Chenin Blanc

Synonyms
Chenin is the official name in France, where it is commonly called Pineau de la Loire, and, less often, Pineau d’Anjou. In South Africa it is commonly called Steen.

Source
Chenin blanc is an old variety from Anjou, France, known to have been growing there since 845 AD and then spreading to neighboring areas. It is a leading variety of the middle Loire region where it is used to produce dry and natural sweet table wines as well as sparkling wines. It did not emerge in California until after World War II when some North Coast wineries acquired vines from the collection at UC Davis for premium table wine production. Acreage expanded rapidly in the 1970s, peaked in the early 1980s, and has since declined. Now it is mostly grown in moderately warm coastal valleys, the Sacramento and San Joaquin Delta, and the San Joaquin Valley for the production of table and sparkling wines.

Description
Clusters: medium to large; long conical, compact, often winged; short to medium peduncles.
Berries: medium; oval, yellow-green.
Leaves: medium; 3- to 5-lobed with U-shaped petiolar sinus; inferior lateral sinuses often shallow; short teeth; moderately dense hair on lower leaf surface; leaf veins near the petiolar junction pink-red and noticeable on upper surface.
Shoot tips: felty white; dense hair on young leaves makes them appear cream-white.

Growth and Soil Adaptability
Vines are very vigorous when grown on their own roots in medium- to fine-textured soils (sandy loam to clay loam); they show poor vigor on very sandy soils. Vines are more vigorous than Chardonnay but less vigorous than Sauvignon blanc and Colombard. The vines leaf out early and have a spreading growth habit. Recommended in-row spacing is 6 feet in poor soils or in coastal regions and 7 feet in good soils or in Central Valley regions.

Rootstocks
Chenin blanc has no known incompatibilities. Freedom and Harmony rootstocks are used in the San Joaquin Valley for nematode resistance. Since the failure of AXR #1, experience with phylloxera-resistant rootstocks in California is very limited.

Clones
Registered selections in California have been limited to selections from regional commercial vineyards. Chenin blanc FPS 02, 03, and 04 were derived from FPS 01 using heat therapy. FPS 05 was established from a different California vineyard. A comparative trial demonstrated that Chenin blanc FPS 04 was the most productive, followed closely by selection 01. Selection 05 should not be planted because of its higher bunch rot potential (75 percent increase over FPS Chenin blanc 01 and 04), which is due to small, very compact clusters—in spite of its smaller berries. No differences were shown in sensory analysis of experimental wine lots.
from these clonal trials. The discovery of a loose-clustered, virus-free clone would benefit this variety.

Production
A consistent producer, Chenin blanc usually yields 8 to 11 tons in the Central Valley and 5 to 8 tons per acre in coastal regions.

Harvest
Period: Chenin blanc is a midseason variety, but harvest is practiced early (mid-August to mid-September) in the San Joaquin Valley due to a greater bunch rot potential. Harvest is mid-September to mid-October in the coastal valleys.

Method: Clusters have thick, short to medium-long peduncles, which require the use of knives or shears to hand harvest. Canopy shakers result in medium harvestability and medium juicing. The fruit is mostly removed as single berries with some cluster parts. Trunk shakers are considered the best harvesting method for this variety. They result in easy to medium harvestability, medium juicing, but less than with rod-type canopy shaker. Fruit is removed as single berries and cluster parts as well as some whole clusters. Fewer rotten clusters are removed with trunk shakers.

Training and Pruning
Chenin blanc is mostly trained to a bilateral cordon and pruned to 12 to 16 two-node spurs. Additional numbers of spurs may be needed for large vines and to minimize tight clusters by increasing cluster numbers. Cane pruning reduces bunch rot potential with less compact clusters but increases the cost of pruning and tying.

The variety is quite fruitful and the closely spaced nodes on spurs easily contribute to high node numbers at pruning. This characteristic makes it less suitable to machine hedge pruning that can delay fruit maturation, the result of overcropping.

Leaves
Medium; 3- to 5-lobed with U-shaped petiolar sinus; inferior lateral sinus often shallow; short teeth; moderately dense hair on lower leaf surface; leaf veins near the petiolar junction pink-red and noticeable on upper surface.
Trellising and Canopy Management
Leaf removal from the cluster region after veraison may reduce bunch rot potential. Cluster exposure may be facilitated with vertical-shoot-positioned systems when using single and divided canopy systems.

Insect and Disease Problems
Tight clusters can contribute to bunch rot. Problems may be minimized by early deficit irrigation before harvest, increasing cluster numbers by retaining more buds at pruning, and cluster exposure with leaf removal. Pre-bloom gibberellin “stretch” spray application to elongate the cluster stem structure has been practiced by growers to reduce bunch rot. The practice is currently limited to those receiving a Special Local Need label permit from California Department of Food and Agriculture. Growers should be aware that excessive gibberellin rates or improper application can reduce current season’s yield as well as return bud fruitfulness the following season. Bloom-time and pre-bunch-closure fungicide sprays may help reduce Botrytis bunch rot. In some years during cool weather, large numbers of flower thrips may retard early shoot growth. The variety is somewhat tolerant of Pierce’s disease and very susceptible to Eutypa dieback.

Other Cultural Characteristics
Three- or four-year-old vines tend to overproduce; shoot and cluster thinning at this age is often needed. Shoots adhere firmly and are not easily blown off by high winds in the spring, a reason for this variety’s popularity in South Africa. Chenin blanc has moderately good acid level, attaining its best balance of sugar and acid in the cool to moderately warm growing regions.

Winery Use
Chenin blanc is used to produce quality, well-balanced table wines, usually under a varietal label. Coastal wines are usually moderately distinct and fruity in character. It produces some very good sparkling wines and can be used for natural sweet wines in cool districts.

— L. Peter Christensen