



# Spider Lily



## **Synonym:**

Gujarati: નાગદમની (Nagdamani)

Hindi: नागदौन (Nagdaun)

English: Spider Lily

**Botanical name:** *Crinum asiaticum*

**Family:** Amaryllidaceae

## **Chemical Constituent:**

- Alkaloids:
  - *Lycorine, Crinamine, Crinamidine* – known for cytotoxic and antiviral properties
- Flavonoids:
  - *Quercetin, Kaempferol, Rutin* – antioxidant and anti-inflammatory
- Saponins:
  - Present in bulbs and leaves – contribute to antimicrobial and expectorant effects
- Phenolic Compounds:

- *Gallic acid, Caffeic acid, Ferulic acid* – antioxidant and hepatoprotective
- Triterpenoids and Sterols:
  - *$\beta$ -sitosterol, Stigmasterol* – anti-inflammatory and wound healing
- Others:
- Carbohydrates, proteins, and essential oils with therapeutic potential

## **Therapeutic Effect:**

- Anti-inflammatory
  - Reduces swelling and cytokine activity
  - Used in joint pain and respiratory inflammation
- Antimicrobial
  - Effective against *Staphylococcus aureus*, *E. coli*, and *Candida albicans*
  - Used in skin infections and oral care
- Wound Healing
  - Promotes fibroblast activity and tissue regeneration
  - Applied topically for ulcers and cuts

- Emetic and Detoxifying
  - Traditionally used to induce vomiting in poisoning cases
  - Helps in detoxification
- Anticancer (experimental)
  - Lycorine shows cytotoxic activity against cancer cell lines
- Antioxidant
  - Protects cells from oxidative damage
  - Supports liver and cardiovascular health
- Antiviral (potential)
- Lycorine and crinamidine show activity against viral replication

## **Marketed preparation:**

- Ayurvedic Formulations
  - Used in *Nagadamani-based* remedies for fever, joint pain, and skin diseases
  - Often combined with turmeric or neem
- Topical Creams and Ointments

- For wound healing, fungal infections, and inflammation
- Made from bulb or leaf extracts
- Traditional Remedies
  - Decoctions and poultices used in folk medicine for snake bites, ulcers, and leucorrhea
- Cosmetic Products
  - Incorporated into herbal soaps and skin creams for antimicrobial and soothing effects.

**Key Constituents:** Alkaloids (lycorine, crinine), saponins, tannins

**Uses:** Wounds, inflammation, ear problems, snake bite, joint pain