diseases was mentioned. The aim of this study is, to document the knowledge of ethno medicinal importance of olive in the light of Islam.

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Introduction

Olive is one of the oldest plants of history. When water receded after Nuh's flood the first thing that appeared was olive tree. That is why olive became a sign of peace in international politics¹. In ancient Egypt olive oil is used for eating, cooking, massage and medicine. It is also used to save the fish from degeneration during packing. It is a popular oil crop of the Mediterranean countries like Greece and Italy. In these countries olive oil is the main cooking oil. Olives are edible and main ingredient of many cuisines like pizza, pasta, pickle etc.

It is classified as follows

Division	Spermatophyta
Subdivision	Angiospermae
Class	Dicotyledonae
Subclass	Gamopetalae
Order	Gentianales
Family	Oleaceae
Genus	Olea
Species	O.europaea

Olive is a much longer living tree as compared to other plants. "In Mediterranean Basin there are many olive trees which are reported to have more than 1000 years of age"². Olive is an erect, bushy evergreen tree growing to about 12 m tall with a deep, widely-branched, woody root system. The trunk is twisted and it produces branches from the base and has rough black bark. Leaves are undivided, narrowly elliptic and tapered to a point, glossy dark green on top, silvery below, 3 to 8cm long and 1 to 4cm wide. The tiny cream flowers appear in large clusters in late spring; each has four petals and four protruding stamens. The fruit reaches1.5 to 3cm long, ellipsoid in shape and purple-black when fully ripe; each contains one brown oblong seed about 1.5cm long.

Olive seedlings have smaller oblong leaves arranged rigidly in opposite pairs. They are densely branched and can produce many new stems from the base if cut or grazed³.

"Italian olive cultivars have been introduced recently in NWFP to be planted in high rainfall areas like North and South Waziristan and Bajour agencies, Malakand, Hazara & Mardan divisions. It is usually propagated through cuttings"⁴. Its cultivation is also encouraged in the districts of Attock, Chakwal and Rawalpindi. Potential of earning from the cultivation of Olive on culturable waste lands in these districts of Punjab is recently estimated upto 80307 million rupees per year⁵.

The major olive oil producing countries are firstly Spain, secondly Italy and thirdly Greece⁶. Together they produce 75% of the world production⁷.

Olive in The Holy Qur'an

Olive has been repeatedly mentioned in The Holy Qur'an. At least at one place Allah has sweared this Olive which shows its importance. Some examples are as follows.

"It is He Who sends down water from the sky from which We bring forth growth of every kind, and from that We bring forth the green shoots and from them We bring forth close-packed seeds, and from the spathes of the date palm date clusters hanging down, and gardens of grapes and olives and pomegranates, both similar and dissimilar. Look at their fruits as they bear fruit and ripen. There are Signs in that for people who believe"⁸.

"It is He Who produces gardens, both cultivated and wild, and palm-trees and crops of diverse kinds, and olives and pomegranates, both similar and dissimilar. Eat of their fruits when they bear fruit and pay their due on the day of their harvest, and do not be profligate. He does not love the profligate".

"It is He who sends down water from the sky: from it you drink, and out of it (grows) the vegetation on which you feed your cattle. With it He produces for you corn, olives, date-palms, grapes and every kind of fruit: verily in this is a sign for those who give thought"¹⁰.

"Allah is the Light of the heavens and the earth. The metaphor of His Light is that of a niche in which is a lamp, the lamp inside a glass, the glass like a brilliant star, lit from a blessed tree, an olive, neither of the east nor of the west, its oil all but giving off light even if no fire touches it. Light upon Light. Allah guides to His Light whoever He wills and Allah makes metaphors for mankind and Allah has knowledge of all things"¹¹.

"So man should see towards his food. We pour down plentiful water, then split the earth into furrows. Then We make grain grow in it, and grapes and herbs and olives and dates and luxuriant gardens and orchards and meadows, for you and your livestock to enjoy"¹².

"(I swear) by the fig and the olive"¹³.

From the above verses it becomes quite clear that date palms, grapes, olive and pomegranates are the plants which are full of benefits for human beings. Olive is specially mentioned as a blessed tree. As Olive has not a good taste which attracts people, therefore, Allah has pointed out its importance in a special way.

