A Secondary Research on Medicinal Plants Mentioned in the Holy **Our'an**

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Abstract

Background: Finding scientific data from the Holy Our'an is an old trend, which emerge newly with rise of modern science. In the literature, we have found that total number of medicinal plants cited in the Holy Our'an varies author to author.

Objective: The aim of this study was to indentify the plants mentioned in the Holy Qur'an and to confirm the botanical name with other relevant information and Islamic history of medicine.

Methods: The Holy Our'an has been studied thoroughly to identify the medicinal plants, and Surah and verses were only chosen if they stated specific name of plants which are found in the earth. The identity of the selected plants was confirmed and claim of ethnomedicinal uses of Our'anic medicinal plants was vindicated using scientific evidence available in the journals and books.

Results: Our present findings revealed a total of 27 plants cited in 47 verses of 28 Surah in the Holy Our'an, those belongs to 22 genera of 18 families of plant kingdom. Among these plants, eight fruits, five vegetables, two crops, six aromatics, five trees and one forage species. Out of 27, 15 plants have been consumed in raw form or in cuisine which directly contribute nutrition to our body as well as medicinal benefits.

Conclusion: It is concluded that identified medicinal plants extensively used in the traditional healing system due to their availability, acceptability, compatibility and affordability and studied in modern science for identifying theory of their potential role in improving the quality of life.

Keywords: Ethnomedicine, Holy Qur'an, Islamic medicine, Medicinal plant, Qur'anic plant



Introduction

"And we send down of the Holy Qur'an that which is a **healing** and a mercy to those who believe" (Surah 17, Verse 82 [1])

"Says: It is for those who believe, a guide and a **healing**" [Surah 44, Verse 44 [1]

The Holy Qur'an, the last and final divine speech of Allah revealed to the Prophet Mohammad (peace be upon him) is the complete code of life and there is nothing neglected in this divine book. There is a verse in the Holy Our'an where almighty Allah declared that "We have neglected nothing in the Book" (Surah Al-An'am, Verse 38 (6:38) [1]). Among the many resources, this book also described about the plants which are medicinally and nutritionally important. People suffering with diseases and medicinal plants are being used to combat these diseases from the dawn of civilization. The indigenous plants and plant-derived drugs are the potential alternative source of medicine. Traditionally, the medicinal plants have been used extensively to treat ailments from ancient time. Currently, about 75-80% people of developing countries and about 25% people of developed countries depend either directly or indirectly on medicinal plants for the first line of treatment due to availability, acceptability, compatibility and affordability [2].

Life and disease go together where there is life, disease are bound to exist. Cure of diseases through medicinal plants is always a salient feature of Islamic teaching and preaching. Narrated Abu Huraira, Prophet Mohammad (*peace be upon him*) said, "There is no disease that Allah has created, except that He also has created its treatment." (Bukhari, 7:582) [3]. Islamic medicine started from Prophet Adam (Alaihis Salaam) and was completed to Prophet Mohammad (*peace be upon him*) [4]. Medicines are gifts from nature and used by the Prophets themselves and they told the followers to use them.

Finding scientific data from the Holy Qur'an is not a new trend, recently study on the Holy Qur'an rises along with modern scientific investigation. The investigation of medicine from the Holy Qur'an and traditions of Prophet Mohammad (peace be upon him) started in 8th century and continued to present day for the welfare of human beings throughout the world. There are many verses in the Holy Qur'an where the importance of plants has been described. In the literature, we have found that the total number of medicinal plants cited in the Holy Qur'an varies author to author. Khafagi et al. (2006) revealed 22 medicinal plants [5], Koshak et al. (2012) reported 19 medicinal plants [6] and Kahrizi et al. (2012) described only 13 medicinal plants [7] enlisted in the Holy Qur'an. So. considering the medicinal vlaue and the scientific importance it is worthy to make a complete chekc list of medicinal plants with botanical name mentioned in the Holy Qur'an, which might be facilitated the rechercers to investigate new drugs or pharmacological properties. Therefore, the aim of this study was to indentify the plants mentioned in the Holy Qur'an studying each and every verse and Surah (chapter), and to confirm the botanical name with other relevant information such as family. genus, species and egnlish/common name through existing scientific paper ivestigations and Islamic



history of medicine. The ethnomedicinal importance of the identified plants was also summerized using secondary data.

