

# Intervention of watermelon variety sugar baby in pathanamthitta agroclimatic zone through multimode approach

Nisha Aravind\*<sup>1</sup> and Rakesh.D<sup>2</sup>

<sup>1</sup>Department of Agricultural Extension, KVK, Pathanamthitta (Kerala) India

<sup>2</sup>Soil Conservation Office, Tiruvalla (Kerala) India

(Accepted : Mar., 06)

KVK-Pathanamthitta acknowledged the need to move away from top-down instructions and adopted pure technology transfer with a multimode participatory approach that directly involved farmers in defining and achieving their own development goals. Major constraint faced by the paddy farmers is non-remunerative paddy cultivation and lack of alternative profitable crop. Based on this watermelon is recommended as the best alternative crop in acres of fallow paddy lands of the district after conducting front line demonstration with innovator group of farmers in their field. Average yield/plant was about 30 kg and average yield/acre was nearly 40 tons with an average of two plants per pit. Yield data reveals that crop flowers and yields well in the agroclimatic situation of the district. Rapid transfer of technology was sort through group farming techniques. Productivity of watermelon cultivated by the men groups increased from 18.4 tons/acre in 2002-03 to 24.15 tons/acre in 2003-04. However, Yield of watermelon cultivated by the women groups was 17.08 tons/acre in 2002-03 and 15.72 tons/acre in 2003-04. On Farm Testing (OFT) with manure modification was conducted to study the vegetative as well as reproductive growth of the crop in these innovators field. Growth and yield of the plants supplied with vermicompost was higher compared to the plants supplied with coir pith compost. However, in plots where coir pith compost was applied, soil water retention was high and as a result the number of irrigation was reduced. The reduced cost of production resulted in a higher B:C ratio (3.57:1) for coir pith compost applied plots. Ratio of the spread of technology through master farmers was 1 : 2.7: 8.

**Key words :** Water melon, Kerala, Cultivator pathanamthitta.

## INTRODUCTION

THE major problem faced by Kerala State is conversion of paddy fields and drastic decrease in paddy areas, which had made many agricultural laborers especially the women, jobless. Moreover leveling of flood channels in paddy fields started inducing flood problems in different parts of the state, which led to further ground water depletion during summer. The combined effect of environmental and farm degradation, monocropping, neglect of organics in farming, etc have led to reduction of agriculture production in the state as a whole and it had become high time for the extension agencies to take up alternative cultivation approaches. Watermelon is cultivated in different parts of India. In South India, its cultivation is restricted to only Karnataka and Tamil Nadu. In Kerala, different field trials at Krishi Vigyan Kendra (KVK) farm indicated that the watermelon variety Sugar baby flowers as well as fruits in Pathanamthitta Agro-climatic region. Sugar Baby has proved as promising variety under other Southern Kerala conditions Shibukumar (1995). Realizing that cultivation of this crop could be a profitable enterprise during summer season in the paddy fallows, the KVK took up the venture of transferring this innovation among farmers.

## MATERIALS AND METHODS

Sugar baby variety of watermelon was introduced among the farming community of Pathanamthitta, Kerala.

Among the twenty agro-climatic zones identified in Kerala

by superimposing six moisture availability regimes over seven soil groups, the classification specified for Pathanamthitta district is given below:

**Table 1:** Agro-climatic zones

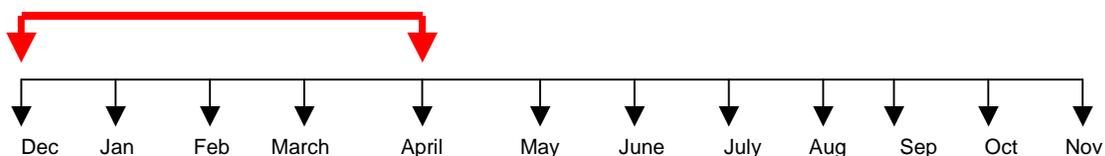
Types	Zones	Farming situations/ crops grown
Type 1	Humid laterite	Vegetables, nut mug, cashew, fodder grass, pineapples and banana
Type 2	Humid forest loam	Pepper, banana, rubber, ginger, paddy, jack and coffee,
Type 3	Wet laterite	Paddy, rubber, pepper, tapioca, ginger and banana

As this crop was an introduction in this district, following multi methodology approach was adopted to ensure full-fledged cultivation.

- ❖ Survey was conducted among 120 vegetable trainees to identify innovator category farmers .20% of them were categorized as innovators.
- ❖ Front line demonstration of variety sugar baby in innovator farmers' field was undertaken and location specific package was developed.
- ❖ Group approach techniques were adopted
- ❖ Master farmers were trained during crop demonstration

**Fig. 1 :** Seasonality of watermelon

Watermelon is cultivated from Dec-April in Kerala



\* Author for Correspondence