

# Table Grapes & Kiwi: Annual Care & Pruning

SJC Master Gardeners 2019

Monica Maggio, Core Home Fruit

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

## TABLE GRAPES

TERMINOLOGY	ESTABLISHMENT	CULTURAL CARE
<ul style="list-style-type: none"> <li>- Trunk</li> <li>- Cane</li> <li>- Bud</li> <li>- Spur</li> <li>- Renewal spur</li> <li>- Cordon</li> </ul>	<ul style="list-style-type: none"> <li>- Buy virus free plants.</li> <li>- Plant in full sun, 6-8hr/day or more.</li> <li>- Plant in spring.</li> <li>- 6-12' between plants.</li> <li>- Trellis: solid enough to support 22-35lbs per plant.</li> </ul>	<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"> <li>- Clusters are suddenly exposed to sun due to loss or removal of leaves during hot weather.</li> <li>- Avoid severe summer pruning.</li> </ul>	<ul style="list-style-type: none"> <li>- Fungi can overwinter on bark, branches, and stems.</li> <li>- Not necessarily related to wet weather.</li> <li>- Plant in full sun.</li> <li>- Plant in an area with good airflow.</li> <li>- Prune well in winter/summer to increase heat and sunlight.</li> <li>- Remove infected leaves early.</li> <li>- Sulphur spray during growing season can be helpful.</li> </ul>	<ul style="list-style-type: none"> <li>- Disease is promoted by a warm, moist environment.</li> <li>- Avoid overhead irrigation and late watering.</li> <li>- Prune to maintain an open canopy.</li> </ul>	<ul style="list-style-type: none"> <li>- Birds, squirrels, deer, dogs, neighbors, kids!</li> <li>- Netting vines and/ fences effective to protect against creature damage.</li> </ul>

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

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"> <li>- Flame</li> <li>- Early Muscat</li> </ul> <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"> <li>- Shoot thinning: Remove all but most fruitful shoot.</li> <li>- 3-4' of new growth = enough for fruit set.</li> <li>- Leaf pulling: Remove leaves in fruiting zone.</li> </ul>	<ul style="list-style-type: none"> <li>- The Pacific NW is well suited to table grape production.</li> <li>- Choose "early" varieties to avoid mildew/poor ripening.</li> </ul>	<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"> <li>- Dioecious = each kiwi plant has a distinct sex, either female or male.</li> <li>- One male plant has pollen for up to 6-10 female plants.</li> <li>- Trunk</li> <li>- Cordon</li> <li>- Lateral</li> <li>- Fruit Spurs</li> </ul>	<ul style="list-style-type: none"> <li>- Plant in full sun.</li> <li>- Protect from cold/frost damage.</li> <li>- Some hardy kiwi varieties can fruit in part shade.</li> <li>- Build a sturdy trellis that can hold 100-200lbs of fruit set a year.</li> <li>- Trellis should be no taller than 6-8'.</li> <li>- Amend soil with compost prior to planting.</li> <li>- Plant 1 male plant for every 6-10 female plants.</li> <li>- Plant vines a minimum of 15' apart .</li> </ul>

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

CULTURAL CARE: Harvest	Common Problems: Spotted-Wing Drosophila	RECOMMENDED VARIETIES (most varieties do well)
<ul style="list-style-type: none"> <li>- Kiwi ripen late Sept-Nov depending on location.</li> <li>- Pick when seeds are dark black and fruit is still firm for best storage.</li> <li>- Best flavor if fully ripened on the vine, but this can shorten storage time.</li> <li>- Store at 32F for 1-3 weeks.</li> </ul>	<ul style="list-style-type: none"> <li>- Set out traps.</li> <li>- Use unpasteurized apple cider vinegar &amp; a few drops dish soap.</li> <li>- Plant summer fruiting varieties reduces fall fruit set.</li> </ul>	<b>FUZZY:</b> Hayward (needs mild winters) Male <b>HARDY:</b> 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"> <li>- Prune Fuzzy and Hardy Kiwi the same way.</li> <li>- REMINDER: Only use clean, sharp tools!!</li> <li>- Female Kiwi set fruit on first 12-24" of new growth &amp; on fruit spurs.</li> <li>- Kiwi vines can grow 15-20' year!</li> <li>- Prune FEMALE vines every winter (approx. Dec-Jan): <ul style="list-style-type: none"> <li>Prune 70% off the vine...mostly older canes.</li> <li>Leave 24" of new growth.</li> <li>Leave all fruiting spurs.</li> </ul> </li> </ul>	<b>For both FEMALE &amp; MALE Kiwi vines:</b> <b>At Planting:</b> Prune to one central vine that will become trunk. <b>Year 1-2:</b> Prune to keep one central trunk to reach to top of trellis. <b>Year 2-4:</b> Prune to create 2 cordons to cover trellis. <b>Year 4-5:</b> Prune to have 15-20 lateral canes coming off the 2 main cordons. <b>Ongoing:</b> Replace main cordon(s) every 3-4 years. <ul style="list-style-type: none"> <li>- Prune MALE vines after flowering is done in summer (approx. late June).</li> <li>- Prune MALE the same way as FEMALE vines.</li> <li>- Pruning FEMALE vines too late in winter can result in weeping sap.</li> </ul>

## 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.