

Table Grapes & Kiwi: Annual Care & Pruning

SJC Master Gardeners 2019

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Good for all fruit:	Specific to each kind of fruit:
<ul style="list-style-type: none"> - Full sun; 6-8hrs everyday. - Raised or mounded planting beds/rows. - No grass or weeds. - Well draining soil. - Mulch. - Drip irrigation only! 	<ul style="list-style-type: none"> - Proper pH. - Proper irrigation. - Proper fertilization. - Proper pruning. - Proper harvesting.

TABLE GRAPES

TERMINOLOGY	ESTABLISHMENT	CULTURAL CARE
<ul style="list-style-type: none"> - Trunk - Cane - Bud - Spur - Renewal spur - Cordon 	<ul style="list-style-type: none"> - Buy virus free plants. - Plant in full sun, 6-8hr/day or more. - Plant in spring. - 6-12' between plants. - Trellis: solid enough to support 22-35lbs per plant. 	<p>SOIL: pH 5.3-6.0, well draining, weed free. WATER: Keep young plants moist. Established plants need little/no water. FERTILITY: 10oz of 10-20-20 per vine in spring. POLLINATION: Self-fertile. MULCH: Compost and/or wood chips.</p>

Common Problems: Sunburn	Common Problems: Powdery Mildew	Common Problems: Botrytis	Common Problems: Creatures!
<ul style="list-style-type: none"> - Clusters are suddenly exposed to sun due to loss or removal of leaves during hot weather. - Avoid severe summer pruning. 	<ul style="list-style-type: none"> - Fungi can overwinter on bark, branches, and stems. - Not necessarily related to wet weather. - Plant in full sun. - Plant in an area with good airflow. - Prune well in winter/summer to increase heat and sunlight. - Remove infected leaves early. - Sulphur spray during growing season can be helpful. 	<ul style="list-style-type: none"> - Disease is promoted by a warm, moist environment. - Avoid overhead irrigation and late watering. - Prune to maintain an open canopy. 	<ul style="list-style-type: none"> - Birds, squirrels, deer, dogs, neighbors, kids! - Netting vines and/fences effective to protect against creature damage.

PRUNING	PRUNING & TRAINING
<ul style="list-style-type: none"> - Only use clean, sharp tools! - Clean tools with 70% rubbing alcohol: Apply then wait 10 seconds. Clean between every plant. Clean between diseased cuts. - Keep tools sharp – I can show you how! - Keep tools well oiled. Use machine oil. 	<ul style="list-style-type: none"> - Grapes fruit on new growth coming off one year old growth. - Single downward hanging canopy = easiest for home gardens. - Use SPUR or CANE pruning technique. - In winter remove 90% of growth from previous season.

Spur Prune: Winter	Cane Prune: Winter
<p>European varieties and most wine grapes.</p> <p>Few table grapes:</p> <ul style="list-style-type: none"> - Flame - Early Muscat <p>Prune 90% off leaving 2-3 buds on each new cane.</p>	<p>American and French hybrid varieties.</p> <p>Most table grapes.</p> <p>Prune 90% off leaving 2 canes of new growth.</p> <p>Each cane should have 40-80 buds.</p>

Whether you should SPUR or CANE prune depends on your specific variety.

When in doubt, CANE PRUNE!!

SUMMER PRUNING	VARIETIES	RECOMMENDED VARIETIES
<ul style="list-style-type: none"> - Shoot thinning: Remove all but most fruitful shoot. - 3-4' of new growth = enough for fruit set. - Leaf pulling: Remove leaves in fruiting zone. 	<ul style="list-style-type: none"> - The Pacific NW is well suited to table grape production. - Choose "early" varieties to avoid mildew/poor ripening. 	<u>Seedless Red Cultivars:</u> Einset, Canadice, Reliance <u>Seedless White/Green Cultivars:</u> Himrod, Interlaken <u>Seedless Blue/Black Cultivars:</u> Glenora, Venus, Concord (seeded varieties also)

