Botanic name : ***Balanophora indica*** (Arn.) Griff. -- Trans. Linn. Soc. London 20: 95 (1846). (IK) **(syn.** *Balanophora fungosa* subsp. *indica* (Arn.) B.Hansen.)

Common name : Kannukuttimadu (Malayalam) (India Biodiversity Portal), Markata Pippali (Sanskrit)

Family : Balanophoraceae

Habitat : Terrestrial, parasitic, rain-forest plant

Distribution : Indian Eastern Himalayas, hills of South India-extremely threatened due to overexploitation and loss of habitat. In India it is common in peninsular hills, especially in Shola forests at an altitude of 1000 m, msl. This plant is included in the negative list, restricted and prohibited for export (Wildlife Protection Act, 1972, India).

Description : Unisexual dioecious, parasitic (Plants' arise from an irregularly-shaped, hard, bulbous mass attached to the roots of rain forest plants), herbs, 10-25 cm high; rootstock warted with lenticels; stem stout, short, cylindric, leafy bracts/leaves ovate to sub orbicular, without chlorophyll, obtuse at apex, purple, without venation; male flowers small, reddish, actinomorphic, 0.4-0.6 cm long; perianth lobes 2-6, white, each subtended by a truncate bract; stamens 2-6 or more; filaments united,; male inflorescence obovoid, dense raceme, Pollen white. Backs of the anthers fused to one another to form a globular head of anthers in the middle of each male flower. Anthers opening by a horseshoe-shaped slit. 5-10 cm long, 3-6 cm wide. Female inflorescence globose heads, 2-5 cm diam., Spadicles subclavate in female flower, bright red in colour; no perianth, ovary vary ellipsoid, minute.

Phytochemicals: Cinnamic acid derivative tannins, possessing a phenylacrylic acid derivative (e. g. caffeoyl, coumaroyl, feruloyl or cinnamoyl), which connected to the C(1) position of a glucosyl unit by *O*-glycosidic bond, are the characteristic components in genus *Balanophora*. In addition, several galloyl, caffeoyl and hexahydroxydiphenoyl esters of dihydrochalcone glucosides, phenylpropanoids, flavonoids, terpenoids and sterols.

Medicinal/Economic uses : Hypoglycemic, antioxidant, HIV-inhibitory. Flowers emit a mouse-like odour. In South India, local falks used the plants to treat skin diseases, piles and for curing internal hemorrhages. Also used for clearing away heat and toxic, neutralizing the effect of alcoholic drinks, and as a tonic for the treatment of hemorrhoids, stomachache and hemoptysis. In China, the plant is known as 'she-gu' (stone-fungus) and in Thailand as 'hoh-ra-tao-su-nak' and is used to treat a variety of ailments in both countries. Found in crude drug markets as substitute/adulterant for the Ayurvedic drug Gajapippali (*Scindapsus officinalis*).The tubers of *Balanophora* are rich in a wax-like substance which is used in Java (Indonesia) as a fuel for torches.