Olive in The Hadith Literature:

Olive is also mentioned in many Ahadith of the Holy Prophet (SAW) for its benefits. Only a few are mentioned blow

1 Narrated By Hazrat Abu Huraira (RA) "Eat Olive oil and anoint it upon your bodies as it is from a blessed tree".^{14, 15, 16}

2 Narrated by Hazrat Alqama Bin Amir (RA) "For you Olive oil is present. Eat it and anoint it as it is beneficial for piles".¹⁷

3 Narrated by Hazrat Uqba Bin Amir, "You have Olive oil from this blessed tree. Treat with it as it cures Basoor".¹⁸,¹⁹

4 Narrated By Hazrat Abu Huraira (RA), "Eat Olive oil and anoint it as it is a cure for 70 diseases including liprosy".²⁰

5 Narrated By Hazrat Abu Huraira (RA), "Eat and anoint Olive oil as it is clean and blessed".²¹

6 Hazrat Zaid Bin Arqam (RA) stated that, "The Holy Prophet (PBUH) ordered us to treat Zat al Janb (pleurisy) with Qast ul Behri and Olive Oil".²², ²³, ²⁴

7 Narrated By Hazrat Zaid Bin Arqam (RA), "The Holy Prophet (PBUH) used to praise Durs and Olive Oil for the treatment of Zat al Janb (pleurisy)".²⁵, ²⁶, ²⁷

8 Holy Prophet PBUH said "Who massaged with the Olive Oil, Satan will not come near him."Revealed by Muhammad Ahmed Zahbi c/o Ibn al Jozi without sanad.²⁸

S. No	Organ	S.No	Disease	Treatment	Reference
1	Skeleton (Teeth, Bones, Nails etc)	1		Best Tooth brush (مىسواك)	Tibrani: Almo'jam al'ausat, Hadith#678,1/210, Cairo: Dar Al Haramain
		2	weakening & breaking of teeth	Take Olive leaves in your mouth	Al- Abeeri: Al-Ilaj bil A'shab, 81
		3	Strengthening of teeth	1) Miswak of olive 2) Gargle with saline water of wild Olive.	Al- Suyuti: Al-Havi Fi Tibb, 2/186
		4	For strengthening gums and week teeth	Gargle with saline water of Olive or oil of wild olive.	Al-Havi fi Tibb, 6/185
		5	Toothache	Gargle with water obtained from cooked leaves of Indian olive in vinegar	Tarkamani: Al Mo'tamad fil Adviah Al mufridah, 1/370
		6	Whiteness of nails	Mix olive fruit pulp in oil and flour use this as paste on nails	Al-Havi fi Tibb 6/185
		7	Strengthening of Hair	Daily use of wild olive oil	Ibn–i Seena: Al Qanoon fi Tibb 1/469
2	Skin	1	Wound of burning	Dip in saline water of Olive	Ibn al- Qaiyyim: Al- Tibb al-Nabwi, 238
		2	Psoriasis (Chanbal)	Powder of olive leaves Putting water of Indian olive leaves cooked in vinegar in ones mouth for long time is beneficial for psoriasis.	Al Mo'tamad fil Adviah Al mufridah, 1/370
		3	Psoriasis	Use water of cooked leaves of Indian olive in vinegar also use the paste of leaves on psoriasis	Khalid Ghaznavi
		4	Wounds / Surgeries	Use Olive Gum (صمغ) in ointments.	Al-Havi fi Tibb 6/187
3	Gastric System	1	Piles (Bwasir)	Leaves of Indian olive cooked in vinegar are beneficial for both inner & outer piles	Al'Motamad fil Adviah al mufridah, 1/370, Al-Mo'jam Alkabir 774, 17/281, Cairo, Maktaba Ibn Taymiah 2 nd ed.