KIWI: Fuzzy & Hardy

TERMINOLOGY	ESTABLISHMENT
<ul style="list-style-type: none"> - Dioecious = each kiwi plant has a distinct sex, either female or male. - One male plant has pollen for up to 6-10 female plants. - Trunk - Cordon - Lateral - Fruit Spurs 	<ul style="list-style-type: none"> - Plant in full sun. - Protect from cold/frost damage. - Some hardy kiwi varieties can fruit in part shade. - Build a sturdy trellis that can hold 100-200lbs of fruit set a year. - Trellis should be no taller than 6-8'. - Amend soil with compost prior to planting. - Plant 1 male plant for every 6-10 female plants. - Plant vines a minimum of 15' apart .

CULTURAL CARE	CULTURAL CARE
SOIL <ul style="list-style-type: none"> - pH 5.5-6.0 - Well draining - Weed free WATER <ul style="list-style-type: none"> - 2-3 inches water per vine per week. - 0.62 gallons per square foot to apply one inch of water. 	FERTILITY <ul style="list-style-type: none"> - No fertilizing at planting or during first year. - Apply N cautiously to avoid burning roots. - 0.4-0.8 oz actual N a year (depending on size). - Young vines: apply ¼ cup of 10-10-10 divided into in 3 parts in April, May, June. - Established vines: apply ½-1 cup of 10-10-10 divided into in 3 parts in April, May, June. <ul style="list-style-type: none"> - Use Ammonium nitrate or urea. - No chloride (KDI). - Do not fertilize after July 1.

CULTURAL CARE: Harvest	Common Problems: Spotted-Wing Drosophila	RECOMMENDED VARIETIES (most varieties do well)
<ul style="list-style-type: none"> - Kiwi ripen late Sept-Nov depending on location. - Pick when seeds are dark black and fruit is still firm for best storage. - Best flavor if fully ripened on the vine, but this can shorten storage time. - Store at 32F for 1-3 weeks. 	<ul style="list-style-type: none"> - Set out traps. - Use unpasteurized apple cider vinegar & a few drops dish soap. - Plant summer fruiting varieties reduces fall fruit set. 	FUZZY: Hayward (needs mild winters) Male HARDY: Ananasnaya "Anna" Issai (self-fertile) 74-49 Ken's Red Male (hardier than fuzzy male)

PRUNING & TRAINING	PRUNING & TRAINING
<ul style="list-style-type: none"> - Prune Fuzzy and Hardy Kiwi the same way. - REMINDER: Only use clean, sharp tools!! - Female Kiwi set fruit on first 12-24" of new growth & on fruit spurs. - Kiwi vines can grow 15-20' year! - Prune FEMALE vines every winter (approx. Dec-Jan): <ul style="list-style-type: none"> Prune 70% off the vine...mostly older canes. Leave 24" of new growth. Leave all fruiting spurs. 	For both FEMALE & MALE Kiwi vines: At Planting: Prune to one central vine that will become trunk. Year 1-2: Prune to keep one central trunk to reach to top of trellis. Year 2-4: Prune to create 2 cordons to cover trellis. Year 4-5: Prune to have 15-20 lateral canes coming off the 2 main cordons. Ongoing: Replace main cordon(s) every 3-4 years. <ul style="list-style-type: none"> - Prune MALE vines after flowering is done in summer (approx. late June). - Prune MALE the same way as FEMALE vines. - Pruning FEMALE vines too late in winter can result in weeping sap.

THANK YOU MASTER GARDENERS!

Works Cited:

Sustainable Gardening: The Oregon-Washington Master Gardener Handbook, Chapter 11 Berry Crops, pgs 223-270, EM 8742, OSU Extension Service, 2008

"Growing Kiwifruit", Strik, Bernadine, PNW Extension Publication, Oregon State University, U. of Idaho, Washington State University, Reprinted in April 2005.