



Syrah

Synonyms

Sirah, Syra, Schiras, Sirac, Syrac, and Petite Syras are used in France. It is called Shiraz in Australia and South Africa. In California, Syrah is not to be confused with “Petite Sirah” plantings, which are mostly of Durif (a hybrid of Peloursin and Syrah) but have included Peloursin and true Syrah.

Source

The true origin of Syrah has been shown through DNA testing to be a cross between two French varieties, Dureza and Mondeuse Blanche. Dureza is an obscure black variety and Mondeuse Blanche is a minor white variety, both of Rhône origin. Previous myths of origin included the Middle East (Shiraz, Persia); Roman importation into Gaul; Syracuse (Sicily); and Syrah Island, Greece. Syrah has been known in the Rhône Valley of France for many centuries where it has recently had a resurgence of popularity. Only 3,300 acres remained in 1958, but by the mid-1990s, plantings in southern France had increased to more than 86,000 acres. It is classified as recommended in the Rhône Valley, Provence, Languedoc, and southwest France; it is used in the production of AOC wines such as those of Hermitage, Cotes-du-Rhône, and Coteaux du Languedoc. The second largest plantings are in Australia where it is the leading red wine variety. Significant plantings also exist in South Africa and South America. Interest in the variety did not become widespread in California until

the 1980s. It is now grown in a wide range of districts from the Central Valley and Sierra foothills to all but the coolest coastal districts.

Description

Clusters: medium; long cylindrical, loose to well-filled; very long peduncles causing the clusters to hang free from the canes.

Berries: small to medium; oval; blue-black; tend to shrivel when ripe.

Leaves: medium; mostly 3- to 5-lobed with reduced inferior lateral sinuses; U- to lyre-shaped petiolar sinus; short, sharp teeth; leaf surface occasionally bullate and puckered near petiole junction; tufted hair on lower leaf surface.

Shoot tips: felty with rose margin; young leaves yellowish with bronze highlights.

Growth and Soil Adaptability

Syrah is a very vigorous variety with a spreading growth habit and a tendency to produce long, trailing shoots. Growth can be excessive on deep, fertile soils and with high-vigor rootstocks. Recommended in-row spacing is 6 to 8 feet; suitable row middle spacing is 8 to 10 feet for bilateral cordon training and 11 to 12 feet for quadrilateral cordon training. Budbreak is fairly late.

Rootstocks

Freedom, Harmony, and Ramsey are suitable for nematode-prone sites if care is taken to match rootstock vigor to soil type, vine spacing, and trellis system. Drought-tolerant, phylloxera-resistant rootstocks should



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be used to minimize the fruit's tendency to shrivel during the latter stages of ripening. Good results have been experienced with 110R, 101-14 Mgt, and Kober 5BB. Suitable yields and vine growth have been seen with 3309C, SO4, and Schwarzmann.

Clones

The most widely distributed clonal material in California came from Australia as "Shiraz." It has been registered as virus tested in a series of numbered selections—Shiraz FPS 01 through 07—subclones that differ only on the length of their heat treatment. All of these selections have shown good viticultural and fruiting characteristics.

Other selections imported from France are adding to clonal diversity. Syrah FPS 04 (French 300), 05 (French 174), 06 (French 100), and 07 (French 877) are all available as generic clonal selections and registered stock. Syrah ENTAV-INRA[®] 525 is available as California certified stock. Syrah ENTAV-INRA[®] 99, 100, 174, 300, 388, 470, 471, and 877 are all available in the trademark program.

Production

Syrah's yield potential is medium, usually 7 to 11 tons per acre, due to its relatively small berries, medium clusters, and low fruitfulness of basal buds.

Harvest

Period: A midseason variety, usually ripening in mid-September in the San Joaquin Valley, late September in the Sierra foothills, and late September to mid-October in the coastal districts.

Method: Hand harvest is moderately easy due to the long, green peduncles, but heavy growth can interfere, and the removal of numerous lightweight clusters is time-consuming. Canopy shaking results in easy to medium harvestability, mostly as single berries and some whole clusters and cluster parts, and with light to medium juicing. Trunk shaking results in easy to medium harvestability, mostly as single berries and some whole clusters, and with light juicing. Berry shriveling of ripe fruit reduces harvestability with any harvester.

Training and Pruning

Bilateral cordon training is most common with pruning to 8 to 20 spurs, depending on vine size. Higher-node numbers are sometimes used in highly vigorous vines. Syrah responds well to machine-hedge pruning with increased yields and little or no delay in fruit maturation. The method retains all nodes within the box configuration of the spur zone. Quadrilateral cordon



leaves

Medium; mostly 3- to 5-lobed with reduced inferior lateral sinuses; U- to lyre-shaped petiolar sinus; short, sharp teeth; leaf surface occasionally bullate and puckered near petiole junction; tufted hair on lower leaf surface.



shoot tips

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training with 20 to 30 spurs has been shown to be a favorable system to spread the vine canopy and fruiting zone in highly vigorous vineyards. Minimal pruning (no pruning except for canopy bottom) has been widely used in Australia, but lower berry skin anthocyanin content may occur.

Trellising and Canopy Management

Vigorously growing shoots are subject to wind breakage in the early spring. A foliar catch wire with bilateral cordons will reduce damage. High-vigor vineyards develop large canopies that respond favorably to horizontal quadrilateral systems such as GDC. It is not well suited to vertical-shoot-positioned systems in high-vigor sites due to the rapid growth of its long shoots. The trailing, downward growth from high cordons at 50 to 60 inches tends to moderate the rapid growth. VSP systems are suitable in cool districts or low-vigor sites.

Insect and Disease Problems

Syrah is moderately susceptible to powdery mildew, Phomopsis cane and leaf spot, and Pierce's disease. It has low susceptibility to sour rot except in highly vigorous, young vineyards where clusters may be very compact. Botrytis shoot blight and cluster blight from early spring rain can be a problem. It is not sensitive to Botrytis bunch rot from late season rains.

Other Cultural Characteristics

Berry shrivel is common at the latter stages of ripening, often beginning at 21 to 22° Brix. This contributes to increased soluble solids but declining harvest weight and increased difficulty of machine harvest. Therefore, harvest must be timely as the grapes reach optimum maturity. Phloem flow of water and solutes into berries is apparently impeded once they reach maximum weight. Thus, berry weight loss and soluble solids concentration are the result of berry transpiration.



Syrah is susceptible to lime-induced chlorosis and “spring fever,” a springtime nitrogen metabolism disorder that occurs during fluctuating warm and cool periods during rapid shoot growth before bloom. Basal leaves will fade in green color from the edges to between the primary and secondary veins. This is often accompanied by a border of red to purplish pigmentation and marginal leaf burn. The symptoms are associated with elevated levels of putrescine, a polyamine, although they are sometimes mistakenly diagnosed as potassium deficiency. It is a seasonal, non-debilitating phenomenon; there are no known preventative measures.

Winery Use

A versatile variety, Syrah is well adapted to a wide range of viticultural temperature regions, winery uses, and wine styles. Used to produce varietal table wines of distinct character in the cooler districts, it also has demonstrated high potential for red table wine production in the warmer districts, including the San Joaquin Valley. It has good blending qualities for deep color and not overly tannic, fruity aromas, producing popular blends such as Cabernet Sauvignon-Shiraz, an Australian conception, as well as traditional Rhône blends. Dessert wine potential is high, with Australian Port-type wines as good precedents.

—L. Peter Christensen