Methodology

The Holy Qur'an was the primary source of this comprehensive study. This Holy book consists of 114 Surah (Chapter) and 6666 Verses. We studied the Holy Qur'an thoroughly and the Surah and verses were only chosen if they stated specific name of plants. Finally, we only included the plants cited in the different verses of the Holy Our'an that are found in the earth. The identity of the selected plants were confirmed from existing literature such as, books, journal article, and family and species of plants were confirmed from nomenclatural and bibliographic databaseshttp://www.tropicos.org/ and

http://www.theplantlist.org/. The claim of ethnomedicinal uses of the Qur'anic medicinal plants were vindicated using scientific evidence available in the journals and books. The journal articles were searched in the following electronic databases- PubMed

(http://www.ncbi.nlm.nih.gov/pubmed),

ScienceDirect (http://www.sciencedirect.com/), Scopus (http://www.scopus.com/), Web of Science (http://webofknowledge.com/), Springer Link (http://link.springer.com/), Wiley Online Library (http://onlinelibrary.wiley.com/) and advance search in Google scholar (http://scholar.google.com.my/), and some nonimpact journals. The searching terms were "English name" or "botanical name" of a specific plant to find ethnomedicinal uses and pharmacological properties. No language restriction was applied.

Results

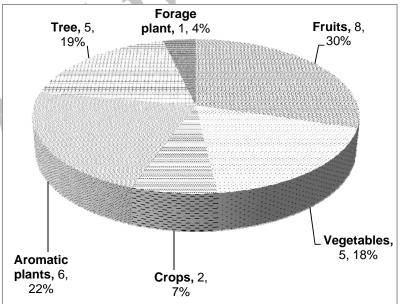
Our initial searches finally identified 46 Surah (chapter) and 121 verses, among which 18 Surah (chapter) and 74 verses were excluded; because, specific plant name was not stated and/or the plant is not available in the earth. Finally, we selected 28 Surah and 47 verses those mentioned specific name of plants (Table 1). This finding was confined to a total of 27 medicinal plant species belonging to 22 genera of 18 families of the plant kingdom. Botanical name of these plants are Acacia seval Delile, Alhagi maurorum Medik, Allium cepa L., Allium sativum L., Brassica nigra (L.) W.D.J. Koch, Cedrus libani A. Rich, Cinnamomum aromaticum Nees & Eberm., Cinnamomum camphora (L.) Nees & Eberm., Cucumis sativus L., Dryobalanops aromatic C.F. Gaertn., Ficus carica L., Lagenaria siceraria (Molina) Standl., Lawsonia inermis L., Lens culinaris Medik., Musa paradisiaca L., Ocimum basilicum L., Olea europaea L., Phoenix dactylifera L., Punica granatum L., Salvadora persica L., Tamarix aphylla (L.) H. Karst., Tamarix mannifera (Ehrenb.) Bunge, Trifolium repens L., Vitis vinifera L., Zingiber officinale Roscoe, Ziziphus mauritiana Lam. and Ziziphus spina-christi (L.) Willd.

The identified plants fall under different categories such as, fruit, vegetables, crops, aromatics, tree species and forage plant based on their characteristics. The distribution of plant types is shown in the Fig. 1. The results indicating that 55% plant (15 plants out of 27) fall under the category of fruits, vegetables and crops, which are generally consumed as nutrition sources either in raw forms or after processing like cuisine.



