

# **KIWI FRUIT**

**(A POTENTIAL COMMERCIAL FRUIT FOR MID AND LOW HILLS)**



## **Kiwi fruit at Fruit Research Station Upper Shillong.**

Cutting plants planted on : 09<sup>th</sup>. 06.1998  
First fruiting on : June 2002.  
Varieties : Monte, Allison and Abbot  
Grafted plants planted on : 28<sup>th</sup>. 06.2000.  
First fruiting on : June 2002.  
Varieties : Monte, Allison, Hayward and Abbot.

### **ORIGIN:-**

The Kiwi fruit (*Actinidia deliciosa* also known as Chinese Gooseberry ) is native to China and centre of origin is in the mountain ranges of South Western China where it occurs naturally as a deciduous fruiting vine. Interestingly some seeds of Chinese gooseberry i.e. Kiwi fruit were introduced in New Zealand in the beginning of 20<sup>th</sup> Century from China. New Zealand nurserymen realizing its potential as a new crop, developed cultivars and standardized its cultural practices. In 1940 about 400 ha of Kiwi were under commercial cultivation which produced about 2100 tonnes of fruit in New Zealand. Since then there has been a steady increase in plantation and production and at present Kiwi fruit industry is best developed in New Zealand.

### **Adaptability:-**

The Kiwi fruit vine grows well between 900 to 1600 m above mean sea level wherever the climate is warm and humid. This fruit can be successfully grown in Jammu and Kashmir, Himachal Pradesh, Assam, Meghalaya, Nagaland, Mizoram and hills of Tripura. The plant will grow under moderate and high rainfall conditions. The strong wind and frost during growing periods are however injurious to the plants. A rainfall of about 150 cm is sufficient for Kiwi fruit growing. The summer temperature should not go beyond 35<sup>0</sup> otherwise the fruits are injured by sun burn. A deep friable sandy loam soil, well drained and supplied with irrigation is the best for growing Kiwi fruit vines.

### **High Nutritive and Medicinal Value:-**

The fruit is highly acclaimed for its nutritive and medicinal value. It is rich source of Vitamin C and E (twice that of orange and more than Guava, Tomato, and Avocado) and low in calories. It has more fibre than most breakfast cereals. It is rich source of sugar which are mainly glucose and fructose and several minerals such as phosphorus, potassium and calcium. Potassium contents are high i.e. second only to banana but with 40% of calories. In brief Kiwi fruit hold a wealth of health giving property.

### **Precocity and High Yields:-**

This fruit begins bearing sizeable crop at an early age of 4 and 5 years. A plant on an average, yields 50-80 kg fruit in Himachal conditions. There is no crop failure in this fruit crop.

### **Marketability:-**

Depending upon elevation, it ripens from October to December which is lean period for other fruits in the market of India. Hard fruit of Kiwi can be transported to long distances without using sophisticated packing. The fruit can be stored for one month at room temperature and for 4-5 months in cold storage at 0 degree which make it possible to supply for a long period to the market without creating a glut.

### **About the Fruit:-**

The Kiwi fruit is unique in many ways. While most other fruits are attractive in appearance, it is dull brown in colour similar to Sapota. The flesh in cross section is however very beautiful and attractive. It is light green in colour and the seeds are soft and small. The fruit is delicate and the flavour is like strawberry, rhubarb and gooseberry. A ripe fruit has a refreshing, delicate flavour with pleasing aroma and high nutritive value. It is mostly eaten as a fresh fruit or combined with other fruits in salads and desserts. The fruit has a wide variety of uses. It can be eaten fresh, dry, frozen, canned, converted into juices or purees, used for wine and liquor production etc.

### **Planting and Pollination:-**

The vines are generally trained on T-Bar system of training. The support to the structure should be durable for the life span of the vine. The planting is done in late winter or early spring. Distance from plant to plant is 6m x 4m. Male and female flowers are borne on different plants. One male is planted for every 9 female plants for pollination. Insect pollination is therefore necessary for the production of marketable fruits. Flowering begins after 2-3 years of planting but sizeable crops are borne after 4-5 years.

### **Nutrition:-**

20 kgs of FYM coupled with 0.5 kg of NPK fertilizer. Moisture containing 15% N be applied in two dressing for each year age of vine. Half to third in January and February and balance after fruit set in April – May.

