

**Review article****Role of traditional Islamic and Arabic plants in treatment of fever****Sameer Ahmad Thoker* and Sapan Patel**

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[Accepted: 27 March 2020]

Abstract: The present work accentuates the use of traditional Islamic and Arabic plants used for the treatment of fever. The main purpose of the present study is to highlight the medicinal importance of Arabic and Islamic Plants for the Treatment of fever. Islamic and Arabic plants were selected and identified through different literature survey plant database sites like “Google scholar”, “web of science”, “PubMed”, “Research gate”. Information on botanical names, Arabic and Islamic names, plant part used and ailment treated were extracted from the publications and were pooled together. The Present work about the Arabic and Islamic plants highlights the medicinal importance of Arabic and Islamic plants for the treatment of fever. There is a broad list of Islamic and Arabic plants used for the treatment of fever as mentioned in the present article. Each plant has been examined for role in the treatment of fever. This review strongly supports the fact that Arabic and Islamic traditional plants have emerged a good source of complementary and alternative medicine in the treatment of fever. These Arabic and Islamic plants are used in different systems of medicine across the world. Traditional Arab-Islamic medical system suggests that these plants are widely used in Arab countries for the treatment of fever without having any side effects. Different parts of different Arabic and Islamic plants are used in different forms for the treatment of fever.

Keywords: Islamic and Arabic plants - Hadith - Ethno-medicinal plants - Fever.

[Cite as: Thoker SA & Patel S (2020) Role of traditional Islamic and Arabic plants in treatment of fever. *Tropical Plant Research* 7(1): 144–148]

INTRODUCTION

Islamic teachings show different methods for the treatment of several diseases through medicinal plants. Since from the time of Hazrat Adam Aliehisalam to the time of Hazrat Mohammad sallaho aliehi wasalam different plants were used for the treatment of several diseases in the Islamic medicine, and this Islamic medicine system is still continued throughout the world (Nasr 1976). All the plants used in the Islamic medicine system are mentioned in the Holy Quran in different surah I-e Al- Rehman, Al-Baqarah and Al-Moominoon and many other surahs (Ahmad *et al.* 2009). Hazrat Mohammad saw used and recommended several medicinal plants for various ailments and food (Wani *et al.* 2011). Since the second century of Hijra, the history of Islamic medicine starts. The famous book “Tib-e-Nabi” was written by Abdul Malik Bin Habib Undlesi in second century. Mohammad Bin Abu Bakar, Ibn Ulsani and Abu Naeem Isphani compiled their books on the same topics in the third century of Hijra. In the fourth century few other important books were written like Alnabvi fee Mannafal Makalat by Abdul Razzaq Altanki. Some of the best books on Islamic Literature that are still available are Kanzulamal Fee Sanan Walakwal. Arabic and Islamic medicinal plants play a diagnostic role as a source of drug for the treatment of many diseases.

Now a day there is growing awareness to encourage production of indigenous plants and their processing of plants used in different cultures and religions (Yari *et al.* 2011). The role of traditional medicine has gained strength across globe from last decades (Ahmad *et al.* 2009). World Health Organization defined traditional medicine as “the total of knowledge, practices and skills based on theories, beliefs and indigenous experiences to different cultures where explicable or not, which are used in the maintenance of health as well as in the prevention, diagnosis, treatment of physical and mental illness (Ahmad *et al.* 2009). Arab-and Islamic medical system is a high spirited, conversational and curative system of traditional medicine practiced in the Arabian countries and is a most trusted system of medicine among whole Muslim community all over the world

