



## A Review on Pharmacological Versatility of Nagkesar

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### ABSTRACT-

Many plants that are traditionally used as medicines to treat a variety of ailments have not been properly studied. The creation of novel medications with a variety of therapeutic indications relies heavily on the usage of herbal plants. One such herbal plant with various possible therapeutic uses is *Mesua ferrea* Linn., often known as "Nagchampa" or "Nagkesar." Rheumatism, asthma, inflammation, fever, dyspepsia, renal disorders, diarrhea, bleeding piles, and bacterial and fungal infections are among the conditions it is used to treat. This plant has a variety of bioactive chemical components that are simple to isolate, including as coumarins, xanthenes, pyranoxanthenes, flavonoids, terpenoids, and steroids. It can serve as a prelude to many diseases. Numerous pharmacological effects of these bioactive components, including anticancer, antibacterial, antifungal, anti-inflammatory, anti-arthritis, analgesic, diuretic, anti-hemorrhoid, anti-ulcer. There are claims that almost every portion of the plant has healing powers. However, more research is still required to fully understand the pharmacological properties of the *Mesua ferrea* Linn. plant in order to benefit the treatment of numerous ailments. The general description, phytochemical profiling, historical use, and shown pharmacological properties of the *Mesua ferrea* Linn. plant are highlighted in this paper.

**KEY WORDS-** Nagchampa, Nagkesar

### INTRODUCTION-

Nagkesar is a small to medium-sized evergreen tree that is also highly prized for its ornamental value. It also has lovely floral indigenous herbal vegetation. The Nagkesar tree can reach a height of 13 m and has a wide trunk that can expand to 90 cm in diameter. The tree is well known around the world for producing highly tough, high-quality wood. The underside of the short, oblong leaves seems pale, and they are a rich, dark green color. The younger leaves have pinkish-yellow tones. After three to five years of planting, the pearl white and yellow nagkesar flowers begin to blossom. The lovely scent of the white blooms is overwhelming. Extracts from its yellow stamens are used to create astringents and fragrances.

Most Asian nations have Nagkesar trees, which are ornamental evergreen trees. For its therapeutic properties, several sections of Nagkesar are utilized either by themselves or in conjunction with other herbs.

Nagkesar helps to relieve cold and cough symptoms by clearing the lungs of extra mucus. Additionally, this provides relief from some asthmatic symptoms. Because Nagkesar powder has an antipyretic effect, taking it once or twice a day with honey or lukewarm water helps lessen fever by bringing down body temperature. Due to its astringent quality, it also helps treat bleeding piles, diarrhea, and stomach irritability.

Ayurveda claims that Nagkesar's Laghu (easy to digest) quality makes it beneficial for enhancing digestion. Because Nagkesar oil has potent antibacterial and wound-healing properties, applying it topically may help manage skin issues and prevent skin infections. Due to its analgesic and anti-inflammatory qualities, topical administration of it also aids in reducing pain and inflammation.

### SYNONYMS OF NAGKESAR-

*Mesua ferrea*, Cobras Saffron, Ceylon Ironwood, Indian Rose Chestnut, *Mesua*, Nagkesara, Pila Nagkesara, Kesara, Nagapuspa, Naga, Hema, Gajakesara, Negeshvar, Nahar, Nageshvara, Nagesar, Sachunagkeshara, Nagchampa, Pilunagkesar, Tamranagkesar, Nagsampige, Nagakesari, Nangaa, Nauga, Peri, Veluthapala, Nagppu, Nagappovu, Nageswar, Naugu, Naugaliral, Nagachampakam, Sirunagappu, Nagachampakamu.

### PHYTO-CONSTITUENTS-

Numerous biological elements, including fatty acids, oleoresin, and essential oils, are abundant in Nagakesar. Its main chemical component, mammeisin, is found in the seeds, and the stamens are where two novel flavanones, mesuaferone-A and mesuaferol-B, are found. Along with sitosterol,

leucoanthocyanidin, ferulic A and B, coumarins, xanthenes, pyranoxanthenes, flavonoids, terpenoids, and steroids, it also includes mesuaxanthofle A and B.

### **AYURVEDIC CONSTITUENTS-**

The Nagkesar plant exhibits significant medicinal significance and is used to treat chronic health disorders as a result of its potent ayurvedic effects. The rasa of this herb is Kashaya (astringent), Katu (pungent), and Tikta (bitter), while Laghu (light) is determined to be its guna or pharmacological effect. It is regarded as having a Virya (very hot) potency.

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### **MEDICAL VALUES OF THE ASSOCIATED PARTS-**

**Flowers and stamens** have astringent, antibacterial, and antifungal characteristics that aid in the treatment of blood and skin conditions. Using floral extracts to treat bleeding piles is quite successful.

**Seed oil:** To treat pain and inflammation, use the essential oil extracted from the resin that Nagkesar bark and seeds exude. Nagkesar kernels are ground into a paste and administered topically to treat eczema and other skin problems.

**Roots:** This plant's roots are well renowned for being a highly powerful antidote to scorpion venom and snakebite venom. For the treatment of bronchitis and gastritis, or inflammation of the stomach, root extracts are also included in herbal tonics.

**Stem Bark:** Nagkesar's stem bark has a laxative and stomachic effect that aids in the treatment of piles, abdominal pain, difficulties with urine and vaginal discharge, problems with low appetite, and burning stomach sensations.

