



SIGMA[®]
UNIVERSITY

Spider Lily



Synonym:

Gujarati: નાગડમણી (Nagdamani)

Hindi: નાગદૌન (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:
 - *β-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