

KIWI FRUIT

(*Actinidia chinensis* Planch.)

Kiwi fruit is known as Chinese gooseberry and recently, its cultivation has been extended to some areas of Meghalaya, Sikkim, Arunachal Pradesh, Manipur and Nagaland. It is rich source of sugar, minerals such as phosphorus, potassium and calcium and vitamin 'C' and 'E'.

Cultivars

Allison, Abbott, Bruno, Hayward, Monty and Tomuri are the commercial cultivars. Cultivar Tomuri and Allison are used as pollinizers.



Soil and Climate

Deep, rich well drained sandy loam soil having pH less than 6 is ideal for Kiwi cultivation. The plants do not tolerate salty soils. Kiwi vines requires 700-800 chilling hours below 7°C to break the rest period during winter season. It can be grown up to 800-1500 msl

Pollination

Flowering starts from early May to June. Pollination is very important for kiwi since it is dioecious plant i.e. male and female flower are born on different plant. A ratio of 1 staminate: 6 pistillate plants should be maintained. Every third plant in alternate row should be a pollinizer (starninate). Tomuri or Allison are generally inter planted as pollinizer.

Propagation

The propagation through cuttings is most rapid and suitable method of multiplication. The cuttings 0.5-1 cm thick with relatively short internodes and 15-30 cm long are ideal. The cutting should be planted 6-8 cm apart in rows spaced at 12-15 cm in rooting media (consisting FYM, sand and soil in equal part). Cuttings are prepared during the dormant season (January-February) from the previous year summer growth.

Planting

Spacing For T- bar training system- 4 x 5 m

For pergola training system- 6 x6 m

December-January is ideal time for planting.

Training and pruning

Training of kiwi vine is very important. T-bar or pergola system is ideal for training. Pruning is an essential operation in kiwi cultivation because the fruits develop only on current season growth, arising from the buds developed in the previous year. Only basal 3-6 buds of the current season growth are productive. Pruning is done during the dormant season and it must be completed by mid February each year.

Manure and Fertilizer

Generally, a basal dose of 20 kg FYM, 500g NPK mixtures containing 15 % nitrogen is applied each year. After 5 years of age 800g N, 500g P₂O₅ and 800g K along with FYM 20kg per vine should be applied every year.

The fertilizer should be applied in 2 equal doses, half to two third in January-February and the rest after fruit set in April-May.

Insect/Pests

Polyphagus pests, viz. leaf roller, passion vine hopper and two-spotted mite may damage the crop. Application of systemic insecticide from bud burst to pea stage at 15-20 day intervals can reduce the loss.

Diseases

Major diseases are root rot or collar rot or crown rot. Soil drenching with Bordeaux mixture (1.0%) or Copper Oxychloride (0.25%) or Ridomil can be used to control the disease.

Harvesting and yield

Bearing starts at the age of 4-5 years. Fruit matures from October to December depending upon variety and climate. In Barapani condition it ripens in late November. The fruits are harvested when they are still hard, after 10-15 days storage at room temperature fruits become ready for table purpose. To make the fruit attractive, their surface hairs may be rubbed. An approximate yield of 60-120 kg/vine can be obtained from 7 year old vine.