Quality Planting Material Production Demonstration unit (QPM)

Description of the unit : To produce healthy and quality planting materials of selected medicinal and argo forestry species and supply to farmers for commercial cultivation.

Name of the unit : Medicinal and agro forestry Quality planting material production under shade net nursery

Area of the unit : 60 feet X 40 feet

Name of the Varieties and No. of plants available

S.No	Scientific Name of the plant	Vernacular name of the plant	No. of plants available
1	Pterocarpus santalinus	Red sandal	5000-00
2	Santalum album	Srigandham	5000-00
3	Decalepis hamiltonii	Nannari	20000-00
4	Oroxylum indicum	Tundilamu	1000-00
5	Rauwolfia serpentina	Sarpagandha	20000-00
6	Saraca asoca	Seetha asoca	1500-00
	Total		**52500-00**

Total no. of saplings available :52500

Producing Quality Planting Materials (QPMs)

At present under shade net nursery the above sixselected medicinal and agro forestry plants of commercial importance are multiplying for commercial cultivation at farmers fields.

Objectives:

- Encouraging the farmers towards medicinal plants cultivation for subsidiary income.
- Promotion of agro forestry in the district through capacity building and supply of tree species for additional income.
- Creating employment and income generation for rural un-employed youth, small and marginal farmers for better standard of living by cultivation of medicinal and agro forestry species.

- To establish marketing linkage between the farmers and traders.
- To compare the economics with major field crops


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Useful parts:
Uses:

Silkworm Rearing Demonstration Unit

What is Sericulture?

Sericulture is the process of cultivating silkworms and extracting silk from them. Sericulture is a very important domestic industry in many countries. India and China are the world's leading producers of silk. The silk output of these two countries combined accounts for over 60% of global production.

The majority of the mulberry acreage is concentrated in the Rayalaseema region especially drought-prone area of Chittoor and Anantapur districts. Chittoor district is the first largest silk producing traditional sericulture belt of Andhra Pradesh, where farmers have successfully practiced sericulture and this area represents the irrigated sericulture tract of the state. In recent years mulberry acreage, cocoon production and productivity has been increased in some

mandals of Chittoor district namely Kuppam, Palamaner and Madanapalle which are adjacent to Karnataka state. Kuppam mandal in Chittoor district which was just like any other sericulture area in the state till two decades ago, transformed itself into a "Model Sericulture Cluster". Now the sericulture enterprise is slowly adopting by the other farmers in eastern part of the district also because of its regular monthly income.

An extent of 46,600 acres mulberry was under cultivation covering 2348 villages in 52 mandals out of 66 mandals in the erstwhile Chittoor district. It is providing employment for more than 2,23,660 people in rural areas in the district. Farmers earning Rs.1-2.0 Lakhs/year/acre from 10 to 12 crops.

Based on the importance in sericulture RASS-KVK established silkworm rearing demonstration unit at KVK farm.

Women are encouraged to pursue this career path, and they make up around 60% of the sericulture and silk businesses. More women and family members contribute significantly to the family's income as the sericulture sector grows. sericulture sector is an excellent instrument for empowering women and promoting gender equality.

Farm sector in Sericulture?

- Moriculture – the cultivationof mulberry leaves
- Silkworm rearing – promoting the growth of the silkworm.

Moriculture

Moriculture refers to the cultivation of mulberry plants, whose leaves are used as silkworm feed. It is interesting to note that 1 kilogram of mulberry leaves can feed approximately 50 silkworms (from the egg stage to the cocoon stage).

Silkworm Rearing

In sericulture, the silkworm rearing process begins with the hatched worms. A feeding bed is prepared on a rearing tray by sprinkling chopped mulberry leaves onto it. The hatched larvae are transferred into this tray via a process known as brushing. In order to maintain humidity, foam strips are soaked in water and placed on the tray.The silkworm larvae initially have a good appetite. As they grow, their appetite slowly diminishes until their active stage. At this stage, the silkworm eats enthusiastically until its final feeding stage.

After reaching maturity, the larvae begin searching for hospitable places to begin their pupation. At this stage, the body of the silkworm shrinks and becomes translucent. These mature larvae now wrap themselves in a cocoon by secreting saliva from the two salivary glands on their heads. This saliva solidifies and becomes silk when it comes in contact with air.

Generally, the cocoon is spun in 2-3 days. However, some varieties of silkworms can take up to 4 days to spin their cocoons.

Inside the cocoons, the larvae undergo metamorphosis and turn into pupae. The harvesting of silk from these cocoons is the final stage of sericulture

Importance of the unit

To provide hands-on training on silkworm rearing from egg to cocoon to the new farmers, rural youth, students etc., and exposure on silkworm rearing as an enterprise.

Objectives

- Encouraging the farmers towards mulberry cultivation and silkworm rearing for regular income.
- Promotion of sericulture in the district through capacity building.
- Creating employment and income generation for rural un-employed youth, small and marginal farmers for better standard of living by mulberry cultivation and silkworm rearing.
- To create effective management practices in mulberry cultivation and silkworm rearing to the practicing sericulture farmers.