THE AYURVEDIC PHARMACOPOEIA OF INDIA

PART- I

VOLUME - V



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

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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.

51. Meshashringi (Lf)

MESAŚRNGĪ (Leaf)

Meṣaśṛng ī consists of dried leaf of *Gymnema sylvestre* R.Br. (Fam. Asclepiadaceae), a large woody, much branched, climber, with pubescent young parts, found throughout India in dry forests upto 600 m.

SYNONYMS

Sanskrit : Madhunāśinī, Ajāśrngī

Assamese : --

Bengali : Medhasingi

English : Periploca of the wood Gujrati : Kaavalee, Medhasinge Hindi : Gudmaar, Medhaa Singee

Kannada : Kadhasige

Kashmiri : --

Malayalam : Cakkarakkolli, Madhunaashini

Marathi : Kaavalee, Medhaashingi

Oriya : --Punjabi : --

Tamil : Shirukurum Kaay, Shakkaraikkolli

Telugu : Podapatro

Urdu : --

DESCRIPTION

a) Macroscopic

Leaf simple, opposite, elliptical or ovate, petiolate, petiole 6 to 12 mm long and pubescent; lamina 3 to 6 cm long and 1 to 3 cm broad; acute or shortly acuminate; more or less pubescent on both sides, base rounded or cordate, venation reticulate; odour, unpleasant; taste, bitter and acrid.

b) Microscopic

Leaf -

Petiole - Nearly semi circular in outline having a deep furrow, shows a single layered epidermis covered with thick cuticle; multicellular uniseriate trichomes present; cortex composed of 3 or 4 layers of collenchyma and 3 or 4 layers of thin walled parenchymatous cells with intercellular spaces; vascular bundle bicollateral, conjoint and 3 in number, one central larger and crescent shaped and 2 lateral and smaller in size; a few rosette crystals of calcium oxalate present in cortical region.

Midrib - Epidermis and trichome as in petiole; epidermis followed by 2 or 3 layers of collenchyma adjacent to the lower surface; vascular bundle crescent shaped, bicollateral, conjoint and situated in centre; rest of the tissue between collenchyma and vascular bundles consisting of polygonal thin-walled parenchymatous cells with intercellular spaces, a few having rosette crystals of calcium oxalate.

Lamina - Shows dorsiventral structure; epidermis and trichome as in petiole and midrib; trichome cylindrical, consists of 3 to 6 cells nearly similar in width and variable in length, terminal cells blunt, most of them curved inwards from the leaf surface; palisade 1 or 2 layers; spongy parenchyma irregular, arranged with distinct intercellular spaces, rosette crystals of calcium oxalate present in this region; stomata paracytic, present only on lower surface; palisade ratio 7 or 8; stomatal index 20 to 25, vein islet number 7 to 10 per sq. mm.

Powder - Light green; under microscope shows epidermal cells having nearly straight wall, and paracytic stomata in surface view; rosette crystals of calcium oxalate; broken pieces of trichomes and spiral vessels.

IDENTITY, PURITY AND STRENGTH

Foreign matter	Not more than	2	per cent, Appendix	2.2.2.
Total Ash	Not more than	12	per cent, Appendix	2.2.3.
Acid-insoluble ash	Not more than	2	per cent, Appendix	2.2.4.
Alcohol-soluble extractive	Not less than	7	per cent, Appendix	2.2.6.
Water-soluble extractive	Not less than	28	per cent, Appendix	2.2.7.

T.L.C.

T.L.C. of the alcoholic extract on Silica Gel 'G' plate using n-Hexane: Toluene: Ethylacetate (5:10:2) as mobile phase shows four fluorescent zones under U.V. (366 nm) at Rf. 0.24, 0.37 (both Red), 0.50 (blue) and 0.60 (Red). On spraying with Anisaldehyde-Sulphuric acid reagent and heating the plate at 110° for ten minutes seven spots appear at Rf. 0.29 (green), 0.37, 0.47 (both violet), 0.55 (pink), 0.60 (green), 0.66 (violet) and 0.93 (pink).

CONSTITUENTS - Triterpenoid saponins of gymnemic acid A, B, C and D with sugarresidues such as glucuronic acid, galacturonic acid, ferulic and angelic acids attached as carboxylic acids. Several isopropylene derivatives of gymnemagenin, a hexahydroterpene, gymnemagenin, gymnemic acid. The leaves also contain betaine, choline, gymnamine alkaloids, inositol, d-quercitol. Hydrocarbons such as nonacosane, hentriacontane, tritriacontane, pentatriacontane, phytin, resin, tartaric acid, formic acid, butyric acid, amino acids such as leucine, isoleucine, valine, alanine, γ-butyric acid.

PROPERTIES AND ACTION

Rasa : Tikta, Kaṣāya Guna : Laghu, Rukṣa

Virya : Uṣṇa Vipaka : Kaṭu

Karma : Cakṣuṣya, Dipana, Kaphahara, Vātahara, Viṣaghna, Sramasāna

 $\textbf{IMPORTANT FORMULATIONS} \quad \text{-} \quad \text{Mahāviṣagarbha Taila, Ayaskrt\overline{i}, Nyagrodh\overline{a}di C$\overline{u}r$, and a substitution of the content of$

Mrtasanji Vanī Surā

THERAPEUTIC USES - Śūla, Śopha, Arśa, Śvāsa, Hṛdroga, Kāsa, Kṛmi, Kuṣṭha,

Netraroga, Prameha, Vrana, Dantakṛmi

DOSE - 3-6 g.