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## MEDICINAL EFFECT OF *KAMEELA* AND *AMRAZE JILDIYA* (SKIN DISEASES) DESCRIBED IN UNANI SYSTEM OF MEDICINE AND CURRENT RESEARCH-AN OVERVIEW

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### Keywords:

Unani medicine, *Kameela*,  
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**ABSTRACT:** *Kameela* or *Kamala* is a well known Unani drug which is being used as medicament from centuries for the treatment of *Amraze Jildiya* (skin disease) by Unani Physicians and also mentioned their medicinal efficacy in Unani classical text. It is widely scattered perennial shrub or small tree in tropical and subtropical region regions with an altitude below the 1,000 m and is a description to have a broad range of pharmacological activities. There are many chemical constituents documented such as phenols, steroids diterpenoids, triterpenoids, flavonoids, coumarins, isocoumarins, cardenolides and particularly phenols; that is, bergenin, mallotophilipinens, rottlerin, and isorottlerin have been isolated, identified, and reported different biological activities such as antimicrobial, cytotoxicity, antifungal, antiviral, antioxidant, anti-inflammatory. *Roghan Kameela* and *Zimad Jarb* are well established compound drug of Unani system for the treatment of *Jarb* (Scabies) and *Kharish* (itching) which is time tested and safe. The present review reveals that *Mallotus philippinensis* is a precious source of natural medicament and provides persuasive support for its potential use in a modern medicament.

**INTRODUCTION:** *Mallotus philipiensis* L. commonly known as *Kameela*/*Kamala* which is a large woody multipurpose medicinal tree belongs to the family of Euphorbiaceae consisting of herbs, shrubs, and trees. It is up to 10-12 meters in height and is widely distributed throughout tropical India along with the Himalaya from Kashmir eastwards up to 5000 feet. The plants are a rich source of biologically active compounds and are used as a common dye yielding plant various parts of the *Kameela* are used for the healing of skin problem, antifungal tapeworm, eye-disease, bronchitis, diarrhea, urinogenital infection, cancer, diabetes, jaundice, malaria, etc.<sup>1,2</sup>

Fruits of *Mallotus philippinensis* have been reported being used since a long time in Ayurvedic (Indian), Arabic, Unani and Chinese traditional Medicine systems as anti-helminthics, antifungal, antibacterial and immunoregulatory properties, anti-filarial, antiparasitic, antiulcer and as an aphrodisiac<sup>3</sup>.

### Botanical Classification:

Kingdom: Plantae

Order: Malpighiales

Family: Euphorbiaceae

Genus: *Mallotus*

Species: *M. Philippensis*<sup>4</sup>

**Chemical Constituents:** *Kamala* oil has been found to contain about 60% of kamlolenic acid as the only major component with minor proportions of common linoleic, oleic, and saturated acids and

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probably some conjugated diethenoid acid. The saturated components consist mostly of myristic and palmitic acids<sup>6</sup>. Other active constituents are phenols, steroids diterpenoids, triterpenoids,

flavonoids, coumarins, isocoumarins, cardenolides and particularly phenols; that is, bergenin, mallotophilippinens, rottlerin, and isorottlerin<sup>7,8</sup>.



FIG. 1: *MALLOTUS PHILIPPIENSIS* L.<sup>5</sup>.

**Pharmacological Action of Kameela:** Antifungal, antibacterial, antiviral, antidiabetic, anticancer, antileukemic activity, antioxidant, immunomodulator, hepatoprotective<sup>9-14</sup>.

**Uses of Kameela:** *Jarb* (Scabies), *Daad* (Ring Worm), *Qooba* (Pityriasis) *Naar Farsi* (Eczema), *Shara* (Urticaria), *Taqassure Jild* (Psoriasis), *Bars* (Vitiligo), *Sartan* (Cancer), *Suzaak* (Gonorrhoea), *Aateshak* (Syphilis) etc.<sup>15-16</sup>

**Compound Unani Formulations:** There are some compound formulations which active constituents is *Kameela* such as; *Roghan Kameela*, *Zimad Jarb*<sup>17-20</sup>.

#### Scientific Report:

**Wound Healing Activity:** Gangwar M *et al.*, reported that ethanolic extract of *Kameela* at the dose of 200 mg/kg body wt. Exhibit wound healing activity in rat models when administered orally up to 10 days and Histopathological evaluation revealed more density of collagen formation with minimal inflammatory cells in deeper tissues when compared to control group<sup>21</sup>.

**Antimicrobial Activity:** Sheikh *et al.*, reported that Methanolic extract of Hairs and Glands covering fruits of *Mallotus philippinensis* (Kamala powder) showed Antimicrobial activity in a different culture (Gram-positive and Gram-negative bacteria and fungi)<sup>22</sup>. Velanganni J *et al.*, also documented that, ethanol extract showed antimicrobial activity against the fungi *A. flavus* and *C. albicans*<sup>9</sup>.

**Hepatoprotective Activity:** Ramakrishna S *et al.*, reported that ethanolic extract of *Kameela* leaves exhibit hepatoprotective activity against CCl<sub>4</sub> induced hepatotoxicity in rats in compare to Silymarin which was standard control, which may be attributed to its antioxidant property<sup>23</sup>.

