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Review Article

MEDICINAL USES OF ARJUNA (Terminalia arjuna Roxb.): A REVIEW ARTICLE

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ABSTRACT

Arjuna also called Arjun Tree and Botanically *Terminalia arjuna* is medicinal plant mainly used for heart diseases due to its cardioprotective and cardiostrenghening properties. It strengthens cardiac muscle and normalizes (mainly reduce) heart beat. In addition, it is a good source of minerals, which helps to prevent bone loss and improve bone mineral density. It has ulcer protection action, so it is used for ulcer treatment, especially indicated for peptic ulcers. It stops bleeding. It reduces the frequency of urination, so it is beneficial in polyuria. It has astringent action, so it is helpful in the management of leucorrhea.

KEY WORDS: Arjuna, cardioprotective, bledding, leucorrhea.

BOTANICAL DESCRIPTION

Terminalia arjuna is a member of Combretaceae family. It is native to india but also found in Pakistan, Sri Lanka, Myanmar and some other Asian Countries. It is a deciduous riparian tree and it can grow up to a height of about 20-27 m.

SYNONYMS & VERNACULAR NAMES

Latin : Terminalia arjuna
English : Arjuna, Arjuna tree
Types of Plant : Deciduous riparian tree

Native Range : India

Height: It prefers humid, fertile and red lateritic soils, but it can grow in any type of soils. It can also grow in shade.

Leaves : Conical and oblong leaves. Leaves have a green color on the top and brown color below.

Bark : Grey and smooth bark
Flowers : Pale yellow flowers
Sinhala Name : Kumbuk

Sinhala Name: Kumbuk
Tamil Name: Marudha maram
Malayalam Name: Neer maruthu

Bloom Time: March and June

BOTANICAL CLASSIFICATION

Kingdom - plantae **Sub-Kingdom** - Viridiplantae

Infra Kingdom - Streptophyta (Land Plants)

Super Division - Embryophyta

Division- Tracheophyta (Tracheophytes o

Vascular Plants)

Sub Division - Spermatophyta (Spermatophytes or Seed Plants)

Class- Magnoliopsida Super order - Rosanae

Order - Myrtales

Family -Combretaceae (Combreturns)

Genus- Terminalia Linn

Species - Terminalia arjuna (Arjun Tree).

MEDICINAL PARTS

The bark of *Terminalia arjuna* is the main medicinal part used for therapeutic purposes. It is well-known for cardioprotective action.

CHEMICAL COMPOSITION

Terminalia arjuna bark contains minerals like calcium and magnesium. The following phytochemicals are found in the Arjuna bark.

- 1. **Phenolic Compounds** terminic acid and arjunolic acid
- 2. Glycosides: arjunetin and arjunosides I-IV
- 3. Flavones
- 4. Tannis
- 5. Oligomeric Proanthocyanidins.

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PHARMACOLOGICAL ACTIONS

Terminalia arjuna bark has a cardioprotective role by restoring the depleted endogenous myocardial antioxidants and improving myocardial function.

According to ayurveda, arjuna bark strengthens the heart and myocardium (cardiac muscles), improves blood circulation to the heart tissue and improves its strength to pump the blood. These facts are also now verified by some research studies.

MEDICINAL PROPERTIES

- Cardioprotective
- Antiarrhythmic
- Cardiac Stimulant
- Antianginal
- Anti-osteoporotic
- Anti-herpes virus (it is found in Casuarinin hydrolysable tannin compound in Arjuna bark)
- Wound healing
- Anti-arthritic
- Anti-inflammatory
- Antacid
- Antiulcerogenic.

CHARECTRISITIC CHARACTERS IN AYURVEDA

Rasa – Kasaya

Guna – Laghu, Ruksha

Virya - Sheeta

Vipaka – Katu

Prabhava – Cardiac Tonic

Dosha karma – Pacifies Kapha dosha & Pitta dosha

Dhatu – Rasa, Rakta, Mamsa, meda, Asthi

Organ effect – Heart, Blood vessels, Bones

Main indication – Heart diseases.

THERAPEUTIC INDICATIONS

- Dyslipidemia
- Coronary artery disease
- Heart failure
- Hypercholesterolemia
- Angina pectoris
- Arrhythmia (especially used for Tachycardia)
- Hemorrhages
- Edema due to heart disease
- Asthma
- Cough associated with weakness and fatigue
- Heart burn
- Gastritis.

Therefore, Arjuna bark can be used for its antiatherogenic action, reducing atherosclerotic lesion and stopping the progress of atherosclerosis.

DOSAGE AND ADMINISTRATION

Terminalia arjuna can be used in Different forms and dosage as follows:

1. Bark powder – 3-6 g

Terminalia arjuna bark is used in different forms like bark juice, powder, decoction etc. All formulations of Arjuna are considerably safe and well-tolerated in most individuals when taken in recommended dosage under the supervision of an Ayurvedic physician.

ARJUNA FORMULATIONS

- 1. Arjunarishta
- 2. Arjun Ksheera Pak
- 3. Ashwagandha Arjun Kshir Pak
- 4. Kumkumbhadi churana.

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