(Azaizeh *et al.* 2006). The history of the traditional Arabic-Islamic medicine dates from the seventh to fifteenth century, which was the golden time of Arabo Islamic civilisation (AlBarik *et al.* 2008). Since the Muslim community across the globe have true faith on Arab medicine, therefore the exploration of Arab and Islamic medicinal plants that are used for the treatment of different ailments is need of the present era (Ahmad *et al.* 2009). In the present time people across the globe prefer traditional and indigenous medicine over other systems of medicine (Shefer-Mossensohn 2009). Arabian territory is very rich in vegetation; the presence of several medicinal plants pushes Doctors, Hakims, Pharmacists and professionals to find the medicinal use of Arabic and Islamic plants (Koshak *et al.* 2012). As-Saydanah Fit-Tib written by Al Biruni is the most important book on Arabic and Islamic medicine which is available in the present time. The famous Arabic Botanist Ibn al-Baytar plays a significant role in the exploration of Arabic and Islamic medicine (Azarpour *et al.* 2014). Since the medicinal property is the most important use of plants. The real contribution towards the use of medicinal plants by Muslims starts during the end of Abbasid time (Sajadi *et al.* 2012). Some of the most famous Islamic scholars who worked on medicinal botany are Abu Hanifah Ahmad Ibn Dawad Dinawari, Ibn Jaljul, Ibn Samjun, Ibn Al-Wafid, Ibn-Ghafiqi, Ibn-Idrisi, Al-Qalanisi, Ibn-al Baytar, Ibn-Sirabiyun and Ibn al-Suri (Azaizeh *et al.* 2003).

What is Fever?

In Arabic, fever is called as Hama, when the body temperature of human increases randomly we call a person is suffered from fever. In fever the body temperature rise above 36–37 degree centigrade (98–100 Fahrenheit). There are several symptoms of fever like lack of appetite, shivering, depression etc (Saad & Said 2011). There are several types of fever that are harmful cause different other diseases in human beings. Malarial fever is considered one of the main important fevers in our country.

Importance of plants

Plants play a vital role in the earth's maintenance. Apart from food humans get several other products from plants like timber, firewood, dyes, oils, pesticides and the most important thing which we are getting from plants is medicine (Umadevi *et al.* 2013, Mehra *et al.* 2014, Ichoron *et al.* 2019). It is believed that 74% of drugs are isolated from plants, 18% are from fungi, 5% and 3% from bacteria and other vertebrates respectively (WHO 2003). Plants are used in different systems of medicines like Ayurvedic, Unani, Homeopathy, Siddha and many other systems of medicine all over the world (Sen & Behera 2016, Srivastava & Shukla 2018, Gadhvi & Modi 2019). Several drugs are extracted from plants that are used for the treatment of different diseases. There are several plants across the globe which is used for the treatment of fever by different traditional and indigenous people. Arabic and Islamic traditional medicinal system also uses some plants for the treatment of fever (Saad & Said 2011).

Importance of Arabic and Islamic plants

Globally fever is increasing day by day and every year a high percentage of deaths are caused by this disease across the globe, especially in developing countries. In India fever is considered one of the fatal diseases (Simon *et al.* 1984). The more attention of the Researchers and scientists in the present era is towards the herbal medicine for the treatment of several diseases like a fever. There are several systems of medicines for the treatment of fever besides the herbal system but majority of the systems are causing side effects to the patients. This causing of side effects compels present scientists to work on herbal medicine for the treatment of several diseases. More interest of people globally especially Muslim community towards the Arabic and Islamic medicine is because of several factors *viz.*, religious beliefs, this system is safe and affordable, the drugs of this system contain a rich diversity of biologically active compounds, this system does not harm immune system of the patient (Sajadi *et al.* 2012) several parts of Arabic and Islamic plants like seeds, leaves, roots, branches, fruits shows direct and effective anti-fever effects (Ahmad *et al.* 2009). Traditional Arabic and Islamic medicine prove an effective source of new drug discovery. It is believed that more than 50 % of modern drugs are herbal based (Pan *et al.* 2013). All Arabic and Islamic plants possess a large number of chemo preventive effects within their pharmacological effects.

Searching Facts

For the literature survey, several data bases like PubMed, Science Direct, Research gate, Web of science, Google scholar are used. The related papers were downloading by using the free access portal of Jiwaji University Gwalior. The most used keywords for the literature survey were as,

1. Arabic and Islamic Plants
2. Plants Mentioned in Holy Quran

3. Plants Used by Prophet Mohamad s.a.w
4. Herbs used for the treatment of fever
5. Anti-fever effects of Arabic and Islamic plants
6. Different systems of medicines followed in Arab

RESULTS

On the basis of review literature, a list of Arabic and Islamic medicinal plants was prepared (Table 1).

Table 1. List of Arabic and Islamic plants for the treatment of fever with references.

