

Innovative approach to improve Amla yield



The farmer-scientist Mr. Antonysamy admiring the uniform-sized nelli fruits borne in bunches.

AN INNOVATIVE approach to improve the yield and performance of amla (Indian gooseberry or nelli in Tamil) has been attempted by a farmer-scientist, Mr. V. Antonysamy of Chintamani, Puliangudi in Tirunelveli district of Tamil Nadu. His field experiment to graft the improved varieties of amla such as NA7 and Kanchan on locally collected rootstocks and then top-work the grafts with local varieties of proven performance have paid rich dividends.

"My main objective was to make the selected local varieties of nelli high yielding and to make them bear uniform sized fruits all through the year. Again, the short-stature trees lend themselves to high density planting and easy harvesting," explained Mr. Antonysamy, a committed organic farmer. He did not have any formal training in horticulture, but guided by intuition and a strong conviction he began his experiments. His keen observation and meticulous record keeping helped him succeed in this venture never attempted before.

Mr. Antonysamy planted indigenous varieties of nelli and grafted improved varieties such as NA7 and Kanchan. He planted them closely at an espacement of 4 m x 5 m to accommodate about 500 trees in a hectare. When the plants established well, he top-worked them with selected indigenous varieties of proven yields. His experiment proved successful, and the trees started yielding two years after top-working. On an average each tree is yielding about 60 kg in a year, according to him. He applied liberal quantities of compost, farmyard manure, sheep manure and tank silt as basal dressing. The quantity of the organic manure should be gradually increased to meet the growing demands of yielding trees, according to him.

He used *Panchakavya*, fish ensilage and an organic insect repellent, a concoction of plant leaves soaked in cow's urine for over a week, regularly to keep his trees in good health. "Spraying the trees with these organic extracts will improve the plant growth, eliminates flower and marble shedding and enhances the fruit size and quality," pointed out Mr. Antonyamy.

The spraying starts in October and following a cycle of three rounds of spray, it is repeated till December. The fruiting begins in November and lasts till March. "If we have a good monsoon, we will have overlapping flushes, and will have harvests all round the year," he said. He has set up a self-designed drip system to supply 32 litres of water for four hours daily to each tree. It is particularly useful in peak summer, according to him. The cost of cultivation of amla using this novel technique and with an ingeniously designed drip system worked out to Rs. 50,000 per hectare.

The trees started bearing from the third year of planting, and the fruits were sold at Rs. 12 per kg in the local market.

"I would have earned more if there was any premium price for the organically grown nelli. All the trees yielded well, and the uniform-sized fruits were of good quality and taste," said Mr. Antonyamy.

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