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## Ethno Botanical Importance of *Punica granatum* L in Islam: A Review Article

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**ABSTRACT:** The main aim of this study is to document the knowledge ethno botanical importance of fruits in the light of Islam. In Islam the 10 fruit plant species belonging to 10 genera of 9 families widely used i.e *Citrullus lanatus* (Thunb.) Mats. & Nakai, *Cucumis sativus* L., *Cydonia oblonga* Mill. *Ficus carica* L., *Olea europea* L., *Phoenix dactylifera* L., *Punica granatum* L., *Salvadora persica* L., *Vitis vinifera* L. and *Zizyphus mauritiana* Lam. mentioned Holy Quran-and hadith. *Punica granatum* pomegranate is deciduous shrub which have many medicinal properties. In Malegaon region agriculture sector cover by Pomegranate In Nashik distric is Identified for Grapes, Onion and now for Pomegranate. This fruit acts as Antioxidant fruit also have many medicinal properties. This article reviews the main reports of the pharmacological, traditional value and folk remedies of this plant in Scientific Studies.

**Keywords:** Ethno-botany, *Punica granatum* L, Biochemistry, Pharmacology

### Introduction

Indian Ayurveda along with the Jamu, Siddha, Tibetan, traditional Chinese and Unani systems of medicine are an important source of health and livelihood for millions of Asian people. Ayurvedic medicine is widely practiced especially in Bangladesh, India, Nepal, Pakistan and Sri Lanka. Unani medicine draws from the traditional systems of medicine of China, Egypt, India, Iraq, Persia and the Syrian Arab Republic and is also known as Arabic medicine (WHO, 2001). Plants are an essential component of the universe. Human beings have used plants as medicine from the very beginning of time. After various observations and experimentations medicinal plants were identified as a source of important medicine, therefore, treatment through these medicinal plants, began in the early stages of human civilization ( Malik 2001). Approximately 70% of the homeopathic drugs are prepared from the fresh plants. Similarly more than 90% of tibbi medicines are prepared from herbs. Pakistan is very rich in plants of medicinal value (Nasreen, U. and M.A. Khan 2001). Fruits are one of the oldest forms of food known to man. There are many references to fruits in ancient literature. Vedas state that the fruits form the base of the foods of Gods. According to Quran, the fruits like grape, date, fig, olive and pomegranate are gifts and heavenly fruits of God. The people in ancient time regarded fruits to be endowed with magic or divine properties. The pomegranate (*Punica granatum* L.) is one of the oldest known edible fruits (Cam et al., 2009). It is native to the area extending from present day Iran to the Himalayas in northern India and has been cultivated since ancient times throughout the Mediterranean region of Asia, Africa, and parts of Europe (Fawole and Opara, 2013). The edible part of the pomegranate is its arils, which are usually consumed fresh and in processed forms such as fresh juice, canned beverages, jelly, jam, and paste. It is also used for flavoring and coloring drinks (Zaouay et al., 2012)

### Description

An attractive shrub or small tree, to 20 or 30 ft (6 or 10 m) high, the pomegranate is much-branched, more or less spiny, and extremely long-lived. The leaves are evergreen or deciduous, opposite or in whorls of 5 or 6, short-stemmed, oblong-lanceolate, 3/8 to 4 in (1-10 cm) long, leathery. Showy flowers are borne on the branch tips singly or as many as 5 in a cluster. They are 1 1/4 in (3 cm) wide and characterized by the thick, tubular, red calyx having 5 to 8 fleshy, pointed sepals forming a vase from which emerge the 3 to 7 , red, white or variegated petals enclosing the numerous stamens. Nearly round, but crowned at the base by the prominent calyx, the fruit, 2 1/2 to 5 in (6.25-12.5 cm) wide, has a tough, leathery skin or rind, basically yellow more or less overlaid with light or deep pink or rich red. The interior is separated by membranous walls and white spongy tissue (rag) into compartments packed with transparent sacs filled with tart, flavorful, fleshy, juicy, red, pink or whitish pulp (technically the aril). In each sac, there is one white or red, angular, soft or hard seed. The seeds represent about 52% of the weight of the whole fruit.

