



Muscat Blanc

Synonyms

The official French name is Muscat à petits grains, which means simply “Muscat with small berries.” In California, the name Muscat Canelli is common, which is a modification of Moscato di Canelli, a geographical derivation used in Italy. Other names that reference a district where the grapes are grown include Moscato d’Asti in Italy and Muscat de Frontignan in France. Muscat blanc in California describes the white-fruited selection that is almost exclusively grown here.

Source

Likely a native of Greece, Muscat blanc has been cultivated on the edge of the Mediterranean Sea since ancient times. The Romans probably brought the first vines to Narbonne, France, where they became a notable variety in places such as Frontignan. It remains an important variety in Italy for sparkling and dessert wines, and it is widely grown throughout Europe and the New World. The three color variants of the variety—white, rosé, and red—are the result of mutations of berry skin color. The white form predominates in Europe as well as California. It was brought to California in the 1850s from nurseries in New England, where it was grown as a hothouse table grape. It is now grown in widely differing districts in California, owing to its use as dessert wine in warm districts and light, sweet table wines in the cooler districts.

Description

Clusters: medium; cylindrical to conical, well-filled to compact; medium peduncles.

Berries: medium; round; yellow and oily brown at maturity.

Leaves: medium; mostly 3-lobed to almost entire with reduced lateral sinuses; closed U-shaped petiolar sinus; sharp, saw-like teeth; lower leaf surface glabrous.

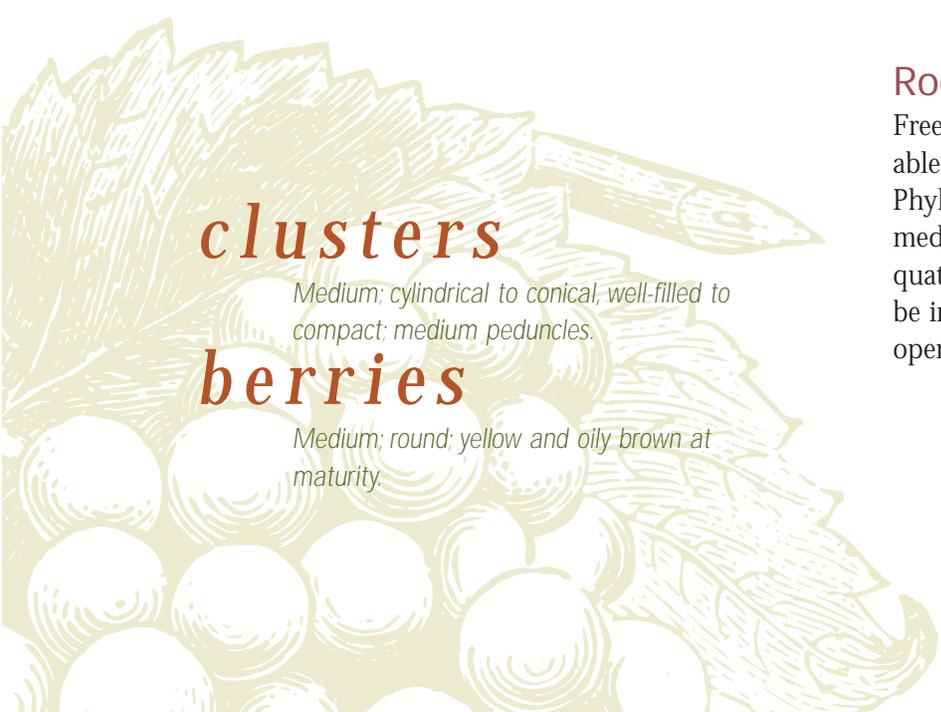
Shoot tips: downy tips; young leaves bronze-red and shiny.

Growth and Soil Adaptability

The vine is moderately vigorous on medium- to fine-textured soils—sandy loams to clay loams—when grown on its own roots in the San Joaquin Valley. Vigor is poor on sandy soils. In-row vine spacing is 6 or 7 feet, and row width spacing can be 8 to 10 feet for conventional equipment.

Rootstocks

Freedom, Harmony, and Ramsey are suitable rootstocks in nematode-prone sites. Phylloxera-resistant rootstocks should be of medium to high vigor to produce an adequate canopy. Otherwise, vine growth may be insufficient, resulting in an excessively open, sparse canopy.



clusters

Medium; cylindrical to conical, well-filled to compact; medium peduncles.

berries

Medium; round; yellow and oily brown at maturity.

Clones

Muscat blanc FPS 01 and 02 (both 64-day heat treatments), are the most widely distributed selections in California, along with other commercial wood sources. Clonal studies show that selections FPS 03 and 04, introductions from Milan, produce more and smaller clusters with fewer and smaller berries and less rot. The Milan selections also demonstrate the largest harvest yields of comparable fruit composition. Of these four tested selections, 04 is recommended for new plantings due to its greatest cluster numbers and much less bunch rot (50 percent less in a trial at the UC Kearney Agricultural Center than selection 02). Selection 04 fruit maturation was also earlier than that of selection 03 in that study. No California evaluation data is available for the new selections Muscat blanc 05 (Rauscedo VCR 3) and 06 (Milan, Italy). Muscat blanc ENTAV-INRA® 453 is available as a California registered selection.

