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REVIEW ON CLERODENDRUM PHLOMIDIS (AGNIMANTHA).

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ABSTRACT

The folklore medicines have great potential as therapeutic agent but are neglected because of deficient scientific evaluation one of such plant is clerodendrum phlomidis. The present article is the complete taxonomical, phytochemical, pharmacological profile of clerodendrum phlomidis is extensively discussed.

Key words:
Clerodendrum phlomidis bark, Agnimantha, Phytochemistry and Pharmacology.

INTRODUCTION:

Clerodendrum is a genus of flowering plants in the family Lamiaceae (Raymond M. Harley et.al). Its common names include glory bower, bag flower and bleeding-heart. It is currently classified in the subfamily Ajugoideae, being one of several genera transferred from Verbenaceae to Lamiaceae in the 1990s, based on phylogenetic analysis of morphological and molecular data (Steven J. Wagstaff et.al). Estimates of the number of species in clerodendrum vary widely, from about 150 (Yao-Wu Yuan et.al) to about 450 (Raymond M. Harley). This is partly because about 30 species have been transferred to Rotheca,(Dorothy A et.al, Rosette B et.al) about 30 more to Volkameria, and 1 to Ovieda (Yao-Wu Yuan et.al)The type species for the genus is Clerodendrum infortunatum (Index Nominum Genericorum). It is native to Sri Lanka and the Andaman Islands (Anthony J. Huxley et.al). The genus is native to tropical and warm temperate regions of the world, with most of the species occurring in tropical Africa and southern Asia, but with a few in the tropical Americas and northern Australasia, and a few extending north into the temperate zone in eastern Asia (David J. Mabberley et.al).

They are shrubs, lianas, and small trees, usually growing to 1–12 m (3 ft 3 in–39 ft 4 in) tall, withopposite or whorled leaves. C. floribundum can grow to 30 m (98 ft) tall (Floyd A.G. et.al). Clerodendrum fistulosum and Clerodendrum myrmecophila have hollow stems that are inhabited by ants (David J. Mabberley et.al). Clerodendrum trichotomum is a common ornamental in warmer parts of the world (David J. Mabberley et.al). Eight other species are also grown in the tropics for their abundant and attractive flowers (George W. Staples et.al).

One of these, Clerodendrum macrostegium, suckers abundantly from the roots, often producing a thicket within a few years(George W. Staples et.al). A few other species are also found, somewhat rarely, in cultivation (Anthony J. Huxley et.al). Clerodendrum species are used as food plants by the larvae of some Lepidoptera species including Endoclita malabaricus and Endoclita sericeus.

Fig 1: Clerodendrum Phlomidis Plant.

TAXONOMICAL CLASSIFICATION:
(ayurwiki.info.com)

Kingdom	**:***Plantae*
Subkingdom	**:***Viridaeplantae*
Phylum	**:***Tracheophyta*
Subphylum	**:***Euphylophytema*
Infraphylum	**:***Radiotopses*
Class	:*Magnoliopsida*
Subclass	**:***Lamiidae*
Order	:*Laminales*
Family	:*Laminaceae*
Subfamily	:*Ajugoideae*
Genus	:*Clerodendrum*
Species	:*phlomidis*

VERNACULAR NAMES:
Sanskrit: Agnimantha,
Tamil: Takkari.
Marathi: Airanamula,Arani,Arni.
Hindi: Arni,Piran,Pirun,Urni**.**
Telugu: Nelli,Taluki,Takkolamu,Tekkali.
Malayalam: Munja,Peruvelum,Tirutalai.
Bengali: Arani,Ganiyari,Goniari.
Gujarati: Aranimula,Arni,Irun.
Kannada: Teggi, Taggi-beru.
Oriya: Hontari,Ganiary (ayurwiki.info.com)

HABIT: Found throughout the india (Chopra RN et.al.)
HABITAT: C. phlomidis is a common shrub of arid plains, low hills and tropical deserts. They are distributed throughout the drier parts of India (Andhra Pradesh, Uttar Pradesh, Diu Island, Delhi, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Bihar, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal), Pakistan (Sindh, Baluchistan and north-western provinces), Sri Lanka, Myanmar and south-east Asia(Kirtikar KR et.al, Pandey R et.al, Watt G. et.al, Moldenke HN et.al, Chopra RN et.al.)

