

COLOCASIA *(Colocasia Esculenta Schott)*

Colocasia or taro is a herbaceous plant with thick tuber (underground stem) containing a lot of starch; cultivated for food for many centuries. All the plant parts i.e. leaves, petioles, corms and cormels are eaten in some or other parts of north eastern region. It is a rich source of carbohydrates, minerals and vitamins. Starch is the main constituent of carbohydrate in colocasia. The peel contains non-starchy material and can be used as feed. The calcium oxalate varies from 0.1 to 0.4% on fresh weight basis. It must be cooked to destroy the acrid crystals of calcium oxalate found in all parts of the plant.



Varieties

Generally farmers in the region grow the local types of colocasia, which are available. ICAR Research Complex for NEH Region, Umiam has identified several genotypes/ varieties. These are ML-1, ML-2, ML-9, BCC-1 and Nadia Local which are not only high yielding but also moderately resistant to leaf blight, a major disease of colocasia in this region.

Soil and Climate

It grows best in sandy loam or alluvial soil with abundant organic matter and moisture holding capacity. A soil pH of 5.5-6.5 is ideal.

It is a crop of tropical and sub-tropical regions and requires a warm humid climate. Under rainfed conditions, it requires a fairly well distributed rainfall around 120-150 cm during the growth period.

Seed Rate

Side tubers each of 25-35 g are used for planting. About 37,000 side tubers weighing about 1200 kg are required to plant one hectare.

Sowing Time

Rainfed crop: May-June to October-November

Irrigated crop: Throughout the year

Planting

The side corms are planted at a spacing of 45 cm on the ridges. Soon after planting, the ridges are covered with suitable mulching materials.

Nutrient Management

Compost @ 12 t/ha is applied as basal dressing, while preparing the ridges for planting. A fertilizer dose of 80:25: 100 kg of N: P: K /ha is recommended. Full dose of P and 1/2 of N and

K should be applied within a week after sprouting and the remaining 1/2 of N and K one month after the first application along with weeding and earthing up.

Water Management

For uniform sprouting, irrigation should be given just after planting and one week later. Subsequent irrigation may be given at 12-15 days intervals, depending on the soil type. The irrigation should be stopped 3-4 weeks before harvest. In the case of rainfed crop, if there is prolonged drought, supplementary irrigation is required.

Intercultural Operations

Inter-cultivation is essential in colocasia. Weeding, light hoeing and earthing up are required at 30-45 days and 60-75 days after planting. The leafy parts may be smothered about one month before harvest so as to enhance tuber development.

Plant Protection Measures

Colocasia Blight: It can be controlled by spraying Ziram, Zineb, Mancozeb or Copper oxychloride formulations at 2 g/l of water (1 kg/ha).

Aphids: For controlling serious infestation of aphids, apply Dimethoate or Monocrotophos at 0.05%.

Harvesting and Yield

Colocasia becomes ready for harvest 5-6 months after planting. The mother corms and side tubers are separated after harvest.

A yield of about 5- 6 t/ha can be obtained from a good crop.