**High Yielding Amla for High density Planting**
**Hindu: D-19.8.04**

Amla (Indian gooseberry or Nelli) is a hardy, drought tolerant crop, and it lends itself to high density planting even in marginal and wastelands. “Through systematic pruning techniques, the grafted trees of high yielding varieties can be retained as bushes of profuse bearing and such bushes are ideally suited for high density planting,” says Mr. R. Kolandaisamy, an engineer turned –farmer at Marungulam village near Thanjhar.

“High yielding amla varieties such as NA 7, Krishna and Chakia are particularly suited for closer planting with a spacing of 3 m by 3 m.

By adopting this spacing and following hexagonal or triangular method of planting as many as 1200plants can be accommodated in a hectare.

Some shade-tolerant medicinal plants such as Phyllanthus sp (Keelanelli) and gulmeg can be grown as intercrop until the amla trees reaches economic bearing age,” explained this innovative and enterprising engineer.

**Water Management**

In this 25-hectare organic farm integrated with high-tech nursery, he has laid a demonstration plot of 0.4 hectare with more than 400 grafts of high yielding varieties of amla. “Water management and special pruning techniques are crucial for its success. I have laid drip system for the efficient discharge of water right at the root zone, and adopt the unique pruning to encourage lateral shoots for year-round profuse bearing and easy harvesting,” points out Mr. Kolandaisamy.

Good quality and healthy grafts of the high yielding varieties were planted in well-prepared fields. Small pits of 30 cm by 30 cm were filled up with good organic manure, mulched with coir pitch compost, neem cake and vermin compost to increase the water holding capacity of the soil.

Biofertilizers such as Azotobacter, phosphobacterium and Vesicular Arbuscular Mycorrhiza (Vam) were applied regularly to boost the plant growth.

Initially, for the first three months, the drip-system was set to deliver 25 litres per plant per day (depending on the soil moisture regimen). When the plants were established, the same quantum of water was used for irrigation on alternate days.

After the first year of growth, when the grafts have put down penetrating and extensive root systems, each plant would need only 25 litres once a week, that too in peak summer. The plants are systematically pruned, and fruiting can be noticed even in young plants. However, economically viable and bigger fruits can be got from third year of planting. Each plant will yield about 25 kg of fruits a year. When the trees are five years old, the yield per tree will gradually rise to 50 kg a year.

**Cost per hectare**

From the 8th year onwards, the average output per tree will be about 100 kg a year, according to Mr. Kolandaisamy. The cost of raising an amla plantation works out to Rs 1.25 lakh per hectare.

The returns from the third year of planting, at an average price of Rs 10 a kg of fruits, will be about Rs.2.5lakhs.

Cultivation of medicinal plants as intercrops would provide returns till the amla comes to bearing and fetch assured returns. “With sound management of natural resources and good varieties, we can make every square centimeter of our own farm yield rich dividends,” points out Mr. Kolandaisamy.