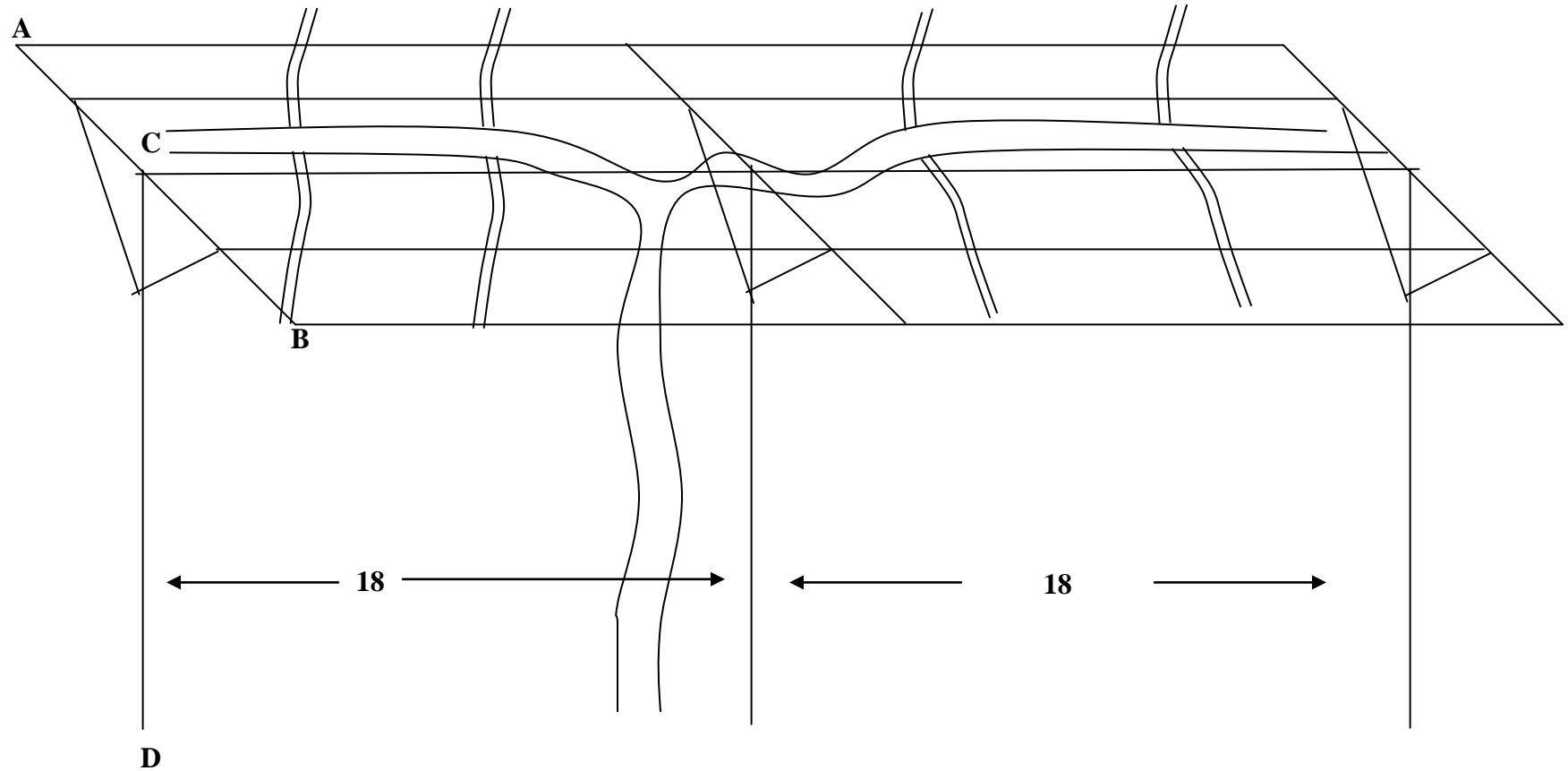
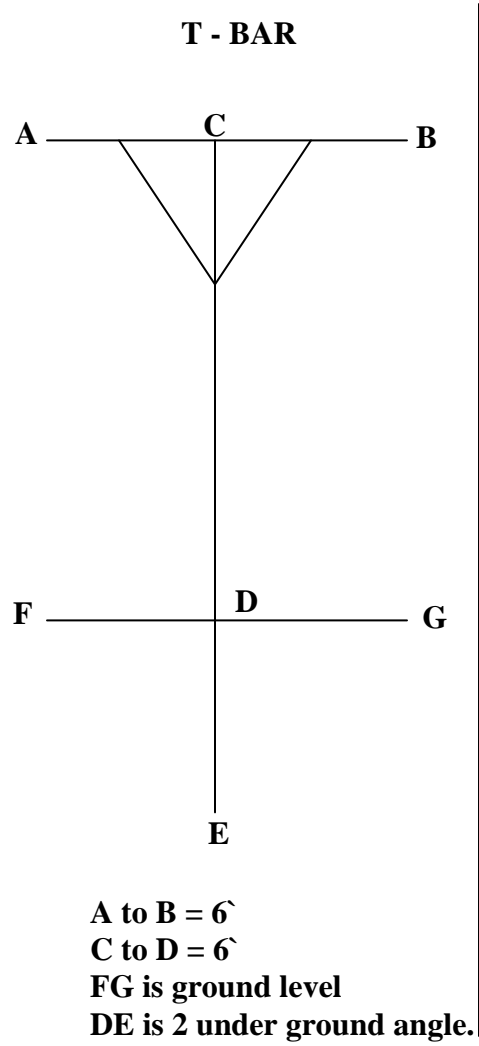
### **Irrigation:-**

Irrigation is very important for the successful establishment of a Kiwi fruit orchard to meet the requirement of vine during first 2-3 years of planting. After this, foliage cover the entire surface area of soil and act as mulch and reduces the need of irrigation. During dry season, frequent irrigation are needed for this fruit vine.

### **Maturity and Harvesting:-**

For obtaining optimum quality and maximum storage life the fruit should be harvested when they have attained atleast 6.2 T.SS and are still hard. The delay in harvesting also deteriorates storability.

# LAYOUT OF "KIWI FRUIT" GARDEN



**From Vine to Vine = 18''**  
**Row to Row = 12''**