

		Maturity &		Nematode resist. and toler.			Phylloxera	Lime	Drought	Crown gall	Phytophthora	Comments	03-05 yield	03-06 yield	nursery
Rootstock	Vitis Parentage	Veg cycle	Vigor	Rootknot	Dagger	Root lesion	resistance	tolerance	tolerance	resistance	root rot susc.		Cab. Franc	Chardonnay	status
Most vinifera	vinifera	varies	varies	low, i	low, i	low, i	low	varies	varies	sus, l	low	alkalinity tolerant, Chardonnay was 0.5 brix lower than grafted		5.8	
Ramsey (Salt Cr.)	champinii	late, 4	High-ex high	High, t	low, i	high, t	mod, high	mod-high	mod-high	mod/tol	low-high	Iron chlorosis toler., high N & K, suited to sandy soils, but adaptable to almost any, susc. To Zn def.			
V. Champinii imparts cotton root rot resistance, unknown for hybrids											Cotton	tolerates mod. wetness and salinity, hard to propagate. Moderate resistance to Armillaria root rot.			
Dog Ridge	champinii	late, 4	High-Ex high	high t	low, i	m-h, t	mod, high	low-mod	L, M, H	res	mod/Cotton	High N, K, & juice pH, suckers, wetness and salt tolerance, good for low vigor scion in sandy soils.			
Freedom	champinii x 1613	late, 4?	high	High, t	high,	mod,	high	mod?	mod	res	mod-high?	High N & K, suited to sandy soils, but does well in loams. Most resistant to Armillaria.		8.6	2
Harmony	"	late, 4?	mod-high	mh, in	ml, in	low, i	mod, low	mod	mod	res	mod-high?	suited to medium and sandy soils. High K uptake, reduced N.			others better
RS-3	riparia x rupestris x champinii		mod-high	high	mod-high	mod-high	high?	mod?	mod?	high?	mod-high?	Highly recommended, but not widely tested. Less K uptake and			1
(Ramsey x Schwar.)				also mod.	Resistant to ring nematode							vigor than Ramsey but similar resistance and tolerances. Reported to bring balance to the vine in med. Texture soils.			
RS-9	"		low	High	High	High						Coarse textured soils, not widely tested			2
Riparia Gloire	riparia	early, 1	low-mod	low	mod	na	high	low	low	mod-high		well drained deep, moist, fertile loams, improves set, often overcrops. Low N, susc to Armillaria			
Schwarzmann	riparia x rupestris	mid, 1	low-mod	high, t	high, t	low	high	mod-high	low-mod	high	high	suited to deep moist soils, tends to overbear, mod high salt			others better
												and some wetness toler. high K and low Mg passed to fruit			
3309C	"	mid, 2	mod	low, in	mod, t	mod,	high	mod	low-mod	res	low-v. high	suited to deep soils, some wetness tolerance, improves set, susc.		6	6.2
												to Armillaria, low K, sensitive to acid soils			1
3306C	"	mid?, 2?	mod	low-mod, in	low-mod, in	mod	high	mod	low-mod		low-mod	suited to moist fine textured soils, resistant to M. arenaria (Peanut), less vigor than 3309			
101-14	"	early, 1	low-mod	mod-high, ir	low-mod, in	mod	high	mod	low-mod	res	low-mod	suited to mod-deep clays, tolerates wetness and mod. salinity, high N & K, improves set., low juice pH.			1
44-53M	" x cordifolia	mid, 2	mod-high	low	mod	mod	mod, high	low-mod	mod-high		vhigh	suited to high Mg soils & tol. Mod. acid., has high K. Tendency to overbear.			
Boerner	" x cinerea		mod	high	high		high	low							
99R	berlandieri x rupestris	mid, 4	mod-high	mod-high	low-mod	low-mod	mod, high	mod	high	low	mod-high	wide range of mod. And well drained soils (including acid), good constant ylds. High K.			