No.	Name of Surah (Arabic)	Name of Surah (English)	Surah (chapter) number	Verse number
1	Al-Baqarah	The Cow	2	57, 61, 266
2	Al-An'am	The Cattle	6	99, 141
3	Al-A'raf	The Heights (or The Wall With Elevations)	7	160
4	Ar-Ra'd	The Thunder	13	4
5	An-Nahl	The Bees	16	11,67
6	Al-Isra	The Journey by Night	17	91
7	Al-Kahf	The Cave	18	32
8	Maryam	Mary	19	23, 25
9	Та-На	Taha	20	71,80
10	Al-Anbiya	The Prophets	21	47
11	Al-Mu'minum	The Believers	23	19, 20
12	An-Nur	The Light	24	35
13	Ash-Shu'ara	The Poets	26	148
14	Luqman	Luqman	31	16
15	Saba'	Sheba	34	16
16	Ya Seen	Ya Seen	36	34, 39
17	As-Saffat	Those Ranged in Ranks	37	146
18	Qaf	Qaf	50	10
19	An-Najm	The Star	53	14, 16
20	Al-Qamar	The Moon	54	20
21	Ar-Rahman	The Most Gracious	55	11, 12, 68
22	Al-Waqi'ah	The Event	56	28, 29, 88-89
23	Al-Hashr	Exile	59	5
24	Al-Haqqah	The Inevitable	69	7
25	Al-Insan or Ad-Dahr	Man or Time	76	5, 17
26	An-Naba'	The Great News	78	32
27	ʻAbasa	He Frowned	80	28, 29
28	At-Tin	The Fig	95	1-4

Table 1- Surah and Verses of the Holy Qur'an stated specifi	c nlant name
Table 1- Buran and Verses of the Hory Qui an stated speen	c plant name





Other plants are aromatic (22%) and tree species (19%), which are generally used for medicinal purposes as well as commercial purposes in various industry, and forage plants (4%) are used for grazing horses or cattle and medicinal purposes. A complete check list of medicinal plants mentioned in the Holy Qur'an with botanical name, family, Qur'anic name, English/common name, type of plants and frequency of citation of each plant is given in the Table 2. For Ethnomedicinal importance

and pharmacological properties of the identified medicinal plants, we finally identified 76 articles according to the search strategy and summarized the traditional uses and parts used of these plants (Table 3). Most of the mentioned plants have been used extensively in the traditional healing system as well as some of them used in traditional Iranian medicine (TIM) (Table 4) since centuries due their availability, to acceptability, compatibility and affordability.

No.	Botanical Name	Family	Quranic Name	English/common Name	Type of plants	Frequency of citation
1	^a Acacia seyal	Fabaceae	Talh	Acacia	Tree	1
2	^b Alhagi maurorum	Fabaceae	Mann	Manna	Aromatic	3
3	Allium cepa	Amaryllidaceae	Basal	Onion	Vegetable	1
4	Allium sativum	Amaryllidaceae	Foume	Garlic	Vegetable	1
5	Brassica nigra	Brassicaceae	Khardal	Black Mustard	Crop	2
6	°Cedrus libani	Pinaceae	Sidar	Ceder, Lebanon	Tree	4
7	^d Cinnamomum aromaticum	Lauraceae	Kafur	Cassia, Bastard Cinnamon	Aromatic	1
8	^d Cinnamomum camphora	Lauraceae	Kafur	Camphor tree	Aromatic	1
9	Cucumis sativus	Cucurbitaceae	Qissa	Cucumber	Vegetable	1
10	^d Dryobalanops aromatic	Dipterocarpaceae	Kafur	Borneo camphor, Malayan camphor	Aromatic	1
11	Ficus carica	Moraceae	Teen	Fig	Fruit	1
12	Lagenaria siceraria	Cucurbitaceae	Yakteen	Bottle Gourd	Vegetable	1
13	^d Lawsonia inermis	Lythraceae	Kafur	Henna	Aromatic	1
14	Lens culinaris	Fabaceae	Adas	Lentils	Crop	1
15	^a Musa paradisiaca	Musaceae	Talh	Banana	Fruit	1
16	Ocimum basilicum	Lamiaceae	Reihan	Sweet Basil	Aromatic	2
17	Olea europaea	Oleaceae	Zeitoon	Olive	Fruit	7
18	Phoenix dactylifera	Arecaceae	Nakhl	Date palm	Fruit	20
19	Punica granatum	Lythraceae	Rumman	Pomegranate	Fruit	3