Some Diseases in which Olive is used as medicine

		2	Strengthening of stomach	Use of Olive Oil	Alhavi fi Tibb 2/186
		3	Dysentery/ Diarrhea	Wild Olive, Extract of olive to be used with flour of barley.	Al Qanoon fi Tibb 1/469
		4	Inner wounds of rectum (basoor)	Mix olive oil with water of unripe grapes (حصر م) & then give Aenema	Al Qanoon fi Tibb 1/469
		5	Abdominal worms	Use of oil of a type of olive called alnad'ij (النضيج)	Ibn al-Qaiyyim: Al- Tibb al-Nabwi, 238
		6	Poisoning	Use of oil of a type of olive called alnad'ij	Ibn al-Qaiyyim: Al- Tibb al-Nabwi, 238
4	4 Respiratory System	1	Cough	Use of wild olive oil on outer side of neck	Al-Havi fi Tibb 6/184
		2	Flu (Influenza)	Flush the extract of olive on head	Ibn al-Beetar: Al- Jami'ah li mufridat Aladviah val Aghazia 1/356
		3	Asthma, Lungs and respiration irregularity	Use of Black olive with seeds	Al Qanoon fi Tibb 1/469
5	Eyes		Problems of Eye lids	Extract of leaves of wild olive	Alhavi fi Tibb 276/1,281,219
			Cataracts, Watering Eyes	Extract of leaves of wild olive	Alhavi fi Tibb 276/1,281,219
		3	Defender of secretions	Extract of leaves of wild olive	Alhavi fi Tibb 276/1,281,219
		4	To improve eye sight	Use collyrium (سرمہ) of gum of wild olive	Alhavi fi Tibb 276/1,281,219
6	Ear	1	Oozing of puss from the ear	pound wild olives with water, dry its extract, mix it with olive oil and honey. Use in affected ear.	Alhavi fi Tibb 379/1
7	Aging		Stop early aging	Use of wild olive daily	Alhavi fi Tibb 184/6, Al-Qanoon fi Tibb 469/1
8	Miscellaneous		Motor Neuron disease & Sciatica,	To give Enema with saline water of olive	Al Qanoon fi Tibb 1/469
			Paralysis and facial paralysis.	Massage of olive oil	Al-Jami'ah li mufridat Aladviah val Aghazia 1/356
			Leucorrhoea	Juice of olive	Al Qanoon fi Tibb 1/469
			Inner injury of Uterus	Juice of olive mixed with the water of حصرم	Al Qanoon fi Tibb 1/469

Preparation/Extraction

The ripe fruits are sorted out and are crushed in an edge-runner mill, having stones sufficiently heavy to crush the pulp, but into coarse circular bags about 60 cm. in diameter and tied up; the bags are piled one upon another and subjected to a moderate pressure, using in the more remote districts a wooden screw hand-press and in the larger factories a steel screw press operated mechanically. The crude oil is run into tubs and mixed with water, which removes colouring matter and other impurities, and is allowed to stand till the oil separates, when it is skimmed off and filtered. This yields the first quality oil, known as **"Virgin oil"** which is the variety suitable for medicinal use. The mare from this operation is ground up, mixed with hot water and again pressed, this time more strongly, and yields a second quality of oil.

The residue still contains a little oil which may be obtained by a third pressing or by extraction with solvents; such oil is usually used for soap-making etc. Sometimes all the fruits are thrown into heaps and allowed to ferment; on pressing the whole of the oil is obtained, but it is of inferior quality, and is used principally for technical purposes²⁹.

Medicinal olive oil – virgin oil has a pale yellow or greenishyellow colour, a slight characteristic odour, and a bland taste without rancidity. It is liquid at ordinary temperatures, but when cooled to 10° C it assumed a pasty consistence, from deposition of solid fats, and at 0° C it becomes a nearly solid, granular mass³⁰.

Physical & Chemical Properties of Olive Oil

Olive oil is a recognized medicine by US Pharmacopeia and British BP (Pharmacopeia Codex)³¹. According to both the books it is

fresh olive oil which is greenish yellow in colour with no special odor. At 20°C in ordinary conditions 1 ml weigh 0.913gm i.e. it is lighter than water. Its freezing point is 4°C. It is insoluble in water but soluble in Alcohol, Ether, Chloroform and liquid paraffin.

Virgin oil is obtained from fruit (pericarp) by extraction after peeling its skin. Its colour is golden with light fragrance. It may be stored for years without any disintegration. More oil from remaining part of the fruit is extracted by mixing it with warm water which afterward is separated from it.