**Classification**

Kingdom: Plantae  
Division: Angiosperm  
Class: Dicot  
Subclass:- Rosidae  
Order: Myrtales  
Family: Punicaceae  
Genus: *Punica*  
Species: *granatum*



**a. Plant Image b. Flowering c. Fruits d. Edible seeds**

**Medicinal Uses**

It has great nutritional values and numerous health benefits. Pomegranates used treatment for Cancer, Osteoarthritis and Other Diseases. The pomegranate has been used in natural and holistic medicine to treat sore throats, coughs, urinary infections, digestive disorders, skin disorders, arthritis, and to expel tapeworms. However, modern research suggests that pomegranates might be useful in treating such serious conditions as prostate cancer, skin cancer, osteoarthritis, and diabetes. Studies also show that pomegranate seeds might help rid the digestive system of fats. Clinical research shows that pomegranates, when part of a healthy diet, might help prevent heart disease, heart attacks and strokes. This is because pomegranates have the potential to thin the blood, increase blood flow to the heart, reduce blood pressure, reduce plaque in the arteries, and reduce bad cholesterol while increasing good cholesterol. . A decoction of seed is used to treat syphilis. Juice used to treat jaundice and diarrhoea. Juice of flower is used to treat nose bleeds. The fruit pulp and the seed are stomachic. Dried, pulverized flower buds are employed as a remedy for bronchitis.( Debjit Bhowmik and B.S. Durai etal )



Pomegranate peel attracts attention due to its apparent wound healing properties (Chidambara *et al.*, 2004), immune modulatory activity (Gracious *et al.*, 2001), and antibacterial activity (Navarro *et al.*, 1996) antiatherosclerotic and antioxidative capacities (Tzulker *et al.*, 2007). Antioxidative activity has often been associated with a decreased risk of various diseases (Whitley *et al.*, 2003).

### **Nutritional value and Biochemical Composition**

The chemical composition of the fruits differs depending on the cultivar, growing region, climate, maturity, cultivation practice, and storage conditions (Poyrazoglu and others 2002; Barzegar and others 2004; Fadavi and others 2005). Significant variations in organic acids, phenolic compounds, sugars, water-soluble vitamins, and minerals of pomegranates have been reported over the years by various researchers (Aviram and others 2000; Davidson and others 2009; Tezcan and others 2009). About 50% of the total fruit weight corresponds to the peel, which is an important source of bioactive compounds such as phenolics, flavonoids, ellagitannins (ETs), and proanthocyanidin compounds (Li and others 2006), minerals, mainly potassium, nitrogen, calcium, phosphorus, magnesium, and sodium (Mirdehghan and Rahemi 2007), and complex polysaccharides (Jahfar and others 2003). The edible part of the pomegranate fruit (50%) consists of 40% arils and 10% seeds. Arils contain 85% water, 10% total sugars, mainly fructose and glucose, and 1.5% pectin, organic acid such as ascorbic acid, citric acid, and malic acid, and bioactive compounds such as phenolics and flavonoids, principally anthocyanins (Aviram and others 2000; Tezcan and others 2009). The seeds are a rich source of total lipids; pomegranate seed oil comprises 12% to 20% of total seed weight. The oil is characterized by a high content of polyunsaturated (n-3) fatty acids such as linolenic, linoleic, and other lipids such as punicic acid, oleic acid, stearic acid, and palmitic acid (Fadavi and others 2006). The seeds also contain protein, crude fibers, vitamins, minerals, pectin, sugars, polyphenols, isoflavones (mainly genistein), the phytoestrogen coumestrol, and the sex steroid, estrone (El-Nemr and others 2006; Syed and others 2007).

### **Conclusions**

*Punica granatum* (Pomegranate-rumman) is a good food and a medicine of great value. It is a tonic for heart patients, highly efficacious in the inflammation of the stomach and effective to check heart pain. The juice of the fruit is an excellent cooling beverage and allays thirst. It acts as a good medicine for both diarrhea and dysentery. For many ailments such as colitis, anemia, jaundice, high blood pressure, piles and arthritis, its juice is an effective medicine. When given with honey, it reduces biliousness. Pomegranate fruit is also prescribed in many disorders under the Homeopathic medicine system. All parts of the plant contain unusual alkaloids, known as 'pelletierines', which paralyse tapeworms so that they are easily expelled from the body by using a laxative. The fruit is a mild astringent and refrigerant in some fevers and especially in biliousness. It is also cardiac and stomachic. The dried rind of the fruit is used in the treatment of amoebic dysentery, diarrhea etc. It is a specific remedy for tapeworm infestation (Plants for a future, 2008). Nowadays, it is widely accepted that the beneficial health effects of fruits and vegetables in the prevention of disease are due to the bioactive compounds they contain (Galaverna and others 2008). The presence of significant amounts of bioactive compounds, such as phenolic acids, flavonoids, and tannins in pomegranate fruits assures them considerable nutritional value (Aviram and others 2000).

The Consumption of pomegranates has tremendously due to high broad spectrum of health benefits. Pomegranates are used as juice, peels and seeds. The rich bioactive profile of pomegranate makes it a highly nutritious and desirable fruit crop so it has great value in Islam.

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