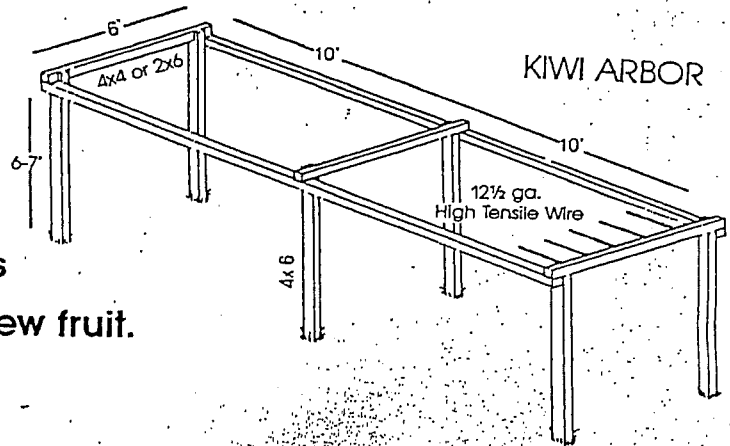


KIWI GROWING GUIDE

Kiwis are fun, rewarding, and easy to grow!

Beautiful vines with nutritious and delicious fruit, they need a strong arbor or trellis and annual pruning. Fertilizer and water are the remaining ingredients needed to begin enjoying this exciting new fruit.



VARIETIES

The **Fuzzy Kiwi** (*Actinidia deliciosa*) is a very vigorous vine hardy to about 0°F. The new **Issai** self-fertile Hardy Kiwi (*Actinidia arguta*) is a more compact vine and is hardy to about minus 25°F. While Issai fruit is smaller than that of the Fuzzy Kiwi, it is sweeter and with its smooth skin, can be eaten like a grape.

SITE SELECTION

The Fuzzy Kiwi and Issai prefer a location with at least 1/2 day of full sun. Kiwis grow well in both light and heavy soils so long as they are well drained.

SOIL PREPARATION & PLANTING

Fertile soil, high in organic matter is ideal for your Kiwis. Applying rotted manure or compost will help build up organic matter and fertility. When ready to plant, dig a hole large enough to accommodate the roots without crowding. Slow acting materials like bone meal, seaweed meal, and rotted manure can be mixed with the soil in the planting hole. Potted plants should be planted carefully so as not to disturb the roots. Rootbound potted plants, however, should have their roots pulled apart to some extent and spread to the sides of the hole. For all plants, **DO NOT LET THE ROOTS DRY OUT.** Kiwis should be planted at about the same level as they were grown in the nursery. After planting, soak the planting area to remove air from around the roots.

CAUTION: Young shoots and leaves can be injured by light frosts. During the first spring, protection from late frost is important and is helpful in future years. Cover the plant when frost threatens or turn on a sprinkler. Sprinkling will protect leaves to about 27°F.

FERTILIZER & IRRIGATION

Fuzzy Kiwis, in particular, can use large amounts of nitrogen to produce vigorous growth and abundant crops. After the first year they can use 1/2 lb. of nitrogen annually. After 4-5 years, this can be increased to 1 to 1 1/2 lbs. Issai should be happy with 1/2 to 3/4 of this amount. Spread the fertilizer, either organic or artificial, throughout the area of the vineyard to feed the Kiwis surface root system. Apply fertilizer before summer to avoid frost tender wood in the fall.

Kiwis are shallow rooted plants. They need regular irrigation during the summer. A deep watering once or twice a week should be sufficient. Avoid overwatering and hold back water in the fall to help harden plants for winter. Mulching a 2'-3' circle around the plants with straw, compost, or other organic materials helps conserve moisture and keep down weeds.

PRUNING & TRAINING

When planting, we recommend that you cut the plant back to about 1 ft. from the ground. Select a vigorous shoot to grow

rapidly to the top of the support. Gently tie this shoot to a stout post as it grows and later remove other less vigorous shoots. When the vine reaches the top of the support, tip it back, and allow two buds near the top to grow and train them along the support wires or beams. Tie them loosely with heavy string or plastic tape. These cordons form the basic structure of your plant.

By the end of the second season you should have a good framework established. Before spring, cut back the two cordons to 8-10 buds. These buds should produce your first fruiting spurs. Train the end bud to extend the cordon further along the trellis and prune it back the following spring to 8-10 buds to produce more fruiting spurs. Once the cordons have reached the limits of the support, regular pruning can begin.

Kiwis flower and bear fruit on wood that has grown from the previous seasons growth. Dormant pruning of female vines begins by heading back last years fruiting canes to 10-12 buds past the last fruit. After several years small weak wood should be heavily pruned to force new vigorous canes. Twisted, tangled, and broken canes should be removed as well as those crossing from one side of the plant to the other. Growth hanging to the ground should be pruned out or tied to the trellis. Excess fruiting spurs should be removed so that 8-12" separates each cane. As you prune your Kiwis, you will begin to get a feel for what should stay and what should be removed.