S.N.	Botanical name	English name	Arabic Name	Family	Part Used	Quran/Hadith	References
1	<i>Allium cepa</i> L.	Onion	Basal	Alliaceae	Bulb, leaves and seeds	AL QURAN surah no 2, Al-Baqarah Ayah no 61	Nasr (1976)
2	<i>Allium sativum</i> L.	Garlic	Soom, Foom	Alliaceae	Bulb and oil	AL QURAN SURAH NO 2 al Baqarah, AYAH NO 61	Ahmad <i>et al.</i> (2009)
3	<i>Cinamoumon camphor</i> L.	Camphor	Caphor	Lauraceae	Leaf and branches	Al Quran Surah no 76, Ad-Dahr, Ayah 5-6	Wani <i>et al.</i> (2011)
4	<i>Cucumis Sativus</i> L.	Cucumber	Qiththa	Cucurbitaceae	fruit, seed and oil seeds	Al Quran Surah no 2 Al Baqarah, Ayah no 61	Yari <i>et al.</i> (2011)
5	<i>Cucurbita pepo</i> L.	Pumpkin	Yakteen, Daba	Cucurbitaceae	Fruit, Seeds, Root, Oil seeds and Leaf	Al Quran Surah 3, AS Saffat, Ayah 145-148	Ahmad <i>et al.</i> (2009)
6	<i>Ficus Carica</i> L.	Fig	Teen	Moraceae	Dried fruit	Al Quran Surah no 95, At-tin, Ayah no 1-8	Azaizeh <i>et al.</i> 2006
7	<i>Hordeum vulgare</i> L.	Barley	Shair	Poaceae	Fruit	Sahi Bukhari 7:71:593	AlBarik <i>et al.</i> (2008)
8	<i>Indigofera tinctoria</i> L.	Indigo	Kutum / Wasma	Febaceae		Sahi Bukhari	Shefer-Mossensohn (2009)
9	<i>Lagenaria sicevaria</i> L.	Squash	Yakteen	Cucurbitaceae	Fruit and leaves	AL-Quran Surah no 37, As-saffat, Ayah no 146	Koshak <i>et al.</i> (2012)
10	<i>Lawsonia inermis</i> L.	Hinna	Kutur	Lythraceae	Leaves, Branches and Flowers	AL-Quran, Surah no 5 al Maidah Ayah no 5	Umadevi <i>et al.</i> (2013)
11	<i>Lepidium sativum</i> L.	Cress Seed	Thafa	Brassicaceae	Leaves, Fruit and Seeds	Al-Hadith, Al-Jozi, Ibn-ul Qayyim	Sajadi <i>et al.</i> (2012)
12	<i>Nigella sativa</i> L.	Black Seed	Habatul-Sudda	Ranunculaceae	Seeds	AL-Hadith , Tirmizi, Ibne Majja	Saad & Said (2011)
13	<i>Ocimum basilicum</i> Bent.	Basil	Rehan	Lamiaceae	Leaves and seeds	AL-Quran Surah no 55, Ar-Rehman Ayah no 10-13	Ahmad <i>et al.</i> (2009)
14	<i>Olea europaea</i> L.	Olive	Zaitun	Oleaceae	Infusion of leaves	All Quran Surah no 6, Al-Anam, Ayah 99, 41; Surah 16, An-Nahl, Ayah 11	Azaizeh <i>et al.</i> 2003
15	<i>Phoenix dactylifera</i> L.	Edible Date	Nahal, Balah, Tammar, Ratab	Arecaeaceae	Roots, Flower and Fruits	AL-Quran Surah no 13, AR-RAAD, Ayah no 4. AL-Quran Surah no 16, An-Nahal Ayah no 11 and 69	Sajadi <i>et al.</i> (2012)
16	<i>Pistacia terebinthus</i> L.	Terebinth	Batm	Anacardiaceae	Resin	Tirmizi	Yari <i>et al.</i> (2011)