Table 2- Medicinal plants mentioned in the Holy Qur'an



	Table 2- Continued					
No.	Botanical Name	Family	Quranic Name	English/common Name	Type of plants	Frequency of citation
20	Salvadora persica	Salvadoraceae	Khamt	Tooth brush tree, Mustard tree	Fruit	1
21	Tamarix aphylla	Tamaricaceae	Athl	Athel tamarisk	Tree	1
22	^b Tamarix mannifera	Tamaricaceae	Mann	Manna	Fruit	3
23	Trifolium repens L.	Fabaceae	Kajb	White clover	Foliage	1
24	Vitis vinifera	Vitaceae	Inab	Grape	Fruit	11
25	Zingiber officinale	Zingiberaceae	Zanjabeal	Ginger	Vegetable spice	1
26	°Ziziphus mauritiana	Rhamnaceae	Sidar	Indian jujube	Tree	4
27	°Ziziphus spina- christi	Rhamnaceae	Sidar	Lote-tree	Tree	4

abcd Plants superscripts by indistinguishable letter identified in a single Qur'anic name in the same verse(s) and Surah (s)

Table 3- Traditional uses of medicinal plants mentioned in the Holy Qur'an				
Botanical Name	Parts Used	Traditional Uses	References	
<i>Acacia seyal</i> Delile	Gum, bark, wood	Aphrodisiac, dysentery, leprosy, colds, diarrhea, hemorrhage, pain, Ophhthalmia, bronchitis and rheumatism	[8]	
Alhagi maurorum Medic.	Aerial parts, oil from leaves and stem, Concrete exudation	Diaphoretic, expectorant, laxative, purgative, diuretic, antiulcer, diarrhea.	[9, 10]	
Allium cepa L.	Bulb, leaves, seed and stalks	Hypertension, diuretic, induce menses, asthma, cholera, common cold, cough, influenza, ear pain, improve sperm production, clear face and skin spots, headache, eye diseases, baldness, dysentery, fever, jaundice, uterine pains, tuberculosis, rheumatic pain.	[11-13]	
Allium sativum L.	Bulb	Antidote, wound healer, dog bite, paralysis, digestive problems asthma, intestinal pain worms, cough, hysteria, headache, tuberculosis.	[14-18]	
Brassica nigra L.	Whole plant, seed	Neurotonic pain, rheumatoid arthritis, brain and lung edema, paralysis, migraine, epilepsy, diuretic, emetic, rubefacient, tumors of sinax, antiseptic.	[19, 20]	
<i>Cedrus libani</i> A. Rich	Cones, leaves, tar from stems and root, wood oil	Leprosy, skin diseases of animals, killing parasites, e.g. aphids, insects, ticks and so on, anti-microbial and anti- ulcerogenic activity	[21-23]	
<i>Cinnamomum</i> <i>aromaticum</i> Nees and Eberm.	Leaves, root, aerial parts, and branches	Rheumatism, sprains, bronchitis, asthma, indigestion, muscle pains, tuberculoses, headache, liver and kidney pains, oral and teeth swelling, cholera, breast pain and sexual stimulant.	[24-28]	