PHYTOCHEMICAL SCREENING:
Clerodendrum phlomidis contains various phytochemical constituents like Carbohydrates, Steroids, Flavanoids, Glycosides, Alkaloids and Phenolic.

Pharmacological profile:

Parts	Pharmacological uses	Reference
Root	12 to 24 g as decoction is used in sotha (inflammation, swelling), pandu (jaundice), Arsa (haemorrhoids, piles), vibandha (constipation),Agnimandya (slowness of digestion, dyspepsia), Adhmana(swelling of the body), Gulma (a chronic enlargement of the spleen or any glandular enlargement in the abdomen), muktrakrccha (painful discharge of urine, a class of urinary affections) and Mutraghata (urinary disease). Used as bitter tonic, antidote, analgesic, anti-asthmatic;for inflammatory disease and in rheumatism. Used as bitter tonic, for nervous disorder and in debility.	Anonymous. The Ayurvedic pharmacopoeia of India. Part 1. Vol 3[M]. New Delhi: Government of India, 2001. 3-4.
Root bark	Used in cough, asthma, cold, anaemia, oedema and nervous disorders.	Kirtikar KR et.al.
Root and root bark	Used in alternative, bitter tonic, and is given in the convalescence of measles by native of western india.	Nadkarni KM et.al, Watt G. et.al, Chopra RN et.al.
Root decoction	Used as aromatic, astringent and and as demulcent in gonorrhea.	Nadkarni KM et.al, Katewa SS et.al.
Root juice	Used to reduce over-corpulence.	Manohar M et.al.
Whole plant	Used as hypoglycemic. Used for ailment involving swelling, joint pains and inflammation.	Krishnamurthy KH et.al, Masilamoney P et.al, Puri HS et.al.
Whole plant	The tribes “Santals” rub the plant over their bodies in dropsy. The tribles “sahariya” use the plant in fever, postnatal complaints, dyspepsia, colic and anthrax.	Kirtikar KR et.al, Watt G. et.al, Anjaria J et.al.

	Used in colic, body-ache, diarrhea, cholera, dysentery, dyspepsia, fever, headache, postnatal fever, stomachache, during convalescence from measles and specially used for mental diseases.	
Whole plant decoction	Used to treat diabetes	Mishra LC.et.al
Whole plant and root	Used as bitter tonic and for neglected syphilitic complaints.	Shafi MS et.al.
Leaf	Used as a remedy to treat diabetes in southern parts of india especially tribals of nilgiris. Used in fever due to sunstroke and malaraia and as febrifuge; grounded leaves are given in stomach pain, dyspepsia, digestive disorders, eye complaints, ling diseases, rheumatism, asthma, inflammatory diseases, swelling.	Dhanabal SP et.al, Pandey CN et.al, Anonymous. The useful plants of India[M]. New Delhi: Publication and Information Directorate, CSIR, 1992. 132.
Leaf juice	Used to treat mental tension and mental disturbance.	Murugesan T et.al.
Leaf and leaf juice	Used as bitter tonic, alternative and prescribed in neglected syphilitic complaints in doses of half an ounce or more twice daily in southern india.	Nadkarni KM et.al, Kirtikar KR et.al, Shafi MS et.al, Watt G et.al.
Leaf decoction	Used for inflammation, and is effective in treating bronchitis, headache, weakness, drowsiness and digestive problems.	Nadkarni KM et.al.
Leaf and root	Used for body-ache, headache ad unconsciousness.	Patil MV et.al.
Aerial parts	The tribals “sahariya”apply the paste on body joints for about a month to reduce pain or stiffnes of joints.	Anis M et.al.

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