

Rootstock	Vitis parentage	Phylloxera resistance	Nematode Resistance		Tolerance				Influence on scion		Soil adaptation	Ease of propagation	Other characteristics
			Root knot	Dagger ( <i>Xiphinema index</i> )	Drought	Wet soil	Salinity	Lime	Vigor	Mineral nutrition <sup>1</sup>			
Riparia Gloire	riparia	High	Low	Med.	Low	Low	Med.	Low	Low–med.	N, P: low K, Mg: low–med.	Deep, well-drained, fertile, moist soils	High	Early maturation; scions tend to overbear
St. George ( <i>Rupestris du lot</i> )	rupestris	High	Low	Low	Low–med. in shallow soils; high in deep soils	Low–med.	Med.–high	Med.	High	N: high P: low on low-P soils, high on high-P soils K: high	Deep soils	High	Fruit set problems with some scions; latent virus tolerant
SO4 (Selection Oppenheim)	berlandieri × riparia	High	Med.–high	Low–med.	Low–med.	Med.–high	Low–med.	Med.	Low–med.	N: low–med. P: med. K: med.–high Mg: med.	Moist, clay soils	Med.	Noted as a cool-region rootstock
5BB (Kober)	berlandieri × riparia	High	Med.–high	Med.	Med.	Low	Med.	Med.–high	Med.	N: med.–high P, K, Zn: med. Ca, Mg: med.–high	Moist, clay soils	High	Susceptible to phytophthora root rot; adapted to high-vigor varieties
5C (Teleki)	berlandieri × riparia	High	Med.–high	Low–med.	Low	Low–med.	Med.	Med.	Low–med.	N: low P, K: med. Mg: med.–high Zn: low–med.	Moist, clay soils	High	—
420A (Millardet et de Grasset)	berlandieri × riparia	High	Med.	Low	Med.	Low–med.	Low	Med.–high	Low	N, P, K: low Mg: med. Zn: low–med.	Fine-textured, fertile soils	Med.	Scions tend to overbear when young
99R (Richter)	berlandieri × rupestris	High	Med.–high	Low–med.	Med.–high	Low	Med.	Med.	Med.–high	P: med. K: high Mg: med.	Tolerant of acid soil	Med.	Young scions may develop slowly
110R (Richter)	berlandieri × rupestris	High	Low–med.	Low	High	Low–med.	Med.	Med.	Med.	N: med. P: high K: low–med. Mg, Zn: med.	Hillside soils; acid soils	Low–med.	Develops slowly in wet soils

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140Ru (Ruggeri)	berlandieri × rupestris	High	Low-med.	Low	High	Low	Med.-high	Med.-high	High	N: med.-high P, Mg: high K: low	Adapted to drought and acid soils	Med.	Does poorly in non-irrigated, low K soils
1103P (Paulsen)	berlandieri × rupestris	High	Med.-high	Low	Med.-high	Med.-high	Med.	Med.	Med.-high	N: med.-high P, Mg: high K, Zn: low-med.	Adapted to drought and saline soils	High	—
3309C (Couderc)	riparia × rupestris	High	Low	Low	Low-med.	Low-med.	Low-med.	Low-med.	Low-med.	N: med.-high P, Ca: low K, Mg, Zn: med.	Deep soils	High	Sensitive to latent viruses; tolerant of cold injury
101-14 Mgt (Millardet et de Grasset)	riparia × rupestris	High	Med.-high	Med.	Low-med.	Med.	Med.	Low-med.	Med.	N, K: med.-high P, Mg, Ca: low Zn: med.	Moist, clay soils	High	—
Schwarzmann	riparia × rupestris	High	Med.	High	Med.	Med.	Med.-high	Med.	Med.	N, P: med. K: med.-high Mg: low	Moist, deep soils	High	—
44-53M (Malègue)	riparia × (cordifolia × rupestris)	High	Low	—	High	—	—	Low-med.	Med.	N: low-med. P, Mg, Ca: low K: high	High Mg soils	High	Readily Mg deficient in low Mg soils
1616C (Couderc)	longii × riparia	High	High	Med.	Low	High	Med.-high	Low-med.	Low	N: low K: med.-high	Best on fertile, med.- to fine-textured soils	High	Poor on low-vigor sites; tolerates wet soils
Salt Creek (Ramsey)	champinii	High	High	Low-med.	Med.-high	Low-med.	High	Med.	High	N, P: high K: med.-high Zn, Mn: low	Sandy, infertile	Low	Tolerant to Phytophthora
Dogridge	champinii	Med.	Med.-high	Low-med.	Med.	Low-med.	Med.-high	Med.	Very high	N, P: high K: med. Zn: low	Very sandy, infertile	Low	Promotes excess vigor, poor fruit set
Harmony	1613 (solonis × Othello) × Dogridge	Low-med. <sup>2</sup>	Med.-high	Med.-high	Low-med.	Low	Low-med.	Med.	Med.-high	N: low P: med. K: high Zn: low-med.	Sandy loams and loamy sands	High	—
Freedom	1613 (solonis × Othello) × Dogridge	Low-med. <sup>2</sup>	High	High	Med.	Low	Low-med.	Med.	High	N, P, K: high Mg: med. Zn, Mn: low	Sandy to sandy loams	Med.-high	Sensitive to latent viruses
O39-16	vinifera × rotundifolia	High	Low	High	Low	—	Low	Low	High	N, K: high P: low-med. Zn: low	Poor on coarse, sandy soils due to low root knot nematode tolerance	Very low	Tolerant of fanleaf virus