

The Yellow Vine

One of the most beneficial plant in the world whose root and stem serve as excellent antibiotic and antiseptic properties, ‘Tree turmeric’ as it is called in English, Maramanjil in Malayalam, Daruharidra in Sanskrit, Daruhaldi in Hindi. Belongs to Menispermaceae family and is botanically known as *Coscinium fenestratum*.

Native to India the natural evergreen forests of south India, 900-1000 m highlands with high relative humidity about 15-20°C and shade are all the favorable conditions for its growth.

Its root and stem are widely used in various Ayurvedic, Unani, Sidha as well as traditional medicinal preparations for the treatment of diabetics, skin diseases, Jaundice, wounds and ulcers. Its stem is used for snake bites.

Berberin is the active ingredient that gives the medicinal properties. Many ayurvedic preparations like Aswagandha Arishtam, Khadira Arishtam, Anuthailam, Ilaneerkuzhambu, Mahapanchagavyam contain maramanjil. Many cosmetic preparations also utilize maramanjil preparations.

National Medicinal Plant Board rated this plant as one of the largest trading medicinal plant from the tropical forests. This has resulted in the huge loss of almost 80 per cent of those plants in Kerala, Karnataka and Tamil Nadu in the last 30 years. There is also unscrupulous practice with dubious and fake varieties of various vines in place of original maramanjil.

Realising the medicinal and commercial potential of this endangered species of ‘Wonder Vine’, KAU with the financial back up of DBT of central Govt. has taken up conservation oriented research work on the flowering, fruit setting, seed viability and dormancy of Maramanjil.

Results of the extensive research works on seeding pattern revealed that in nature, Maramanjil reproduce by seeds or regenerate from stumps of old plants. Since this rate of regeneration is very low and time consuming, alternate methods like air layering is also another means of vegetative propagation which is not found to be cost effective.

Maramanjil is a dioecious plant hence male and female plants exist and they flower at different periods of time limiting the pollination process and restricting the seed formation. KAU has developed hormone treatment to synchronise the flowering pattern and there by produce more viable seeds. Germination of seeds by natural process is slower due to the hard seed coat and certain enzymes present in the coat. So hormonal treatment is the most effective way to produce more viable seeds.

Seedlings should be planted at 1-1.5m away from the base of supporting plants. 10-15 kg dried farm yard manure or compost could be used as basal manure. During summer care should be taken to hydrate the soil adequately and give protective mulching

Harvesting and Processing

Roots and stems are the useful parts. Mature stems are cut at about 50 cm above the base and should be done preferably once in three years. The stem is peeled and dried. The skin could be used as natural dye preparations.

Over harvesting and difficulty in nurturing the vine has endangered this highly medicinal natural vine. Though the exports are banned, due to the great demand for berberine in the international market there is always the danger of unscrupulous harvesting looming high. So alternate methods of maramanjil cultivation and preservation should be given preference. It can be grown in homesteads and should be included as a component in social forestry. Also medicinal plant gardens and selective plantations can be utilized for its propagation and commercial cultivation.

KAU research has come out with one year old poly bag seedlings. Thousands of plants are available for cultivation. The polybag seedling cost only Rs.500/plant. The contact number is 0487-2438451, 9495463927.