

Effective way of transfer of technology to boost the sunflower yield through frontline demonstration in Salem district, Tamil Nadu

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ABSTRACT

To improve the productivity of sunflower, KVK, conducted frontline demonstration programme funded by Oilseed Mission in 2003 to 2005 with CO4 variety. Optimum population maintenance and foliar application of boric acid (0.3%) and Naphthalene acetic acid (40ppm). In the demonstration field, yield was significantly higher (1289 kg/ha) than local check plots (1053kg/ha). However, due to year wise rainfall and mid season dry spells, average yield levels varied from 860 to 1410 in local checks and 1116 to 1600 kg/ha in demonstrations plots. In terms of percentage yield improvement in demonstration was recorded from 13.4 to 29.7 % over local check. Yield improvement achieved to the extent of 29.7 % due to combined effect of high yield variety, population maintenance and foliar application of boric acid and NAA. For the last 2-3 years, the crop variety has replaced almost 50 % of local seed/old released variety and is expected to cover 70-80 % area in a couple of years to come. Performance of FLDs on sunflower showed that besides replacing the old released variety by high yielding variety, crop management also played an important role in getting the higher yield. Hence, the farmers are advised to adopt this improved package of practices to get the optimum yield from improved varieties.

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INTRODUCTION

Sunflower [*Helianthus annuus* (L.)] is commercially cultivated mainly for the high value oil in seeds. Its by product after oil extraction forms an important protein meal in many food products and as feed in dairy industry. In concern to Tamil Nadu, sunflower is cultivated about 18152 ha with the production and productivity of 19303 t and 1063 kg /ha, respectively.

In Salem district, sunflower is grown in an area of 8.34 ha under both irrigated and rain fed situation. The average yield of Salem district is 1063 kg/ha. But districts like Erode getting the average yield of 1730 kg/ha. Farmers in Salem district, obtained the average yield of 1600kg/ha and the potential yield is 1800kg/ha. This wider yield gap in Salem district was identified by the KVK scientist through focused group discussion and field visits.

Identified problems:

- Unaware of latest variety and quality seed,
- Adoption of early released variety-CO-1,
- Non adoption of proper sowing method and spacing,
- Poor seed setting

To improve the productivity of sunflower, KVK, Salem conducted frontline demonstration programme funded by Oilseed Mission in 2003 to 2005. In view of the encouraging results, demonstrations were continued in this year also at farmer's fields.

METHODOLOGY

The present study was conducted by Krishi Vigyan Kendra, Salem district in different villages viz., Eriadikkkarai, Nalikalpatty, Kachipalli, Sandhiyur, Pachuddaiampalayam, Allathur and Reddipalayam. In total, 48 demonstrations in 20 hectares area in different villages were conducted. As far as possible, full package of recommended practices were adopted in demonstration plots and existing practices being used by farmers were also followed.

In demonstration plots, a few critical inputs in the form of quality seed (CO4 variety), planofix, borax etc. were provided and non monetary inputs like timely sowing in lines, maintenance of population and timely weeding were also performed, whereas, traditional products were maintained in case of local checks. In demonstration, the farmers were facilitated by KVK scientists in performing field operations like sowing, spraying, weeding, harvesting etc. during the course of training

Key words :

Transfertechnology,
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line
demonstration,
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