Botanical Name	Parts Used	Table 3- Continued Traditional Uses	References
Cinnamomum camphora L.	Leaves, root, aerial parts, and branches	Rheumatism, sprains, bronchitis, asthma, indigestion, muscle pains, tuberculoses, headache, liver and kidney pains, oral and teeth swelling, cholera, breast pain and sexual stimulant.	[24-28]
<i>Cucumis sativus</i> L.	Whole Fruit, leaves and seed	Throat affections, renal disease, diabetes, pimples, diuretic, demulcent and cooling, healing and soothing to irritated skin.	[29-33]
Dryobalanops aromatic Gaertn F.	Resin	Stress and emotion relief, clear heart, relieve pain, stop itching of sore throat, ulcers, painfull swollen gums, tooth, ache, swelling, redness and eye pain.	[34]
Ficus carica L.	Bark, leaves, tender shoots, fruit, seed and latex	Ulcerative, inflammatory, leucoderma, ringworms, paralysis, antipyretic, purgative, aphrodisiac.	[35-37]
<i>Lawsonia inermis</i> L.	Leaves, stem bark, root, flower and seed	Rheumatoid arthritis, headache, ulcers, diarrheoa, leprosy, analgesic.	[38, 39]
Legenaria siceraria Standl.	Flower, fruit, pulp, leaves, stem, seed, root	Jaundice, diabetes, ulcer, piles, colitis, insanity, hypertension, skin diseases, emetic, sedative, purgative, cooling, diuretic, analgesic.	[40-44]
<i>Lens culinaris</i> Medic.	Seed	Hypercholesterolemia, hypertension, measles, paralysis, common cold, parkinson's, face clearness, eye infection, digestive diseases.	[45-47]
Musa paradisiaca L.	Fruit, flower, leaves, peels, root and stalks	Diarrhoea, dysentery, intestinal lesions, ulcer, diabetes, sprue, uremia, nephritis, gout, hypertension, cardiac diseases, menorrhagia, cholera, otalgia, haemoptysis, anthelmintic, blood disorders, venereal diseases, inflammation, pain and snakebite, and antimicrobial properties.	[48-50]
Ocimum basilicum L.	Leaves, flower and seed	Boredom, cancer, convulsion, deafness, diarrhea, epilepsy, gout, hiccup, impotency, insanity, nausea, sore throat, toothaches, whooping cough.	[51, 52]
Olea europea L.	Leaves, fruit and oil	Fever, malaria, skin diseases, baldness, muscle pain.	[53]
Phoenix dactylifera L.	Fruit and seed	Memory disturbances, fever, inflammation, paralysis, loss of consciousness, nervous disorders, detersive and astringent in intestinal troubles, sore throat, colds, bronchial asthma, relieve fever, cystitis, gonorrhea, edema, liver and abdominal troubles, alcohol intoxication, ulcer, diarrhea.	[54]
Punica granatum L.	Peel, fruit, seed and seed oil	Colic, colitis, headache, diuretic, acne, piles, allergic dermatitis, stomach cough, inflammation, heart diseases, diarrhea, dysentery, cardiovascular diseases, muscle pain, hepatitis, oral diseases, high blood pressure, anemia, jaundice, arthritis.	[55-57]
Salvadora persica L.	Leaves, fruit, root bark, stem bark and seed	Cough, asthma, scurvy, rheumatism, piles, tonic to the liver, diuretic, analgesic, nose troubles, scabies, leukoderma, lessening inflammation, strengthening the teeth, antidiot, carminative, lithontriptic, biliousness, snake bite, gonorrhea, vesical catarrh, fever, emmenagogue, ascarifuge, gastric troubles, purgative, analgesic, plaque.	[58-60]