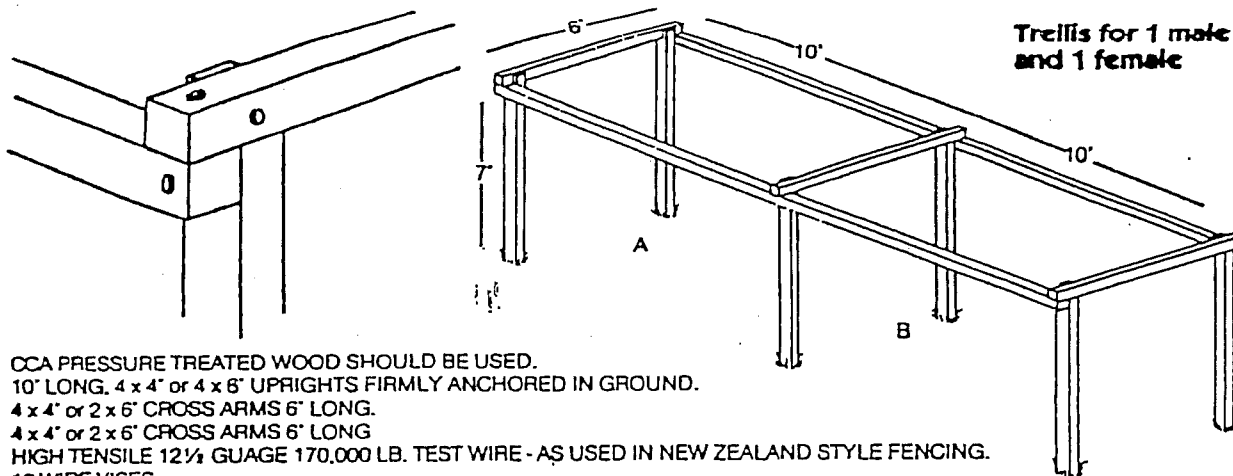
Male plants are treated somewhat differently. Since they are grown only for flowers, they need only about one fourth of the trellis space in a small planting. Males can be pruned more severely to control growth and avoid crowding the female vine. Heavier summer pruning is widely practiced with male plants.

CAUTION: Avoid pruning in early spring after the plant has begun growth. Excess bleeding can occur and damage to the plant may result.

WINTER CARE OF THE FUZZY KIWI

The biggest problem we have seen in growing the Fuzzy Kiwi in Western Oregon and Washington has been frost damage to the lower trunk. While the top of the plant is hardy to below 10°F when dormant, sunny weather with very cold nights can cause freeze damage to the lower portion of the trunk. In many cases, this damage is severe enough to girdle the plant, causing the death of the top. While plants often send up new shoots, the top growth is lost. To prevent this damage, wrap the lower 2-3' of trunk with insulating material, such as 1/4" closed cell foam. Mulch heavily around the base of the plant as well if severe weather threatens.

Trellis Construction Ideas



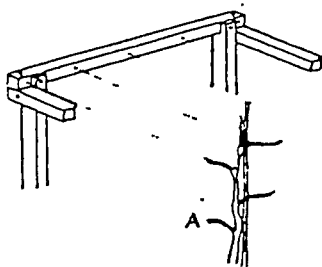
CCA PRESSURE TREATED WOOD SHOULD BE USED.
 10' LONG, 4 x 4" or 4 x 6" UPRIGHTS FIRMLY ANCHORED IN GROUND.
 4 x 4" or 2 x 6" CROSS ARMS 6' LONG.
 4 x 4" or 2 x 6" CROSS ARMS 6' LONG
 HIGH TENSILE 12 1/2 GAUGE 170,000 LB. TEST WIRE - AS USED IN NEW ZEALAND STYLE FENCING.
 10 WIRE VISES.

A. Male plant is given just 5 running feet of trellis.
 B. Female plant is given 15 running feet of trellis.

Pruning Details

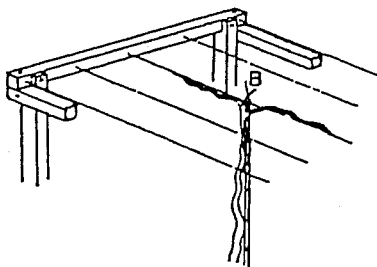
NOTE: YOUR PLANTS MAY GROW MORE RAPIDLY OR MORE SLOWLY THAN INDICATED HERE.

1st Season

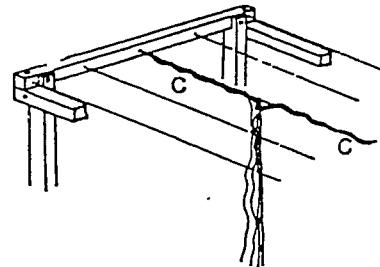


A. Head back side shoots to force top growth.

2nd Winter

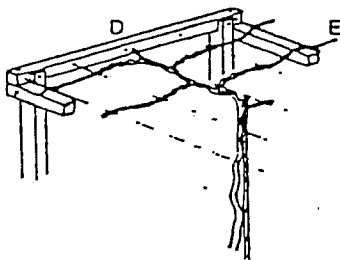


B. Head top growth when dormant to force cordons.



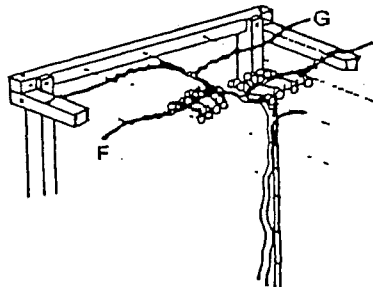
C. Head back cordons to 8-12 buds each to push fruiting canes.

3rd Season

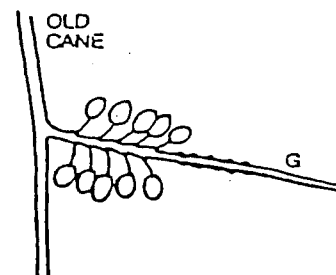


D. Train new growth on end of cordon along wire, to extend cordon.
 E. Growth of first fruiting cane.

3rd Winter



F. Head back canes to 8-12 unfruited buds for next years fruiting canes.



G. Head these NEW canes on extended cordon in winter for fruit next year.