

PART- I

VOLUME – I



GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF AYUSH

[Contents](#) | [Monographs](#) | [Abbreviations](#) | [Appendices](#)

[Legal Notices](#) | [General Notices](#)

Note: This e-Book contains Computer Database generated Monographs which are reproduced from official publication. The order of contents under the sections of *Synonyms, Rasa, Guna, Virya, Vipaka, Karma, Formulations, Therapeutic uses* may be shuffled, but the contents are same from the original source. However, in case of doubt, the user is advised to refer the official book.

70. Tamalaki (Rt. St.& Lf.)

TĀMALAKĪ

Tāmalakī consists of root, stem and leaf of *Phyllanthus fraternus* Webst. Syn. *Phyllanthus niruri* Hook. f. non Linn. (Fam. Euphorbiaceae), an annual herb, 20-60 cm high, found in Central and Southern India extending to Ceylon.

SYNONYMS

Sanskrit	:	Mahidhātrikā, Bhūmyāmalakī, Bahuphalā
Assamese	:	Bhuin Amla
Bengali	:	Bhumamla, Bhumi amalaki
English	:	--
Gujrati	:	Bhoi Amali, Bhony amari, Bhonyamali
Hindi	:	Bhui Amala
Kannada	:	Nelanelli
Kashmiri	:	Kath
Malayalam	:	Kizanelli, Keezhanelli, Ajjhada
Marathi	:	Bhuiawali
Oriya	:	Bhuin Amla
Punjabi	:	Lodhar
Tamil	:	Kizhukai nelli, Kizanelli
Telugu	:	Nela usirika
Urdu	:	--

DESCRIPTION

a) Macroscopic

Root-small, 2.5-11 .0 cm long. nearly straight, gradually tapering, with a number of fibrous secondary and tertiary roots, external surface light brown, fracture, short.

Stem-Slender, gabrous, light brown, cylindrical, 20-75 cm long, branching profuse towards upper region bearing 5-10 pairs of leaves, internode, 1-3.5 cm long, odour, indistinct, taste, slightly bitter.

Leaf-compound and leaf-let arranged in two rows with a rachis, alternate, opposite and decussate almost sessile, stipulate, oblong, entire, upto 1.5 cm long and 0.5 cm wide, greenish-brown in colour, odour, indistinct, taste, slightly bitter

b) Microscopic

Root-transverse section shows, 4-6 layers of cork consisting of thin-walled, rectangular, tangentially elongated and radially arranged cells, filled With reddish-brown content, secondary cortex consists of 8-10 layers of thin-walled, tangentially elongated

parenchymatous cells, secondary phloem narrow consisting of sieve elements, phloem parenchyma and traversed by narrow phloem rays, secondary xylem represented by a broad zone of tissues, composed of vessels, tracheids, fibres and parenchyma, all elements being thick-walled and lignified having simple pits, xylem rays uniseriate.

Stem-transverse section shows, a single layered epidermis composed of thick-walled, flattened, tangentially elongated cells, older stem shows 4-5 layers of cork, composed of thin-walled, tabular, tangentially elongated and radially arranged cells, filled With reddish-brown content, cortex composed of 4-6 layers of oval, tangentially elongated, thin-walled, parenchymatous cells, some cortical cells filled with yellowish-brown content, endodermis quite distinct, pericycle represented by a discontinuous ring, composed of several tangentially elongated strands of lignified fibres with thick walls and narrow lumen, secondary phloem narrow, composed of sieve elements, dispersed in mass of phloem parenchyma, secondary xylem composed of vessels, fibres, parenchyma and traversed by numerous uniseriate rays, vessels mostly simple pitted, a few show spiral thickenings, fibres narrow elongated, with narrow or sometimes blunt ends with simple pits, centre, occupied by a pith composed of thin-walled, circular to oval parenchymatous cells, occasionally cluster crystals of calcium oxalate present in parenchymatous cells of ground tissue.

Leaf-transverse section of leaf shows, a biconvex outline, epidermis on either side, single layered covered externally by a thick cuticle, a palisade layer present beneath upper epidermis, intercepted by a few parenchymatous cells in the middle, meristele composed of small strands of xylem towards upper surface and phloem towards lower surface, rest of tissue of leaf composed of thin-walled, parenchymatous cells some having cluster crystals of calcium oxalate, lamina shows a dorsiventral structure, mesophyll differentiated into palisade and spongy parenchyma, epidermis on either side composed of thin-walled, tangentially elongated cells, covered externally by a thick cuticle, anisocytic type stomata present on both epidermises, palisade single layered, mesophyll composed of 3-5 layers of loosely arranged cells having a number of veins traversed in this region, a few cluster crystals of calcium oxalate present in spongy parenchyma.

Powder-Powder of the drug, brown coloured, under microscope shows, fragments of cork cells, vessels and fibres.

IDENTITY, PURITY AND STRENGTH

Foreign matter	Not more than	2	per cent, Appendix	2.2.2.
Total Ash	Not more than	16	per cent, Appendix	2.2.3.
Acid-insoluble ash	Not more than	7	per cent, Appendix	2.2.4.
Alcohol-soluble extractive	Not less than	3	per cent, Appendix	2.2.6.
Water-soluble extractive	Not less than	13	per cent, Appendix	2.2.7.

CONSTITUENTS - Phyllanthin.

PROPERTIES AND ACTION

Rasa	:	Madhura, Tikta, Kaṣāya
Guna	:	Laghu, Rūkṣa
Virya	:	Śīta
Vipaka	:	Madhura
Karma	:	Mūtrala, Rocana, Dāhanāśanī, Pittaśāmaka

IMPORTANT FORMULATIONS - Cyavanaprāśa, Citraka Harītaki, Madhuyāstyddi Taila, Pippalyddi Ghṛta, Satāvarīguda

THERAPEUTIC USES - Amlapitta, Kāsa, Kṣaya, Kuṣṭha, Pāṇḍu, Prameha, Trṣā, Kṣata, Mūtraroga

DOSE - 10-20 ml of the drug in juice form.
3-6 of the drug in powder form.