Table 3- Continued				
Botanical Name	Parts Used	Traditional Uses	References	
Tamarisk aphylla L.	Leaves, root, young branches, galls and bark	Tuberculosis, leprosy, smallpox, swollen spleen, astringent, eczema, capititis, hepatitis, skin diseases, syphilis, scaly skin, cold, flue, tetanus, poultice on wounds.	[51, 61-63]	
<i>Tamarix mannifera</i> (Ehrenb.) Bunge	Concrete exudation	Laxative, Health tonic (nutritional supplement). It has nutritional value as well as medicinal properties.	[64, 65]	
Trifolium repens L.	Flower, leaves, root, whole plant	Antiseptic, sedative, analgesic medicine for rheumatic disorder, deworming remedy, anti-diarrhoeal remedy, treatment of sore throat, fever, pneumonia, meningitis, feverish feeling, coughs and colds, Boils, abrasions, and small cuts	[66-71]	
Vitis vinifera L.	Leaves, fruit and seed	Skin diseases, syphilis, asthama, jaundice, common cold, bronchitis, diarrhea, heal wound, tonic, hepatitis, stomachaches, dog bites, to improve circulation, cool and detoxify the body, to improve liver function, control high blood pressure, kidney diseases.	[72-76]	
Zingiber officinale Roscoe	Rhizome	Nausea, cold induced disease, colic, vomiting, asthma, cough, inflammation, dyspepsia, loss of appetite, common cold, fever, allergic rhinitis, sinusitis, pain, headache, backache or any kind of muscular catch, painful tooth, swelled gum, tastelessness, gastritis, abdominal pain.	[77, 78]	
Ziziphus maurtitiana Lam.	Fruit, seed, leaves, twigs, bark, root and flower	Nausea, vomiting, relief abdominal pain, antidote, diuretic, laxative, emollient, expectorant, hair growth, anodyne, anticancer, pectoral, refrigerant, sedative, inflammation, wound healing, skin ulcers, Jaundice, stomachache, fever.	[79, 80]	
Ziziphus spina- christi (L.) Willd.	Pulp, leaves, root and root bark	Digestion problems, Sores, Antiseptics, Weakness, Liver complaints, Obesity, Diabetes, Skin infection, Antibacterial Fevers, Pharyngitis, Bronchitis, Anaemia, Diarrhoea, Insomnia and antinociceptive.	[81-83]	

 Table 3- Continued

Table 4- Uses of medicinal plants mentioned in the Holy Qur'an in traditional Iranian medicine (TIM) [84, 85]

English/ Common name	Name(s) in TIM sources	Uses in TIM
Ceder	Shorbin	Gastric and liver tonic, diarrhea, inflammation, hemorrhage, wounds and injury
Fig	Tin, Anjir	Respiratory disorder, laxative, spleen and liver disorder, dermatitis, inflammation, scabies, eczema, infected wounds and injury
Grape	Mow, Angur (leaf and stem)	Diarrhea, inflammation, peptic ulcer, wounds and injury
Henna	Hana	Aphtha, gastric and liver disorder, kidney stone, nervous system disorder, neuropathy disease, abortifacient, amenorrhea, wounds and injury
Lote-tree	Sedr, Konar	Diarrhea, peptic ulcer.
Manna	Angabin, tarfa	Spleen disorder, inflammation, hemorrhoid, burn wound, wounds and injury
Olive	Zeytoon	Gastrotonic, inflammation, arthritis, wounds and injury
Pomegranate	Golnar (flower), Anar, Romman (fruit rind)	Diarrhea, inflammation, peptic ulcer, hemorrhage, polymenorrhea, aphtha, inflammation, dental pain, hemorrhoid, wounds and injury



Discussion

The Holy Qur'an is the endless and perpetual basis of Islam. It invites human to study in depth and think over the creations of Allah, over again [76]. We studied the Holy Qur'an deeply to find plants mentioned in the verses of different Surah (chapter). Our investigation identified a total of 27 plant species, among which 16 unique species in 37 verses of 26 Surah (chapter). Only 9 verses of 7 Surah (chapter) indicated other 11 plant species, among which Acacia and banana identified as "Talh", two plants- Alhagi maurorum and Tamarix mannifera detected as "Al-Mann" and three plants- Ceder, Indian jujube, Lote-tree represent Qur'anic word "Sidar", and four plants- Bastard Cinnamon, Camphor tree, Borneo camphor and Henna identified as "Kafur". Ziziphus mauritiana, and Ziziphus spina-christi are from same genus, and Cinnamomum aromaticum and Cinnamomum camphora are also under same genus with different species. Other plants are from different genus as well as family. The same Qur'anic word representing different plants may be because of interpretation and commentary of Qur'anic verses from different point of view.

