

BILVA

NAME OF THE DRUG- **BILVA**

BOTANICAL NAME- *Aegel marmelos*

FAMILY- **RUTACEAE**



## SYNONYMS-

1. **Maloorā-** Alleviates all types of mala dosha
2. **Sandilya-** cures many diseases.
3. **Sailusha-** Grows in hilly regions.
4. **Sriphala-** Fruits of bilva have aroma
5. **Sadaphala-** Bilva always bears fruits
6. **Mahakapittha-** Fruit resembles large kapittha fruit
7. **Kantaki-** Bilwa is a thorny tree
8. **Granthila-** Stem is nodular

# CLASSICAL CATEGORIZATION-

1. **CHARAKA-** Shothahara, Arsoghna, Asthapanopaga
2. **SUSHRUTHA-** Varunadi, Ambashtadi, Brhat panchamoola
3. **VAGBHATA-** Varunadi, Ambasthadi

## BOTANICAL DESCRIPTION-

*Aegle marmelos* is a deciduous shrub or small to medium-sized tree, up to 13 meters tall with slender drooping branches.







## BARK-

- The bark is pale brown or grayish, smooth or finely fissured and flaking, armed with long straight spines, singly or in pairs.
- Bark is with slimy sap oozing out from cut parts.
- The gum is also described as a clear, gummy sap, which exudes from wounded branches and hangs down in long strands, becoming gradually solid



## LEAF-

- The leaf is trifoliate, alternate, and ovate with a tapering or pointed tip and rounded base.
- Young leaves are pale green or pinkish, finely hairy while mature leaves are dark green and completely smooth.
- Each leaf has 4–12 pairs of side veins joined at the margin





## FLOWER-

- The flowers are 1.5 to 2 cm, pale green or yellowish, sweetly scented
- Bisexual, in short drooping unbranched clusters at the end of twigs and leaf axils.
- They usually appear with young leaves. The calyx is flat with small teeth.
- The four or five petals overlap in the bud.
- Many stamens have short filaments and pale brown, short-style, anthers.
- The ovary is bright green with an inconspicuous disc.





## FRUIT-

- The fruit typically has a diameter of between 5 and 10 cm
- It is globose or slightly pear-shaped with a thick, hard rind and does not split upon ripening.
- The woody shell is smooth and green, gray until it is fully ripe when it turns yellow.
- Inside are 8 to 15 or 20 sections filled with aromatic orange pulp, each section with 8-10 flattened-oblong seeds each about 1 cm long
- Seeds bearing woolly hairs and each enclosed in a sac of adhesive, transparent mucilage that solidifies on drying.

# RASAPANCHAKA-

RASA- Kashaya, Tikta

GUNA- laghu, ruksha

VIRYA- Usna

VIPAKA-Katu

KARMA- Vata-Kapha hara, Grahi, Deepana-pachana

बिल्वं सांग्राहक दीपनीय वातकफप्रशमनानाम् । (Ch Su 25ch)

बिल्वः शाण्डिल्यशैलूषौ मालूरश्रीफलावपि। (गन्धगर्भः शलाटुश्च कण्टकी च सदाफलः ॥)

श्रीफलस्तुवरस्तिक्तो ग्राही रूक्षोऽग्निपित्तकृत् । वातश्लेष्महरो बल्यो लघुरुष्णश्च पाचनः ॥

(Bhavaprakash)



# MYTHOLOGICAL REFERENCE-

- Bilva is also called Shiva Druma( Lord shiva favorite tree)
- The leaves of this tree are generally trifollic--a leaf that's divided into three leaflets--which are believed to represent the '*trinetra*' or three eyes of lord Shiva.
- According to Hindu mythology, the leaf also represents the holy trinity--Bramha, Vishnu and Mahesh.



## PART USED-

1. FRUIT

2. LEAVES

3. ROOT

## DOSAGE-

1. Kashaya- 50ml- 100ml

2. Churna- 3-5gm

# Pharmacological activities-

- 1. Anti-Diarrhoeal activity:** The activity of ethanolic extract of dried *A. marmelos* fruit pulp was tested against pathogens, namely, *Shigella dysenteriae*, It was reported that the extract showed maximum bactericidal activity.
- 2. Anti-Oxidant activity:** A study observed that fruit (pulp) extract of bael showed great antioxidant potential.
- 3. Anti-Diabetic activity:** All extracts of *A. marmelos* exhibited anti-diabetic activity in rabbits. Methanolic extract of leaves showed maximum antidiabetic effect.



# MAJOR CHEMICAL CONSTITUENTS-

1. **Root**-xanthotoxin, umbelliferone, marmesin, marmin, skimmin etc.
2. **Heart wood**- furoquinoline, marmesin,  $\beta$ -sitosterol etc.
3. **Leaves**-essential oil containing  $\alpha$  &  $\beta$  phellandrene, rutin, marmesinin, aegelin, aegelenine, etc.
4. **Ripe fruits**-xanthohumol, marmesin, skimmin etc.
5. **Unripe fruits**-marmeline, aegeline, imperatorin, alloim- peratorin and xanthotoxol, etc.

# IMPORTANT PREPARATIONS OF BILVA-

1. Bilva Taila
2. Bilva Rasayana
3. Asana Bilvadi taila
4. Dasamoola Arishta
5. Bilvadi Vati
6. Kutajadi Avaleha

## THERAPEUTIC INDICATIONS-

- (1) Pittātisāra- Fruit pulp of Bilva and Madhūka are mixed with sugar and honey and administered with rice water (S.S.Ut.40).
- (2) Grahani- Paste of unripe fruit of Bilva is given with Sunthi and Guda while the patient is on buttermilk as diet .
- (3) Kāmalā-Leaf juice of Bilva is given along with Triktu( C.S.Ci.16)





**THANK  
YOU.....**