110R	"	m/l, 1	low-mod	mod, i	low, i	low,	high	mod	very high	sus	mod	low juice pH, suited to dryland and hills, high yields, Mod. Res. to Arm.		8.3	1
140R	"	m/l, 2	mod-vhigh	High	low	low	high	high	very high	mod	mod	high yielder, wide variety of infertile/dry soils, tolerates salinity, low pH		9	1
1103P	"	m/l, 4	mod	mod-high	low-mod	mod	high	mod	high	mod	high	tolerant of wetness, salinity, and low pH, suited to clay so		8.3	7.2
				Can have high vigor if planted in deep fertile soils								Had some (roots) submersed in a bucket over 2 weeks and 56% survived			
St. George	rupestris	late, 4	mod-vhigh	low, in	low, i	mod,	mod-high	mod	mod		high	better on deep well drained soil, but not good w/ shy bearers (High N)			others better
Susceptible to oak root fungus												(e.g., pinot noir, chardonnay or merlot), high K.	7.7	10.1	
5BBK	berlandieri x riparia	mid, 2	mod-high	high, t	low, in	low,	high	mod	low-mod	res	low	Suited to fertile clay loams in cool areas,		8	others better
												some cot. root rot resistance, susc. to Armillaria, High K and pH. Both 5BB & 5C have low-mod. wetness tol. And give low pH			
5A	"	early, 2?	high	mod			high	mod	low			Genetically identical to 5BB, probably an early maturing vigorous clone.			others better
5C	"	mid, 3	mod	mod	low-mod	mod	high	mod	low-mod	low-mod	low	Suited to deep fertile C loams. Good for var. w/ poor set (low N) and ripens wood. Selected from 5A.			others better
SO4	"	mid, 2	mod	Mod, t	sus, in	sus	high	mod	low-mod	mod	low-mod	Suited to irrig. soils and var. with poor set. Good wood ripening, & some acid tolerance			others better
420A	"	early, 2	low-mod	mod, i	low	low	high	mod	mod		low	Suited to poor clayey soils. Shorter veg. cycle. Overbear when young. Low N & K.			others better
125AA	"	mid?, 4	Mod-high					mod-high	mod-high	high		Dense soils w/ poor drainage, & high yielders but not var. w/ irregular set. Mod. Tol. Of acid. High N			
1616C	acerifolia x riparia	mid, 4	low	High, t	mod, in	?	mod, high	low-mod	low		good	suited to fertile soils, tolerates wetness and salinity, reduced N, high K.			2
1613C	" x vinifera x labrusca		mod	mod, i	mod, t	low, i	mod	low	low-mod			suited to moist fertile sandy/sandy loam soils, tolerates wetness and salinity			others better
VR039-16	" x rotundifolia	m/l	high	low	Vhigh		high	low	low			tolerant of fanleaf virus, and acid soils, High N & K. susc to Armillaria			
8909-05	rotundifolia x rupestris		mod-high	vhigh	vhigh	vhigh	high					still in testing, PD resistant, not cold hardy			
9365-43	complex x (Dog rid. x Riparia)		mod	high	high	high	high	Vhigh?	vhigh?			", Moderate ring nem. Resist.			3
9365-85	roftomen. X dog x riparia		mod-high	high	high	high	high					", lower nematode res. Than 43, but more vigorous			3
9407-14	complex x (Ramsey x Riparia)		low-mod	high	high	high	high					Not widely tested			3
ES 15-53												", Adds 10+ degrees of cold hardiness to scion, still in testing			3
Fercal	berlandieri x columbard			med	med	med	high	Vhigh	low-med			favors fruitset, tolerates some wetness, still in testing			Not recommended
Gravesac	161-49c x 3309c	2		low	low	low	high	mod	mod			tolerates some wetness, bred for acid soils			
Minn 1095												Adds cold hardiness, still in testing			
Vegetative cycle 1= shortest 4= longest															
The general consensus is that most rootstocks impart some cold hardiness to most vinifera varieties. However, some can impart excessive vigor and reduce cold hardiness. Some rootstocks can even delay budbreak.															