**Leaves:** Headaches, sore eyes, and burning foot sensations can all be treated using the carminative and pain-relieving qualities of the leaves. To treat the common cold and cough, one applies a paste made from Nagkesar leaves to the head and chest.

#### **Nagkesar's Ayurvedic Indications**

Since the beginning of time, Nagkesar has been one of the most well-known medicinal herbs. It is frequently cited in many writings and scriptures, demonstrating its excellent properties for a variety of purposes, including:

Kusthahara: Treats conditions of the skin

Pachanahara -Digestive aid provided

Amahara: Alleviates heartburn

Javarhara: Beneficial for fever

Trutahara: Quench very intense thirst

Dahahara: Alleviates scorching feelings

Sheersharujhahara- Useful for headaches is

Chardihara: Alleviates nausea

Mehahara: Treats disorders of the urinary tract

Hikkanigrahana - Controls hiccups.

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### **THE HEALTH ADVANTAGES-**

#### ➤ **Treats Leukorrhoea-**

Leucorrhoea is the discharge of a white, yellow, or green color from the genital area. Although it is accepted as typical in adults and teens, it can occasionally result from infections with bacteria, yeast, or other microorganisms. Nagakesar has been shown to be effective in treating this uneasy condition that occasionally has the potential to be unpleasant and itchy and in enhancing Agni (digestive fire).

#### ➤ **Relief from Joint Pain**

As we age, joint pain becomes a prevalent issue that can cause osteoarthritis and weak bones. Due to an imbalance in the Vata dosha and the accumulation of Ama (toxins) in the joints, arthritis develops. Joint pain is reduced by Nagkesar powder's anti-arthritis properties. Applying essential oils made from Nagkesar seed extracts topically helps provide immediate relief for all problems associated with arthritis.

By releasing tense muscles, nagkesar reduces headaches brought on by stress. It also aids in the treatment of several types of painful headaches, including migraines.

➤ **Treats Asthma-**

Nagkesar is additionally used to ease asthmatic symptoms. This herb's fiery potency has the ability to clear mucus and treat breathing problems, which helps to lessen the symptoms of asthma.

➤ **Cures recurring piles**

Blood vessels that are enlarged might develop around the anus and cause bleeding piles or hemorrhoids. In addition to causing painful defecation, this also causes blood stools. Pitta dosha becomes out of equilibrium as a result. Nagkesar reduces pile lumps, reduces inflammation, eases pain, and regulates anal bleeding to calm the pitta dosha and bring the body's heat into equilibrium.

➤ **Treats Skin Diseases**

Nagkesar is used to stop the signs of skin conditions like psoriasis and hives. Because of its anti-inflammatory properties, nagkesar oil has a curative quality and is very helpful in treating skin infections, scabies, and wounds in addition to reducing inflammation. Because they have antibacterial and disinfectant qualities that lessen skin eruption, Nagkesar flower extracts are used as an astringent. To acquire luminous skin and to remove dark spots from the face, nagkesar combined with sandalwood can be mixed into a paste and applied to the skin.

➤ **Relief Excessive Bleeding-**

Excessive bleeding during menstruation is a very common problem that women face. Menstrual bleeding on the higher side is not generally a cause of concern, but excessive bleeding causes weakness, and discomfort and leads to further problems in the later stages. This problem is also known as menorrhagia. Nagkesar consists of hemostatic properties that help to cure excessive bleeding problems and provide long-term relief from many forms of menstrual diseases.

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## **IMPACT ON THE DOSHAS-**

All three doshas—Vata, Pitta, and Kapha—are calmed by Nagkesar. It tastes bitter and astringent and has a burning potency. Along with Laghu or light Guna and the ushna virya, which is its heated potency, it is also blessed with the bitter and pungent tastes of Katu and Tikta rasas. The powerful calming effects of the body's Vata, Pitta, and Kapha (earth and water) doshas as well as the doshas of fire and air are a boon for treating diseases caused by these disorders.

## **DOSAGE-**

In order to determine the proper dosage of this herb for a variety of illnesses, it is absolutely essential to speak with an ayurvedic physician or practitioner. However, the typical adult dosage of Nagkesar is as follows:

Take 1/2 to 1 teaspoon of nagkesar powder once or twice per day.

Apply 5 to 10 drops of nagkesar oil once daily.

Powder Nagkesar Application: 1 teaspoon of powder can be used in place of either rose or regular water.

## **PRECAUTIONS-**

Nagkesar must be taken under the direction of a doctor in some circumstances, such as when pregnant women shouldn't take it because of its potency. Despite the herb's safety for breastfeeding mothers, it is imperative to speak with a doctor before using Nagkesar.

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## **CONCLUSION-**

Given its wide range of therapeutic applications, nagkesar has been revered as one of the most important herbs in Ayurvedic science since the beginning of time. It is a rich source of many flavonoids with powerful analgesic, hemostatic, antibacterial, anti-fungal, antimalarial, anti-arthritic, antioxidant, anti-inflammatory, and antivenom properties that boost over health and wellbeing. Additional benefits include the treatment of fever, reduction of joint pain, protection of the heart from cardiovascular disease, enhancement of digestion, and enhancement of skin health.

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