



**SIGMA**<sup>®</sup>  
**UNIVERSITY**

# Dudhi





## Synonym

- Gujarati: દુધી (Dudhi), દૂધિયું (Dudhiyu).
- Hindi: लौकी (Lauki), घिया (Ghiya).
- English: Bottle gourd.

## Botanical name

- *Lagenaria siceraria*

## Family

- Cucurbitaceae

# Chemical Constituents

- Contains sterols (fucosterol, campesterol), triterpenoids (cucurbitacins B, D, G, H), flavonoid glycosides (apigenin and luteolin derivatives), saponins, water-soluble polysaccharides, pectin, and soluble dietary fibers.
- Rich in amino acids (leucine, phenylalanine, valine, tyrosine, alanine, threonine, glutamic acid, serine, aspartic acid, cystine, cysteine, arginine, proline), vitamins (B-complex, C,  $\beta$ -carotene, choline), minerals (iron, potassium, magnesium, copper), and phenolic compounds.
- Seeds contain sterols, saponins, and mineral elements; fruit has glucose, fructose, ascorbic acid, and small amounts of mono- and dicaffeoylquinic acid derivatives.

# Therapeutic Uses

- Traditionally used for its cardioprotective, diuretic, general tonic, antihyperlipidemic, antihyperglycemic, anti-ulcer, anti-inflammatory, analgesic, immunomodulatory, anthelmintic, and antimicrobial properties.
- Used for treating ulcers, fever, pain, jaundice, bronchial disorders, cough, asthma, insanity,

rheumatism, colitis, and various skin and metabolic disorders.

- Cooling, pectoral (for chest congestion), demulcent, and used in the management of hypertension, obesity, and as an ingredient in cardiac and digestive tonics.
- Research supports its hepatoprotective, antioxidant, hypolipidemic, antidiabetic, anti-inflammatory, and cytotoxic activities.

## **Marketed Preparations**

- Bottle gourd is available as fresh fruit, juice, powder (churna), syrups, capsules, and tablets in the herbal market.
- Commercial products include bottle gourd oil (from seeds), dietary supplements, and proprietary ayurvedic medicines for diabetes, heart health, and digestion.
- Used in various health drinks, instant kheer mixes, nutraceutical powders, and as an ingredient in skincare and wellness formulations.