Kiwifruit, (Chinese gooseberry) nutritional fact sheet
Refuse: 14% (Skin)

Nutrient	Units	Value per 100 grams
aproximates		
Water	g	83.05
Energy	kcal	61
Energy	kj	255
Protein	g	0.99
Total lipid (fat)	g	0.44
Ash	g	0.64
Carbohydrate, by difference	g	14.88
Fiber, total dietary	g	3.4
Minerals		
Calcium, Ca	mg	26
Iron, Fe	mg	0.41
Magnesium, Mg	mg	30
Phosphorus, P	mg	40
Potassium, K	mg	332
Sodium, Na	mg	5
Vitamins		
Vitamin C, total ascorbic acid	mg	75.0
Thiamin	mg	0.020
Riboflavin	mg	0.050
Niacin	mg	0.500
Vitamin B-12	mcg	0.00
Vitamin A, IU	IU	175
Vitamin A, RAE	mcg_RAE	9
Retinol	mcg	0
Lipids		
Cholesterol	mg	0

USDA National Nutrient Database for Standard Reference, Release 19 (2006)

Insects and diseases

Compared to other fruit types, kiwifruit has few insect pests. European red mite can build up in late summer in hot, dry areas. Scale insects and leaf rollers can also be pests.

Varieties

Female
Allison, Bruno, Monty, Hayward and Abbott

Male
Matua and Tomuri

Advantageous properties of Kiwifruit

It contains high vitamin C levels, evidently exceeding those of any citrus fruit.
It has a proteolytic enzyme that has meat tenderizer type properties.
It can survive for long periods after picking. After reaching full size, the fruit can take as long as two months to ripen but this can be speeded up by exposing them to ethylene gas which in a household situation can be achieved by keeping them enclosed with bananas or apples. They can be kept 4-6 months in cold storage. These long storage periods are particularly favourable to hill growers because they are so far from the main markets.

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Kiwifruit

(Actinidia deliciosa)

Cultivation in Sikkim


Kiwi fruit orchard


Male flower


Kiwi fruit


Female flower

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Kiwifruit

Actinidia deliciosa
Family- Actinidiaceae

Common names

Kiwifruit, Macaco monkey peach, the most common name in china, Chinese gooseberry.

Introduction

Kiwifruit plant is an actively growing vine of dioeciously nature (separate male and female plants) of humid subtropical region to most temperate climates. Due to good shelf life and less insect pest and diseases it's becoming popular in suitable pockets of mountainous region of India especially in the northeast. The plants need a long growing season (at least 240 frost-free days) which will not be hampered by late winter or early autumn freezes. When fully dormant they can withstand temperatures to about -12°C (and perhaps a bit lower.) However, they must acclimate to cold slowly and any sudden plunge in temperature may cause trunk splitting and subsequent damage to the vine. Late winter freezing temperatures will kill any exposed buds which limits the adaptable growing areas of kiwifruit.

Site Selection and Establishment

Kiwifruit vines will grow on a wide range of soils, from a sandy loam to a clay loam, as long as drainage is good. Although vines grow in soils with pH between 6.0 and 8.0, they do best in a deep, well-drained silt loam with a neutral pH (about 7.0). Plants will not tolerate heavy, poorly drained soils. When grown in sandy soils, they are susceptible to root-knot nematodes. When selecting a site for planting kiwifruit vines, consider air drainage, wind and water, minimum winter temperatures and number of hours of chilling expected. As with other fruit crops, it is best to avoid low-lying frost pockets. Plants are particularly susceptible to winter injury during their first 3 years.

Seedlings are planted at a spacing of 6x6 m in the month of Dec-Jan and frequent light irrigation is required after the planting.

Propagation

Since kiwifruit is a dioecious plant, it can be propagated only by vegetative means. Commonly hardwood cuttings of winter pruning are used for the propagation. Three node cuttings are taken for the commercial production of seedling. Seedlings from the seed can be used for the rootstock in grafting.

Cultural practices

Kiwifruit vines require a great deal of water. In hot summer weather, the vines' large leaves transpire water rapidly. In summer, newly planted vines in average soils should be watered deeply about once a week. Overhead sprinklers are often used in commercial kiwifruit vineyards for frost protection as well as irrigation (sprinkler heads should be about 3 feet above the training wire). One dose of manure and fertilizers should be applied just after fruit harvesting and other at the time of fruit setting i.e, April-May.

Pruning

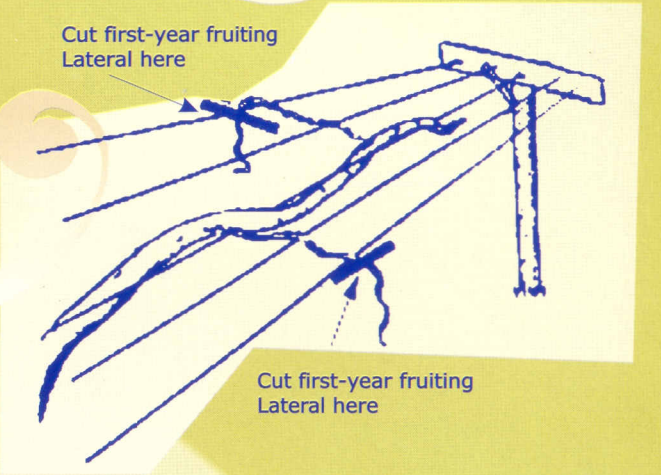
Two prunings are essential for the maintenance of the kiwifruit orchard. Winter pruning in the month of Dec-Jan at 5-6 node stage is most essential for the regulation of the flowering and another pruning in the month of July is essential to maintain proper vegetative growth of the orchard.

Training

The T-bar usually consists of an 8 to 10 foot wooden post (4 by 4 inch minimum thickness and pressure-treated with preservatives), firmly set (at least 2-1/2 feet deep) in the ground or concrete, with a 6-foot-long, 2 by 4 inch cross bar about 6 feet from the ground.

A third wooden piece is often added as a brace between T-bars, which are spaced 15 feet apart. Pulled, 8 to 10 gauge galvanized wires are strung between T-bars and are pulled taut. Attach the wires to a very sturdy end post or anchor them firmly to the ground or a building. Place T-bars no closer than 2 feet from the vines. The centre wire will support the main cordons, and the outer wires will support the fruiting laterals as described below. The following illustrations show a kiwifruit vine being trained to a T-bar trellis.

T-bar trellis system



Pollination

Kiwifruit plants are normally dioecious, meaning that individual plants are male or female. Only female plants bear fruit, and only when pollenized by a male plant. One male pollenizer is required be planted for each six to eight female vines.

Harvesting and storage

Mostly fruits ripe in the last week of October to the first week of November. Fruits can be stored up to three months at room temperature due to hairy fruit surface and less evaporation.