

# *Acorus calamus* Linn.

**Family** : Acoraceae  
**Group** : Stomach disorders/carminatives/laxative, Brain tonic  
**Parts Used** : Rhizome  
**Vernacular Names**  
English : Sweet Flag  
Malayalam : vayambu  
Hindi : Bacc, Gorbacc  
Sanskrit : Uragandha, Vaca



**Distribution and habitat:** Distributed throughout the tropics and subtropics, especially in India and Sri Lanka. It is found in marshes, wild or cultivated.

**Botany:** Semi-aquatic rhizomatous perennial herb.

- **Rhizome:** Creeping, branched, cylindrical or slightly compressed, light brown or pinkish brown externally, white and spongy within.

- **Leaves:** Bright green, distichous, equitant, linear and sword shaped, thickened in the middle and with wavy margins.

- **Flowers:** Solid triangular flower stem. Semi erect spadix arise from the side of flower stem. Light brown and densely packed sessile flowers on cylindrical spadix. Fruits are berries oblong, turbinate berries with a pyramidal top

- **Seeds:** Few and pendant from the apex of the cells

**Chemical constituents:**

- Rhizomes, roots and leaves yield essential oil.
- The important constituents of the essential oil are asarone and its  $\beta$ -isomer.
- Other constituents are  $\alpha$  and  $\beta$ -pinene, myrcene, camphene, p-cymene, camphor, linalool and sesquiterpenic ketones.

**Uses:**

- An important *medhya* drug, capable of improving memory power and intellect.
- Used in treating cough, bronchitis, odontalgia, inflammations, gout, epilepsy, convulsions, depression and other mental disorders, tumours, dysentery, skin diseases, numbness and general debility.
- Essential oil is anticonvulsant.

**Formulations:** Vachechoornam, Vacaditaila, Ayaskrti, Kompancadi gulika, Valiya rasnadi kashaya, etc.

**Agro technology**

**Soil and climate:** Grown in paddy fields and maintaining 10 cm standing water. It comes up well in clayey soils and light alluvial soils of riverbanks. It needs ample sunlight during the growth period.

**Propagation:** Sprouted rhizome pieces are pressed into the mud at a depth of about 5 cm at a spacing of 30x30 cm.

**Manuring:** FYM is to be applied at 25 t/ha as basal application. Fertilizers are applied at 25:50:60 kg/ha N: P<sub>2</sub>O<sub>5</sub>: K<sub>2</sub>O per year. (1/3 of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O are to be added in the field during March - April as a basal dose., remaining 2/3 of nutrients i given in two equal split doses at 4 months and 8 months after planting).

**Harvesting:** Duration is 1 year. Harvested when leaves start turning yellow and dry indicating maturity. Harvesting by digging the rhizome which will be at a depth of 60 cm and having about 30-60 cm spread.