According to reliable classical and modern interpretation of the Holy Qur'an, and classical Arabic dictionary, *Talh* identified as banana [1]. The Holy Qur'an says, "*Among Talh* (*banana-trees*) with fruits piled one above another" (Surah 56, Verse 29), descriptive of individual bananas in a hand [1]. *Talh* has also been identified as acacia which is commonly known as *Talh* in Arabic language [64]. Acacia is flowering plant and grows well in

the deserts of Sudan, Libya, Jordan, and Arabic peninsula. Ancient Egypt used wood of this plant to build boat as well as other [86]. Alhagi applications Both plants maurorum and Tamarix mannifera are commonly known as Manna and in Arabic language they popularly known as Turanjabin and Gazanjbin, respectively. Farooqi (2011) [64] selected these plants to referred "Al-Mann". Based on the commentary and interpretation of the Holy Qur'an, Sidar identified as Ceder [64] or Indian jujube [87] or Lote-tree [1]. Therefore, we listed these 3 plants as Sidar considering their medicinal importance (Table 3). Similarly, Kafur identified as bastard cinnamon or camphor tree or Borneo camphor or henna [64]. Kafur has been described as the Camphor of plant origin in all most all commentary and translation as well as Arabic Dictionaries like Al-Munjid and Lissan al-Arab. However, if the word Mizajuha (Surah 76, Verse 5) means the mixture with the taste of Camphor, then the Qur'anic Kafur may be indicates something different. In this case, Kafur may refer to Henna. In old Greek literature Henna was called Kufros. If Qur'anic Kafur refer to Kufros it will signifies Henna, not Camphor [64]. Therefore, we recorded all of these plants to represent *Kafur* instead of choosing a single plant due to the existence of diverse commentary and interpretation. Further study is needed to confirm the identification of plant to represent Kafur.

The frequency of citation of the identified plants in the Holy Qur'an is not same. Some plants mentioned only one time in a verse and few of them are cited more than one times.



Among the identified plants Date palm cited 20 times in the different Surah and Verses followed by Grape (11 times), Olive (7 times), Ceder/Indian jujube/Lote-tree (4 times). Manna/Pomegranate (3 times) and Black Mustard/Sweet basil (2 times) and others (1 time) (Table 2). The Date palm is a wellknown fruits all over the world. This fruit was the main source of foods in ancient time and currently, many products of food have been prepared from dates. Besides the nutritional value, Date palm also extensively used to treat different types of ailments (Table 3). Grape is another popular fruit species, which is nutritionally very rich and medicinally potential. It has a lot of glucose, fructose, sucrose, formic acid, citric acid, specially malic acid and tartaric acid. However, its calorie level is low (57 kcal per 100g grapes). It is also a great source of iron, most of the vitamins like vitamin A, B1, B2, B3, B6 and minerals [76]. Traditionally grapes are extensively used in TIM for the treatment of including different diseases diarrhea. inflammation, peptic ulcer, wounds and injury [84]. Olive is a multipurpose fruit. This fruit used as food, at the same time its oil used in cuisine. A little amount of olive oil consumtion in raw form improve heart conditions. It is also used to treat fever, malaria, skin diseases, baldness, muscle pain, gastrotonic, inflammation, arthritis, wounds and injury [53, 84]. A summary of uses of medicinal plants that mentioned in the Qur'an and also found in the TIM is presented in Table 4. Among the 27 medicinal plants mentioned in the Qur'an, only 8 plants- Ceder, Fig, Grape, Henna, Lote-tree, Manna, Olive

and Pomegranate is available in TIM which are briefly discussed in this study to make a correlation between Qur'anic medicinal plants and TIM. These findings might help to enlarge the information of TIM resources.

