



## Unlocking Glory lily's Medicinal Secrets

(Aishika Singh, Jasraj Nayak, \*Leena Preeti Lakra, Yashwant Kumar Patel, Nikki Agrawal and Meesala Sudhakar)

Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur, Chhattisgarh

\*Corresponding Author's email: [leenapreeti01@gmail.com](mailto:leenapreeti01@gmail.com)

Glory lily, also known as *Gloriosa superba*, is a type of flowering plant renowned for its decorative and intricate flowers. It is a tropical perennial vine belonging to the Colchicum family. This plant showcases unique and showy flowers with pointed petals and wavy edges, which can exhibit vibrant shades ranging from red and orange to yellow. The beauty of this flower is widely recognized, and it is often cultivated for ornamental purposes.

Glory lilies are climbing a plant that grows up to 6.7 feet (2 m) tall and employ tendrils for support, making them an intriguing subject for the study of plant morphology, ecology, and horticulture.

The plant is commonly referred to by various names including flame lily, fire lily, *Gloriosa lily*, glory lily, superb lily, climbing lily, and creeping lily. It is also known as cat's claw, tiger's claw, and agnishikha and many more names.

### Botanical Classification (Taxonomy) of Glory lily:-

Kingdom	Plantae
Division	Tracheophyta
Class	Magnoliopsida
Order	Liliales
Family	Colchicaceae
Genus	<i>Gloriosa</i> L.
Species	<i>Gloriosa Superba</i> L.

### Medicinal Wonders of Glory Lily

Glory lily is a common Ayurveda herb used for hundreds of years to treat muscle pain, joint inflammation and pain disorders due to its muscle relaxant, anti-inflammatory and analgesic properties. The first description of its use in history appears in Charaka Samhita. In Ayurveda, it is also used to treat ear diseases and skin diseases.

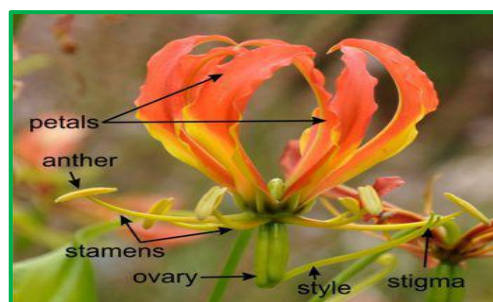
**Thiocolchicoside** used in modern medicine, is a semi-synthetic derivative of **Colchicoside**, an alkaloid and active substance present in Glory lily. These are Glycine receptor antagonists and GABAA receptor antagonists. **Colchicine** is also obtained from this plant, which is used in modern medicine for arthritis.

About 0.15 to 0.3% Colchicine content is present in tubers and 0.7 to 0.9% Colchicine content is present in seeds. Colchicoside is extracted from the seeds of Glory lily. The medicinal parts of Glory lily are roots, tubers, leaves, flowers and seeds and the active constituents known as phytochemicals present in these parts are illustrated below :-

MEDICINAL PARTS	DERIVED PHYTOCHEMICALS
Roots	Colchicine

Tubers & Seeds	Colchicine, Isoperlolyrene, Tropolane, Alkaloids, Sitosterol, Glycoside & Colchicoside
Flowers	Luteolin, Glucoside, N-Formyl-De-Me-Colchicine, 2-De-Me-Colchicine

Medicinal properties of Glory lily includes Anti-inflammatory, Anti-arthritis, Anti-gout, Analgesic, Muscle relaxant, Antispasmodic, Antihelmenthic, Antidote of snake bites, Antidote of scorpion stings, Anti-periodic, Abortifacient, Low backache, Jaundice, Vulvodynia (pain in lower part of the female reproductive tract), Dysmenorrhoea, Intestinal worms, Abscess (external) or chronic skin ulcers, Acne (pimples) and skin eruption (sap with coconut oil), Human Ear Parasites and Alopecia aerate etc.



Glory lily

### Medicinal Uses of *Gloriosa Superba* Aare as Follows:-

- 1. Anti-inflammatory property** - The methanol extracts of Glory lily's root tubers show effective Anti-inflammatory action in percent inhibition of cyclooxygenase assay and lipoxygenase assay.
  - 2. Anti-arthritic activity** - Due to the action of Colchicine on various biochemical reactions on inflammatory mediators, *G. superba* shows anti-arthritic properties.
  - 3. Analgesic action** - Analgesic effect of *G. superba* has been shown by hydro alcoholic extract of the plant on acetic acid-induced writhing in mice, the number of writhing reduces with an increase in dose.
  - 4. Anti-Gout property** - Researches have shown that the tuber of *Gloriosa superba* is a rich source of Colchicine which has shown anti-gout, anti-inflammatory, and anti-tumor activity. Colchicine & Gloriosine are two commonly used phytochemicals for treatment of gout & rheumatism.
  - 5. Muscle Relaxant ability**- *Gloriosa Superba* (Kalihari) has antispasmodic and muscle relaxant properties.
  - 6. Menstruation ease property** - It also acts as emmenagogue, so it promotes easy flow of menstrual blood and gives relief from abdominal cramps and lower abdominal pain during periods.
  - 7. Dysmenorrhoea** - To enhance its effectiveness, extracts of Kalihari / Glory lily is used with coral calcium in Ayurveda. The dosage is used in dysmenorrhoea is 125 mg four times a day with PravalPisthi and honey.
  - 8. Alopecia aerates** -Glory lily's root is used to treat alopecia. It also helps to get rid of fungal infection and stimulates the hair growth.
  - 9. External Abscess** - The Kalahari's extract is essential in external abscess. The drainage of abscess before its application is required for maximum benefits.
  - 10. Vulvodynia** - The oil made with Kalahari's extract is applied within the genital internal walls to get relief from pain of the lower part of the female reproductive tract.
- Glory lily has a wide variety of uses, especially within traditional medicine as practised in tropical Africa and Asia (including Ayurveda medicine in India).