Olive oil provides the purest fat which is obtainable and in this oil bacteria cannot live.³²

According to T. E WALLIS³³ It has following properties

- Specific Gravity: 0.915 0.918
- Iodine Value: 79-87
- Refractive Index: 1.4605 to 1.4635 at 40°C

Free Acid (as Oleic Acid): ≤ 1 %. Lower qualities may contain up to 5 %.

In the development of the olive fruit, three phases are usually distinguished: **a growth phase**, during which accumulation of oleuropein occurs; **a green maturation phase** that coincides with a reduction in the levels of chlorophyll and oleuropein; and **a black maturation phase** that is characterized by the appearance of anthocyanins and during which the oleuropein levels continue to fall³⁴. Therefore, oleuropein is very abundant in the early stages: in young fruits, it can reach 14% of dry matter. Although lower, its level is still very important at harvest for

green picked cultivars³⁵. In black cultivars, its level declines rapidly during maturation³⁶; in some varieties (Oeuropaea var leccino), it can even fall to zero when the fruits are completely black³⁷.

Chemical Composition

Olive Oil contains	a) Oleic Acid	b) Palmitic Acid
	c) Arachis Oil	d) Linoleic Acid
	e) Stearic Acid	f) Myristic Acid
	g) Glycerides ³⁸	

According to Qarshi it constitutes β -carotene, a-chlorophyll, Bchlorophyll, Phenols, Polyphenols, Phenolic acids³⁹

Traditional use of olive as food and medicine

The tree bears fruits which contain edible oil. Older the olive oil is, the hotter it becomes. Olive oil is an excellent treatment for the skin and hair, and it delays old age.

Green olives are the most nourishing, and counteract autointoxication. Black olives cause the spleen to overproduce bile and are hard on the stomach. Olive leaves can be chewed as treatment for inflammation of the stomach, skin ulcerations, and eruptions of herpes and hives.⁴⁰

"Olive oil is cholagogue, nourishing demulcent, emollient and laxative. Beneficial for patients with hyperacidity as its eating reduces gastric secretions. Oil is also used in peptic ulcers. It is externally used to treat pruitis, the effects of stings or burns and as a vehicle for liniments. It is a good hair tonic when used with alcohol and a treatment for dandruff when used oil of rosemary".⁴¹

The leaves of Olive plant are antiseptic, astringent, febrifuge and sedative. A decoction is used in treating obstinate fever. Leaves also have tranquillizing effect on nervous tension and hypertension. The leaves decrease blood suger levels upto 17 to 23%. They are applied externally to abrasions. Olive oil is used as a base for liniments and ointments."⁴²

"The bark is astringent, bitter and febrifuge. In the treatment of malaria it is proved to be a substitute for Quinine".⁴³

USE OF OLIVE OIL IN MODERN AGE MEDICINE

Olive oil provides the purest fat obtainable and in it bacteria cannot live.In Olive growing countries mostly children, as soon as they are born, are anointed (massaged) with olive oil. It provides a far safer cleanser for infants' delicate skin than soap and water. It also provides them prevention from constipation.

For people who are in decline or lacking in flesh Olive oil combined with barley malt is used.

Pure Olive oil mixed with other foods assists in their digestion and natural disposal of waste matter.For speakers who suffer throat troubles a spoonful of olive oil is very beneficial.For gastric catarrh (Cold) and similar digestive troubles use one table spoonful of olive oil and one honey in a glass of water twice a day.Olive oil is best for coughs, colds and sore throats. It may be used freely to get clear complexion. Olive oil is the most easily digested food.

A few drops poured on wasp sting will immediately stop the burning sensation and prevent swelling.For burns, sores, cuts, scratches, sore feet, chapped hands, rough, broken or sun burnt skins an application of olive oil will have a wonderful healing effect.In case of Earache a few drops of warm olive oil work wonderfully.⁴⁴

Anticancer Activity

Recent epidemiological evidence and animal studies suggest a relationship between the intake of olive oil and reduced risk of several

malignancies. Hydroxy tyrosol is a major antioxidant compound of virgin olive oil. This compound is accessed on proliferation, apoptosis and cell cycle of tumor cells. This compound inhibited proliferation of both human promyelocytic leukemia cells HL60 and colon adenocarcinoma cells HT29 and HT29 clone 19A.

