

## **Rosemary cultivation and value addition for small and marginal farmers in Erode (Ooty-1 Variety) – Boon for Talavadi farmers**

### **Introduction:**

Erode district constitute four major types of farming situation viz., dryland farming, wetland farming, garden land farming and hilly region farming. The climate condition prevailing in the district is suitable for cultivation of cash crops like sugarcane, cotton, cabbage, garlic, potato, turmeric, ragi, beans, etc. For past two decades, MYRADA KVK has been working in Erode District. The special focus was given to hilly regions of the district, at an elevation of 1000 m MSL. The area is totally covered by the reserve forest, wherein the topography of land is undulated in nature. The type of soil is Red soil. Water is tapped from bore - well for irrigation. The crops of hilly regions are, Turmeric, sugarcane Maize, Banana, Tapioca are under Irrigation condition and Ragi, Lab-Lab are under rain fed condition.

### **Rationale**

Since, the land covered by reserve forest, the wild animal menace is a major nuisance for farming activities. In many cases, they could not able to get the expected yield from the crop, even after had a constant vigil during night times. The factor leads to migration of people out of the area in search of employment.

### **About Rosemary**

**(*Rosemarinus officinalis*)** – Lamiaceae. It is perennial evergreen shrub, highly aromatic plant growing up to one meter high. The plant is characterized with woody trunk; leaves are linear, revolute, green colour on the dorsal side and woolly grayish on the ventral side. Oil glands are found in ventral side of the leaves. The flowers are pale blue in clusters. The calyx contains high oil content. Principle constituents: Pinenes, camphene, limonene, cineol, borneal with camphor, linalool, terpineal, octanone, borny acetate. Use of Rosemary: Pharmaceutical products – relax muscles, stimulant, mild analgesic and prevention of cancer. Cosmetic – skin care, hair care, and perfumery. Nourishment – common ingredient in most of the European cuisine.



Based on this background, KVK have been introduced an aromatic plant Rosemary livelihood support of small and marginal farmer. Ideal climate is prevailing in the hamlets of villages are located towards western hills of the District of Sathyamangalam with elevation of around 800 to 1000 MSL. Based on this, farmers are finding alternate variety for ensuring their farm income. Keeping this in view, KVK taken up trials on identification of Ooty -1 Rosemary variety overcome problem in hilly regions of Talavadi of Erode district.

## KVK Interventions

- KVK conducted on farm trial during 2021-22 to identify the suitable variety for the prevailing agro climatic condition in Talavadi region of Erode district.
- Ooty-1 variety released from Horticultural college and Research institute, TNAU, Coimbatore found more suitable to this region, which matures in 6 months in initial period then followed by mature every 3 months, and the realized an average Yield: 10-12t/ha. High yield potential of green leaves in one year, leaves possess high rosemary oil content (0.9 %), Green and dried leaves possess excellent aroma and cooking quality, Resistant to leaf blight disease caused by *Rhizoctonia solani*, Resistant to pests like white flies and aphids, when compared to the ruling varieties (Ooty local).
- The selected progressive farmers trained on scientific cultivation methods (Land preparation, mulching techniques, drip irrigation methods, post-harvest management) of Rosemary crop and supported with seed materials like rooted cuttings. From sowing to harvest, KVK scientists made periodical visit to provide technical advisory services for getting maximum yield.
- Organic inputs like Panchagaviya, *Pseudomonas fluorescens* and Fish amino acid were provided to the trial farmers to increase the herbages yield as well as disease management
- Professor and Head Department of Medicinal and Aromatic plant HCRI, Coimbatore visited the field to know about its surveillance during the cropping period, and assess the yield potentiality. Based on its performance, KVK demonstrated the same variety in the subsequent year in Talavadi area with the support of line departments under FLD programme for area expansion and popularization among farming communities



## Outcome and Impact

- KVK identified Ooty -1 suitable for the Talavadi climatic conditions
- 19.41% yield increase was recorded than the existing varieties
- An additional income of Rs.80000 to 90000 / Ha was realized in Ooty -1 variety
- Currently 426 ha areas covered by this variety in Erode district.
- Farmers are linked with marketing agencies ( Hope inn Nilgiris, Ooty) for technical and marketing tie up
- 25 acre of rosemary crop has been expanded with support of NABARD
- Kendra established solar tunnel drier with support of Hope in Nilgiris for post-harvest technology
- Up-scaling of Rosemary cultivation activities neighbouring state like Karnataka in 100 acres

*Mr. Irruthayasamy from kalmadipuram village of Talavadi block has produced 8 ton herbages /acre/year by adopting this Ooty -1 variety and earned Rs.246500/year). The essential oil content was recorded 0.9%, which was highly preferred in the market for cosmetic industries.*