Production

Production is usually 6 to 9 tons per acre. On good soils, yields of 10 to 12 tons per acre have been reported.

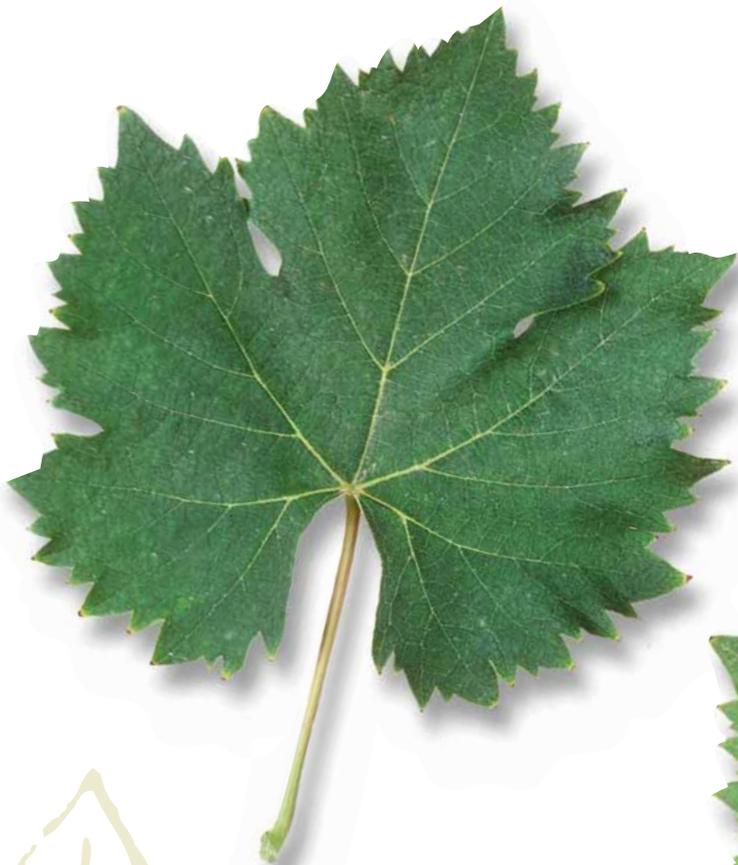
Harvest

Period: One of the earliest varieties, harvested in mid-August to mid-September.

Method: The short and occasionally woody peduncles make hand harvest difficult and require knives or shears for cluster removal. Canopy shaking results in medium-hard harvestability and heavy juicing. Trunk shaking results in medium harvestability and medium juicing. Fruit is mostly removed as single berries.

Training and Pruning

Muscat blanc is most commonly trained to bilateral cordons and pruned to 12 to 18 two-node spurs. Retaining low node numbers may limit cluster numbers unnecessarily and contribute to very compact clusters that are prone to bunch rot. Some very vigorous vineyards are head trained and cane pruned to assure adequate yield and to reduce bunch rot with more loose clusters. Mechanical hedge, non-selective pruning is an alternative to cane pruning.



leaves

Medium; mostly 3-lobed to almost entire with reduced lateral sinuses; closed U-shaped petiolar sinus; sharp, saw-like teeth; lower leaf surface glabrous.

shoot tips

Downy tips; young leaves bronze-red and shiny.

Trellising and Canopy Management

San Joaquin Valley vineyards can be trellised as a single-curtain with a single foliar support wire above the cordon wire. In coastal areas, vertical-shoot-positioned trellising would be appropriate for low to moderate vine vigor. The canopy tends to be moderately open because of its semi-erect shoot growth, with small to medium leaves and limited lateral shoot development. Most of the clusters will receive some direct sunlight in average canopies without leaf removal. Additional vertical foliar support and leaf removal may be warranted for bunch rot control. Excessive cluster exposure and sunburn can be a problem in weaker vines.

Insect and Disease Problems

Muscat blanc is very susceptible to powdery mildew, Botrytis bunch rot, and sour bunch rot. Bunch rot in new plantings may be lower with certain clones. On sandy soils, high nematode populations can further reduce vine vigor, especially on own-rooted plants.



Other Cultural Characteristics

Fully exposed berries will bronze or amber. Fruit will raisin if left on the vines past midseason. Fruit can be attractive to bees, wasps, and birds.

Winery Use

Muscat blanc is mostly used to produce quality, sweet, and light, muscat-type varietal wines, some of which are sparkling. These are commonly produced through cold fermentation and minimum skin contact. It is also used for dessert wines and to blend for added fruitiness.

—L. Peter Christensen