

Integrated Nutrient Management in Jasmine

2016 -17

Background:

Jasmine is grown as a commercial crop in Karur district due to good price it fetches in the market. The crop requires higher quantity of nutrients from the soil. Being a perennial crop, the physical, chemical and biological properties of soil get adversely affected due to continuous use of chemical fertilizers that result in poor soil fertility leading to low yield of Jasmine. Hence, soil test based integrated nutrient management for Jasmine is a viable option for getting profitable yields without affecting the soil fertility.

Interventions

Process: Mr. Sivasubramanian is one of the progressive farmers of Sekkanam Village, Krishnarayapuram block, Karur District. He is traditionally a Jasmine grower. In the year 2014-15, he used chemical fertilizers and pesticides in large quantity. He applied chemical fertilizers based on the advisory provided by fertilizer dealers without going for soil testing. In the year 2015-16, he attended a training programme, organized by the Department of Horticulture, wherein the importance and need for soil testing was discussed by the KVK experts. He collected soil samples with the help of KVK experts for testing the KVK Soil testing laboratory. He was provided the Soil Health Card and the results/recommendations were explained. The recommendations in the report revealed him that he was adopting balanced nutrient application in his field. He also participated in the Frontline demonstration programme of the KVK. The following were the follow up activities taken up:

S. No	Date	Name of the activity
1	5.3.16	Diagnostic visit
2	11.3.16	Group meeting
3	26.5.16	Field visit & Farmers Advisory Service
4	27.8.16	Off campus training on Integrated Crop Management in Jasmine
5	24.9.16	Field visit
6	3.10.16	Field visit
7	21.11.16	Field visit

Technology:

Soil health card is field-specific detailed report of soil fertility status and other important soil parameters that affect crop productivity. KVK experts analyzed for various parameters namely pH, electrical conductivity (EC), Organic Carbon available N, P, K, Iron, Zinc and Boron in his soil sample. The fertility status of the soil showed that nitrogen status is low and Organic carbon status is also low. So, the KVK experts suggested applying biofertilizers *Azospirillum* and *Phosphobacteria* along with FYM, subsequently to go for balanced nutrient application using chemical fertilizers. Initially the farmer applied biofertilizers and after pruning stage, he applied 65 g of urea, 375 g of superphosphate and 100 g of potash per plant. Then again he applied the same dose of fertilizers at the time of June – July. This balanced nutrient application led to better flower quality

thereby fetching higher price in the market. He also added 12 to 15 cartloads of FYM. Based on KVK Expert's advice, he prepared Enriched FYM using superphosphate and applied to selected plants coinciding with the off season. It was found that the application of enriched FYM coupled with other INM practices resulted in good bloom even during off season. He followed the panchakavya application and humic acid spray at proper time. Frequent field visits and advisory services made the farmer to achieve the flower yield of 4000 kg per 0.4 ha for 6 months in Jasmine crop. Now, he has become role-model in his village for soil test based Integrated nutrient management.

Impact

Horizontal Spread: He shared the results to the other farmers in his village and motivated them to go for Integrated nutrient management as per Soil Health Card.

S. No	Date	Name of the activity
1	28.12.16	Video recording
2	30.12.16	News paper coverage

Economic gains: He got income of Rs.4, 01,000 from 0.4 ha for the period of 6 months.

Employment Generation: Nil

