

## Henna *Lawsonia inermis* Family Lythraceae



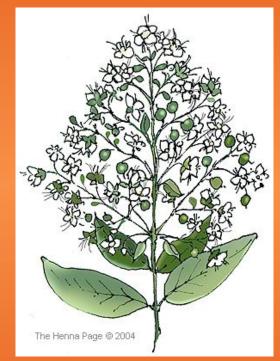


# Ancient Medicine, Dye & Generally Useful Plant



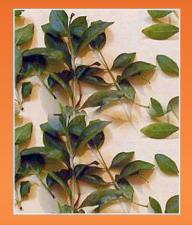
## The Plant

- Shrub native to India and North Africa
- Tolerant to drought and poor soil
- Simple opposite leaves
- Small white-pinkish flowers
- Gray-brown bark
- Branches that end in spines
- Spherical pea sized fruit
- Pyramid shaped smooth seeds



#### **Compounds in Henna**

- Lawsone
  - Main active compound
  - Properties similar to tannins
  - Responsible for red-orange



- dye and many medicinal properties
- High concentration in leaves
- Terpenoids, Alkaloids, Phenols, Glycosides, Saponins, and Gallic Acid are also present, but in smaller concentrations



#### Henna as a Dye

- Dye from lawsone in dried leaves
- Temporarily dyes the skin, nails, and hair; commonly called Mehndi
- Colors textiles
- Used as a tanning agent for leather







Henna Fragrance



- Flowers are very fragrant
- Used for perfume and deodorant
- Essential oil is mainly ionones
- White flowers tend to have more essential oil



## Henna in Traditional Medicine

- Leaves powdered, bruised, or brewed
- Dried leaves tend to be more potent
- Used as: anti-inflammatory, antimicrobial, antifungal, astringent, throat gargle, pain killer
- Useful for: typhoid, hemorrhage, leprosy & other skin disease, gonorrhea, bruises,

ulcers, burns





## Henna in Traditional Medicine

- Bark: jaundice, liver enlargement, spleen enlargement, burns, leprosy and other skin disease
- Roots: abortifacient
- Flower: leprosy, heart problems
- Seed: anti-diarrheal, fever reducer





## Henna in Modern Medicine

Proven to be: antimicrobial, antifungal, anti-inflammatory, astringent, antioxidant, hepatoprotective, abortifacient

Not yet approved for mainstream use

There are still safety issues to be researched

Current research on it's ability to treat skin problems

More research must be done to isolate the active compounds for various ailments and to test all the traditional uses



#### Why does henna matter?

- Important in many religions
- Useful cosmetic
- Good natural dye
- Offers a natural medicine to many common ailments
- \*\*\*Potential to safely fight antibiotic resistant bacteria\*\*\*\*

