



Petite Pearl

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Petite Pearl gets its name from its shiny blue-black berries. It is grown in 25 US states and 4 provinces in Canada. It was released in 2009 by Tom Plocher. This red wine grape variety stands out for its hardiness, late budbreak, and ease of management in the vineyard, as well as excellent qualities for red wine—moderate acidity, good balance, and aromatic complexity.

Fruit Characteristics:

Petite Pearl produces clusters between 85 to 180 grams. Petite Pearl wine has aromas of blueberry, cherry, or plum fruits and hints of anise, almond, mint, cassis, “forest floor”, depending on yeast selection and ripeness. The flavor profile features moderate acidity, good structure, and soft tannins.



Hardiness:

Consistent winter hardiness over many years, although injured at Zone 4a and 3b sites during the 2014 Polar Vortex winter and after the -38F cold event in January 2019. A good choice for Zone 4b sites and on good sites in Zone 4a.

Good early winter hardiness. Was not injured by the November 2014 sub-zero (-12F) cold snap, nor the mid-December 2016 cold event (-22F on 17 Dec. in Hugo, MN).

Excellent late winter hardiness. No injury after the February 2021 cold spell that culminated with a low of -32F on 15 February in Hugo, MN. Also, holds dormancy well during late winter warm spells, such as the record warm spell + freeze in March 2012 that caused trunk injury to many varieties.

Vigor:

Petite Pearl has moderate vigor, with the most vigorous growth on loam or clay-loam soils or irrigated sandy-loam soils. Plant vines at 5 to 6 ft. spacing. Widely adaptable to different soil types and alkalinity, from 6.0-8.0.

Bud Break and Harvest Timing:

Bud break occurs 10-12 days later than Marquette. It is generally harvested in late September in southern Minnesota, about 1-2 weeks after Marquette. This usually corresponds to about 2600 Degree Days (F) of heat.



Harvest Parameters:

Harvest Petite Pearl between 22 to 24 brix, and between 3.35 to 3.50 pH. The titratable acidity target for Petite Pearl is between 0.65 to 0.8 g/L.

Training Systems:

Petite Pearl should be grown on Single High Wire (HW) to take advantage of its naturally drooping growth habit and to minimize the amount of shoot positioning work.

Buds and Clusters per Vine:

Petite Pearl typically develops 2-3 clusters per shoot. Clusters generally weigh between 85g to 180g (ave. 100g). As vines mature, expect yields of 4-5 tons per vine. It can be harvested mechanically. Petite Pearl also is quite fruitful on secondary buds if the primary buds are damaged.

Pruning and Canopy Management:

When spur pruning, maintain 5-6 buds per linear foot of cordon, aiming for a total of 25-30 buds total. Shoot thin to 1 to 2 shoots per spur, alternating between 1 and 2.

Petite Pearl vines have very little lateral or secondary shoot growth. That, combined with shoots that droop down from a high wire, gives the fruit quite good natural exposure to the sun. The shoots must be combed down a few times after fruit set, but then will droop on their own. On more vigorous sites, some fruit zone leaf removal might be beneficial. Use strong renewal canes to establish new cordons. With buds spaced 3 inches apart, you may establish an entire 3-foot cordon in one season if the wood remains pencil-diameter. As with other varieties, prune back to healthy, pencil-diameter wood when establishing new cordons, and avoid using bull canes.

Pest Susceptibility:

Petite Pearl is quite resistant to Downy and Powdery Mildew. Some susceptibility to Black Rot in more humid regions like the Northeast, Mid-Atlantic and parts of the Midwest. A nominal well-timed spray program (two pre- and two post-bloom sprays), provides good Black Rot control on Petite Pearl. The variety has, occasionally, shown symptoms of Phomopsis under very wet conditions. It is preventable with well-timed pre-bloom sprays.