17	<i>Punica Granatum</i> L.	Pomegranate	Rumman	Puniaceae	Fruit juice	Al Quran, Surah no 6, Al-Aam, Ayah no 99, 141; Surah no 55 AR-Rehman, Ayah no 68	Ahmad <i>et al.</i> (2009)
18	<i>Salvadora persics</i> L.	Tooth Brush Tree	Khamt	Salvadoraceae	Leaf, Seeds, Branches and Roots	AL Quran Surah no 37, As-Saffat, Ayah no 16	Nasr (1976)
19	<i>Tamarix aphylla</i> L.	Tamarisk	Tarfa	Tamaricaceae	Smoke of plant	AL-Quran surah no 34, AL Saba Ayah no 16	Koshak <i>et al.</i> (2012)
20	<i>Vitis vinifera</i> L.	Grapes	Inab	Vitaceae	Fruits and leaves	AL-Quran Surah no 1 Al Baqarah, Ayah no 266, Surah no 6, AL-Anam, Ayah no 99, Surah no 13 AR-Raad, Ayah no 4	Ahmad <i>et al.</i> (2009)

DISCUSSION

Holy Quran is the best reference book that describes the importance of plants for the treatment of several diseases in various surahs. Prophet Mohammad s.a.w also used and suggested several plants for the treatment of different diseases. Because of the lack of scientific means in the past mankind was unable to study some important data which is written in the verses of Holy Quran and in the present tie these verses of Holy Quran which deals with some natural phenomenon has well explained, therefore Quranic knowledge gives best understanding of use of Arabic and Islamic plants for the treatment of different diseases including this fatal fever (Al-Rawi & Fetters 2012). The above-mentioned plants are mentioned in the Holy Quran, Prophet Mohammad s.a.w uses and recommended these plants for the treatment of fever (Aslam & Ahmad 2016). In some developing countries like India, the benefit of modern medicine hardly reaches to a little number of people (Ahmad *et al.* 2009). In these countries, several tribal people use their traditional systems of medicine for the treatment of diseases (FSTC Research Team 2010). Muslims in these countries have true faith on Arabic and Islamic system of medicine and they are following this system for the treatment of several diseases (Nasr 1976). Parts of the above-mentioned plants like roots, branches, seeds, fruits and oils are directly used for the treatment of fever. Arabic and Islamic system of medicine is free of side effects (Ahmad *et al.* 2009). The above-mentioned plants contain a large number of biologically active components which have their effect against the fever (Yari *et al.* 2011). Arabic and Islamic system of medicine is practiced all over the world especially in Muslim countries. Muslims across the globe blindly follow and use that plant which is mentioned in Holy Quran or Which is used or recommended by Prophet Mohammad s.a.w for the treatment of several ailments (Douglas & Jean 2016). In comparison to other systems of medicines Arabic and Islamic system of medicine is much effective and is practiced by a majority of people all over the world (Sajadi *et al.* 2012).

ACKNOWLEDGEMENTS

The authors are very thankful to Head, School of Studies in Botany Jiwaji University Gwalior for providing free internet for literature survey. Authors are also thankful Senior Scholars of Institute of Ethnobiology Jiwaji University Gwalior for their valuable guidance.

REFERENCES

- Ahmad M, Khan MA & Marwat SK (2009) Useful flora enlisted in Holy Quran and Ahdith. *American-Eurasian Journal of Agricultural and Environmental Sciences* 5(1): 126–140.
- AlBarik FA, Rutter PM & Brown O (2008) A cross sectional survey of herbal remedy taking by united Arab Emirate (UAE) citizens in Abu Dhabi, Pharma. *Drug Safety* 17: 725–732.
- Al-Rawi S & Fetters M. (2012) Traditional Arabic & Islamic medicine: a conceptual model for clinicians and researchers. *Global Journal of Health Science* 4(3): 164.
- Aslam MS & Ahmad MS (2016) *Alhagi maurorum* and *Tamarix Aphyila*. Two medicinal weeds in holy Quran and Ahadith and Their Ethnomedicinal Uses in District Rajhanpur of Pakistan. *Universal Journal of Pharmaceutical Research* 1(1–10): 80–84.