The use of Qur'anic plants has also been scientifically proved. For example, *Trifolium repens*, an ethnomedicinally important plant has been identified in the Holy Qur'an (Surah 80, Verse 28) is a deworming remedy in the traditional medicine of the Naga tribes of India. This activity of white clover has been confirmed by *in vivo* study on animals [68]. In addition, we also identified some other plants such as wheat (Surah 2, Verse 261; Surah 12, Verse 43, 46) throughout the study, but we did not enlist them due to out of scope of present study. For example, wheat is a corn and it is not a medicinal plants.

In Islam, cure of diseases are achieved by curing of soul through prayers with recitation from the Holy Qur'an, and cure of ailments were done by using remedy [88]. Islamic medicine was initiated from the first Prophet Adam (Alaihis Salaam) and completed by the last messenger of Allah, Prophet Mohammad (peace be upon him). Plants and its derivatives have been used as remedy since beginning of life of Prophet Adam (Alaihis Salaam) on earth. Prophet Mohammad (peace be upon *him*) recommended his followers to use plants source as medicine. Here we quoted some hadith of Prophet Mohammad (peace be upon *him*) to strengthen the uses of plants and its fruits as remedy. Prophet Mohammad (peace be upon him) said:

"He who eats seven dates of Madina (Ajwa dates) every morning, will not be affected by



poison and magic on the day he eats them" [89].

"Eat the olive oil and apply it on the body, it is cure of seventy diseases" [90].

"The Prophet (PBUH) said: *Eat the oil and use it on your hair and skin, for it comes from a blessed tree*" (Reported by Al-Tirmidhi, 1775) [91].

"Pomegranate and its rind strengthen digestion (stomach)" [92].

Nowadays, medicinal plants are being investigated extensively worldwide to find alternative remedies and health approaches free from side effects caused by synthetic chemicals and people are using medicinal plants abundantly instead of synthetic medicines [93, 94]. Natural products are the basis of sophisticated traditional medical systems since ancient time, which are undiminished source of new pharmaceuticals [95]. Since approximately 25% of commonly used medicines including bruceatin, coaine, digoxin, morphine, quinine, aspirin, ephedrine, ergometrine, tubocurarine, digoxin, reserpine, atropine contain phytochemicals, applications of advance technologies in pharmaceutical research exponentially increased the interest of medicinal plant research to find novel and patentable drugs in recent years [95, 96]. They use plants as drug of choice in these millennia. Based on current knowledge, a large number of plants are used in traditional medical practices, and have been for more than 3000 years, such as Chinese Traditional Medicine, Ayurvedic Medicine, Unani Medicine most of which probably evaluated by Western standards. These plants were also used in Islamic religion from the beginning. World

Health Organization made an attempt to identify and compile all medicinal plants that exist in the world today [97]. In this study it is found that medicinal plants are the most important remedy in the Islamic religion and scientific manner as well as other cultures.

Conclusion

"An apple a day keeps the doctor away."

"Eat leeks in March and wild garlic in May, And all the year after, physicians may play." [Traditional rhyme]

Traditional knowledge passed down generation to generation. Islamic and Traditional medicines have an extensive history. People used this knowledge for health benefits. In this study, an attempt has been made to compile an up-to-date knowledge on medicinal plants mentioned in the Holy Qur'an. To our knowledge, we made a complete check list of medicinal plants that can be used as a quick reference guide for further study in the field of ethnobotany. This may also encourage the researcher who conducting ethnopharmacological research to explore new pharmacological properties of those plants, if not actually exists relevant data any of them. As we identified few plants to represent a single Qur'anic name, the precise identification and confirmation of this plants would be a worthy further study. It may be feasible through the details study of the history of Islamic medicine, meaning of the root words, and botanical description of those plants.

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Conflict of Interests

There is nothing to declare.

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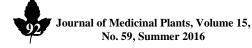
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