The results of the study supported the hypothesis that hydoxy tyrosol may exert a protective activity against cancer by asserting the cell cycle and by inducing apoptosis in tumor cells. The study suggests that hydoxy tyrosol may be responsible for its anticancer activity.⁴⁵Olive oil is also found to reduce oxidative damage to DNA and RNA, which may be a factor in preventing cancer.⁴⁶

Decrease in incidence of Coronary Heart Diseases

Olive Oil contains monounsaturated fats. These fats reduce the effect of bad cholesterol i.e. low density lipoproteins in blood. Natural antioxidants in the olive oil like vitamin E help to prevent lipid oxidation e.g. oxidation of low density lipoproteins. This fact reduces the danger of incidence of coronary heart disease.⁴⁷ Natural antioxidants also play a role in inhibiting the formation of cytotoxic products such as lipid peroxides. Thus they are also helpful in retarding the damage which may be caused by atherosclerosis.⁴⁸

Vitamin K in olive oil is important in reducing incidence of blood clotting.

Activity in lowering blood pressure

Presence of antioxidants like vitamin E in Olive oil aids in lowering blood pressure, cholesterol, and the risk of contracting coronary heart diseases.⁴⁹Another cause for lowering cholesterol is the presence of monounsaturated fatty acids (about 73%) in total fatty acids of olive oil which do not contain cholesterol.

Reduction in Blood Sugar

Olive oil is known to lower blood sugar levels.⁵⁰

Activity in Peptic Ulcer and Gastric Cancer

It seems to be a chemo preventive agent for peptic ulcer and gastric cancer.⁵¹

Prevention of Arthritis

It is reported that the people who consume large quantities of olive and use vegetables have a reduced risk of arthritis.⁵²

Bones development and strengthening

Olive oil bears vitamins E,A,D and K. These vitamins are important for bone development in adults and children. In addition they strengthen bones by fixing calcium. As it is very easily digested therefore it is also recommended for alders. It prevents Calcium loss by stimulating bone mineralisation.⁵³ In bones absence of mineral accumulation results into bone softening which is a serious disease. Olive oil has a best effect on the skeleton as regards bone softening.⁵⁴

Prevention of Aging

In olive oil high level of natural antioxidants are present. It is also rich in vitamin E. Antioxidants prevent damage by harmful substances, delays aging in organs and tissues and renew our cells. Vitamin E suppresses free radicals which destroy the cells and cause aging.⁵⁵

Importance of Olive Oil for Newborns

Olive oil has a balanced polyunsaturated fat at a similar level to that in human milk. When olive oil is added to fatless cow's milk it becomes a natural food source just like mother's milk.⁵⁶ Olive and olive oil contains Linoleic acid and are most healthy food for newborn babies and growing children deficiency in linoleic acid leads to many skin diseases and retardation of development in childhood.⁵⁷

Antioxidants in olive oil prevent us from destructive effects of harmful substances. These along with fatty acids support the hormones and assist in cell membrane formation.

Benefits to Liver and Gall bladder

Olive oil activates bile production. It regulates the discharge of gall bladder thus retarding the risk of bile stone formation.⁵⁸ Chloride present in olive oil assists the liver function and helps the body eliminate waste products.

Effect on Brain

Olive oil has a beneficial effect on the brain arteries.⁵⁹

DISCUSSION

Olive has given prime importance in The Holy Qur'an and Hadith. Allah describes it as a blessed (Mubarak) tree in The Holy Qur'an. Holy Prophet(PBUH) also described it as a holy tree. It was also described by the Holy Prophet a cure of seventy diseases. But no research work has been done to find out its effectiveness for the cure of different ailments other than those diseases already mentioned by the Holy Prophet i.e. Hemorrhoids, Anal fissure, Skin diseases, pleurisy and leprosy. It is the need of time to explore the benefits of this prophetic food by experiments so that we can take benefit of its newly discovered properties. As discussed it can be mentioned that as a food itself and as a preservative for other foods like fish olive has magnificent qualities and it is also proved to be extraordinary when used as medicine. As far as food is concerned most of guidance can be obtained from Ahadith but where modern medicine comes experiments in the light of ahadith are must for getting maximum benefit.

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