**Anti-Leukemic Activity:** Khan M *et al.*, reported that e hexane fraction of *M. philippensis* root extract possesses anti-leukemic activity in HL-60 cells and also confirmed that polyphenols were the main compounds of the hexane extract that inhibited proliferation and induced apoptosis<sup>12</sup>.

**CONCLUSION:** There is a large number of western medicine available for the treatment of skin diseases but it has some drawback as high cost-effective and their side effects, and the chance of recurrence is high when the drug is stopped because most of the cosmetic drugs are steroid based. The medicament which derived from natural sources has lesser side effects and easily available our natives. *Kameela* contain various active chemical constituents *viz*; flavonoids, phenolic, glycosides compound, and tannins which have been reported as antimicrobial activity against various skin disorders. Further elaborative research is needed hidden benefits of *Kameela* and other active constituents. This review will be helpful as new vistas for the research scholars for various skin diseases.

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## REFERENCES:

- Kritikar KR and Basu BD: Indian Medicinal Plants. International Book Distributors Dehradun India. YNM; 3: 2266-2270.
- Sharma J and Varma R: A Review on Endangered plant of *Mallotus philippensis* (Lam.) Pharmacologyonline 2011; 3: 1256-1265.
- Said H: Hamdard Pharmacopoeia of Eastern Medicine. Times Press, Pakistan 1970; 400.
- [https://en.wikipedia.org/wiki/Mallotus\\_philippensis](https://en.wikipedia.org/wiki/Mallotus_philippensis). Cited on 14-07-2015
- <https://www.google.co.in/search?q=taxonomy+of+Mallotus+Philippensis&biw=1280&bih=923&tbm=isch&tbid=univ&sa=X&ved.cited> on 14-07-2015.
- Gupta SC, Gupta SS and Agarwal JS: The component acids of Kamala oil (*Mallotus Philippinensis*, Muell. Arg.). Journal of the American Oil Chemists Society 1954; 31(7): 287-289.
- Nadkarni AK: Indian Materia Medica. Popular Parkashan. YNM 1: 760-763.
- Gangawar M and Goel RR, Nath G: *Mallotus philippinensis* Muell. Arg (Euphorbiaceae): Ethnopharmacology and Phytochemistry Review. BioMed Research International 2014; <http://dx.doi.org/10.1155/2014/213973>.
- Velanganni J, Kadamban D and Tangavelou AC: Phytochemical screening and antimicrobial activity of the stem of *Mallotus Philippensis* (Lam.) Muell. Arg. Var. *Philippensis* (Euphorbiaceae). Int J Pharm Pharm Sci 2011; 3(2): 160-163.
- Adhav M: Phytochemical screening and antimicrobial activity of *Mallotus philippensis* Muell. Arg Journal of Pharmacognosy and Phytochemistry 2015; 3(5): 188-191.
- Khare CP: Indian Medicinal Plants. An Illustrated Dictionary. Published by Springer 2007; 393-394.
- Khan M, Qureshi RA, Hussain M, Mehmood K and Khan R: Hexane soluble extract of *Mallotus philippensis* (Lam.) Muell. Arg. root possesses anti-leukemic activity. Chemistry Central Journal. 2013, 7: 157.
- Anonymous. The Wealth of India. CSIR. New Delhi 2009; 6(L-M): 229-232.
- Panthi MP and Singh AG: Ethnobotany of Arghakhanchi District, Nepal: plants used in dermatological and cosmetic disorders. Int J Appl Sci Biotechnol 2013; 1(2): 27-32.
- Hakim MAH: Bustanul Mufradat Jadeed. Idara Kitab Ul Shifa New Delhi 2002: 453-454.
- Ghani N: Khazainul Advia. Idara Kitab Ul Shifa. New Delhi 2010: 1067-1068.
- Anonymous: Qarabadine Majeedi. Hamdard Wakf Lab 1986: 231.
- Anonymous. Qarabadine Azam. Aejaaz Publishing House New Delhi 1996: 453.
- Anonymous. Qarabadine Jadeed. Central Council for Research in Unani Medicine. New Delhi. YNM: 137-138.
- Kabeeruddin HM: Biyaze Kabir. Hikmat Book Depo Hyderabad India. YNM 1: 90.
- Gangwar M, Gautam MK, Ghildiyal S, Nath G and Goel RK: *Mallotus philippinensis* Muell. Arg fruit glandular hairs extract promotes wound healing on different wound model in rats. BMC Comple and Alter Med 2015; 15: 123. DOI 10.1186/s12906-015-0647-y.
- Shaikh D, Shaikh J, Reman AB and Shafi S: Antimicrobial and toxicological studies on *Mallotus philippensis*, (Kamala Powder). Int J Pharm 2012; 2(3): 613-618.
- Ramakrishna S, Geetha K M, Gopal B, Kumar PR, Madav PC and Umachandar L: Effect of *Mallotus Philippensis* Muell.-Arg leaves against hepatotoxicity of carbon tetrachloride in rats. International Journal of Pharma Sciences and Research 2011; 2(2): 74-83.

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