- Azaizeh H, Fulder S, Khalil K & Said O (2003) Ethnobotanical survey of local practitioners of the Middle Eastern region: the status of traditional Arabic medicine. *Fitoterapia* 74: 98–108.
- Azaizeh H, Saad B, Khaleel K & Said O (2006) The state of the art of traditional Arab herbal medicine in the eastern regions of Mediterranean: A review. *Evidence-Based Complementary and Alternative Medicine* 3: 229–225.
- Azarpour E, Moraditochae M, Reza H & Zori BO (2014) Study Medicinal Plants in Holy Quran. *International Journal of Plant, Animal and Environmental Sciences* 4(2): 529–536.
- Douglas W & Jean B (2016) *Discuss the importance of plants on earth*. SCI, Bio., pp. 604.
- FSTC Research Team (2010) *Botany Herbs and Healing in Islamic Science and Medicine*. Foundation for Science Technology and Civilization (FSTC), Manchester, UK.
- Gadhvi KJ & Modi NR (2019) Traditional ethnomedicinal plants used by tribal communities in Godhra forest, Gujarat, India. *Tropical Plant Research* 6(3): 506–513.
- Ichoron N, Tyoer S, James EJ & Igoli JO (2019) A survey of medicinal plants used as traditional medicine in Ukum and Ogbadibo Local Government Areas of Benue state, Nigeria. *Plants and Environment* 1(1): 5–11.
- Koshak A, Alfaleh A, Abdel-Sattar E & Koshak E (2012) Medicinal Plants in the Holy Quran and their Therapeutic Benefits. *Planta Medica* 78: 109.
- Mehra A, Bajpai O & Joshi H (2014) Diversity, utilization and sacred values of Ethno-medicinal plants of Kumaun Himalaya. *Tropical Plant Research* 1(3): 80–86.
- Nasr SH (1976) *Islamic Science-An illustrated study*. Westerham press, Ltd., Westerham, Kent (England), pp. 1.
- Pan S-Y, Zhou S-F, Gao S-H, Yu Z-L, Zhang S-F, Tang M-K, Sun J-N, Ma D-L, Han Y-F, Fong W-F & Ko K-M (2013) New Perspectives on How to Discover Drugs from Herbal Medicines: CAM's Outstanding Contribution to Modern Therapeutics. *Evidence-Based Complementary and Alternative Medicine* 2013: 627375 [DOI: 10.1155/2013/627375]
- Saad B & Said O (2011) *Greco-Arab and Islamic herbal medicine: traditional system, ethics, safety, efficacy, and regulatory issues*. John Wiley & Sons.
- Sajadi MM, Bonabi R, Reza M, Sajadi M & Philip A (2012) Akhawaynī and the First Fever Curve. *Clinical Infectious Diseases* 55(7): 976–980.
- Sen SK & Behera LM (2016) Some ethnomedicinal plants used against high blood pressure in Bargarh district in Western Odisha (India). *Tropical Plant Research* 3(3): 517–521.
- Shefer-Mossensohn M (2009) *Ottoman Medicine: healing and medical institutions 1500-1700*. Albany State University of Newyork press, pp. 22–23.
- Simon JE, Chadwick AE & Cracker LE (1984) *An indexed Bibliography 1971–1980*. The scientific Literature on Selected herbs, Aromatic and medicinal plants of the Temperate zone. Archon Books, Hamdn c.t., pp. 770.
- Srivastava N & Shukla AN (2018) Diversity and uses of medicinal plants in Chandra Prabha Wildlife Sanctuary, Chandauli district, Uttar Pradesh. *Tropical Plant Research* 5(3): 405–418.
- Umadevi M, Kumar KS, Bhowmik D & Duraivel S (2013) Traditionally used anticancer herbs in India. *Journal of Medicinal Plants Studies* 1(3): 56–74.
- Wani BA, Wani FM, A Bodha, RH Mohiddin & FA Hamid (2011) SomeHerbs Mentioned in the Holy Quran and Ahahidath and their medicinal importance in Contemporary Times. *Journal of Pharmacy Research* 4(11): 3888–3891.
- WHO (2003) *fact sheet no 134: traditional medicine*. World Health Organization. Available from: <http://www.who.int/mediacentre/factsheet/2003/fs134/en/> (accessed: 01 Mar. 2019).
- Yari KH, Kazemi E, Yarani R & Tajehmiri A (2011) Islamic Bioethics for Fetus Abortion in Iran. *American Journal of Scientific Research* 18: 118–124.