### Garden Notes

#### Growing Grapes, Care of Young Plants

Young grape plants are easy to care for during the first year. Grape vines grow well in almost any soil type and require good drainage. Staking and minimal pruning will be necessary. Fertilizer may not be necessary, although spraying may be needed to protect the plant from disease. And, of course, water and sunshine are essential.

**Planting**

Select a spot that receives at least 6 hours of full sun each day. Dig a hole twice as wide as the pot diameter and a little deeper than the soil in the pot. Save the soil removed from the hole. Make a small mound of soil in the center of the hole. Remove the grape from the pot and unwind roots that circled inside the pot. Cut off damaged or broken roots. Place the grape on top of the mound, so that the plant is at the same depth as it was in the pot. Gently spread the roots out and around the mound. This directs the roots to grow outward and down instead of growing in a circle.

Do not add fertilizer or compost. Fill the hole with the soil that was removed when digging the hole. Using this soil encourages roots to grow out beyond the planting hole.

Place compost or mulch on top of the soil leaving 4 to 6 inches between the trunk and compost or mulch.

**Staking**

At planting time install a stake; inserting stakes later will disturb young roots. Metal t-posts at least 6 feet tall do not rot and are tall enough to allow for vine growth. Wood stakes or fences work until the wood rots. The plants and roots of mature plants are easily damaged when replacing stakes.

Your new plant shouldn’t need to be secured to the stake during the first year. If growth is vigorous and strong new shoots develop, use flexible material to tie the strongest one or two shoots to the stake to encourage straight growth.

**Watering**

Water well after planting. Monitor the soil closely for water needs, particularly when planting during the summer. Check for moisture by sticking your finger in the soil or by digging carefully down into the soil a few inches from the vine. Water if the soil feels dry. Drooping leaves, especially in the morning or evening, may indicate the need for water.

When roots push into the soil the plant will need water two or three times a week in the heat of the summer, and less in the spring and fall. Rain is usually enough to sustain the plant in winter. While grapes grow well with most kinds of irrigation, drip is preferred, in part because it keeps the canopy drier than sprinkler irrigation.

**Fertilizing**

Grapes adapt to a wide variety of soils and rarely need fertilizer. The lack of or excess nitrogen may sometimes occur. Symptoms of a nitrogen deficiency may include slow growth, stunting, or yellow-green leaves (chlorosis), especially in the older leaves on your vine. Excess nitrogen causes
excessive growth and a dark green leaf color. For more information about fertilizing grapes if a deficiency is detected, refer to the Resources section below.

PRUNING AND TRAINING
The goal is to select the most vigorous shoot to become a strong, straight trunk. If first-year growth is weak (i.e., smaller than pencil diameter), wait until late winter to prune the strongest cane back to two buds. Remove all other growth. Tie emerging shoots loosely to the stake as they grow. Cane or spur pruning (depending on the grape variety) begins in the next year or two.

DISEASE MANAGEMENT
Powdery mildew is common wherever grapes are grown. Caused by a fungus, it does not require wet or humid weather to spread quickly. It grows best in temperatures between 70º and 85ºF and stops growing when temperatures reach 95ºF or more for several hours a day. The disease is of less concern before the plant starts to produce, but requires control later if a quality crop is expected.

Prevention is the first defense against powdery mildew. In addition to planting your grape in full sun, don’t overwater, and apply nitrogen fertilizer sparingly. The second defense against powdery mildew is spraying with a substance that kills fungus (fungicide). It is safe to assume all buds are infected when spring temperatures reach 70ºF for 6 or more hours per day, 3 days in a row. As soon as temperatures reach this point, start applying wettable sulfur or an oil-based fungicide (available at garden centers) mixed with water and apply regularly thereafter. Continue spraying until daytime temperatures reach 95ºF for 10 hours each day. Always follow instructions on the fungicide label. Special care is needed when applying both sulfur and oil.

FRUIT
Young grape plants typically produce little to no fruit during their first two growing seasons. If they do produce fruit, pinch off the clusters to direct plant energy to root and shoot growth. Do not let vines overbear in subsequent seasons.

RESOURCES
• UCCE Master Gardeners of Sacramento County: 916-876-5338, sacmg.ucanr.edu
• Fair Oaks Horticulture Center (FOHC), 11549 Fair Oaks Boulevard, Fair Oaks, CA, 95628. sacmg.ucanr.edu/Fair_Oaks_Horticulture_Center/
  View event schedule, FOHC project area information and guidance on growing grapes.
  Grapes: sacmg.ucanr.edu/Growing_table_grapes/
  Vineyard: sacmg.ucanr.edu/Vineyard/
• Guidelines for the Home Vineyard, EHN 97: sacmg.ucanr.edu/files/163138.pdf
• UC Integrated Pest Management website: ipm.ucanr.edu/
  Grapes: ipm.ucanr.edu/PMG/GARDEN/FRUIT/grapes.html
  Powdery Mildew on Fruits and Berries: ipm.ucanr.edu/PMG/PESTNOTES/pn7494.html
• Fertilizing grapes: cagardenweb.ucanr.edu/Growing_Grapes_in_the_California_Garden/?uid=9&ds=436