

Table 1. Wine Grape Species

Grape Species	Common Names	Cultivars and Hybrids	Native to	Climatic/pest considerations	Additional Information
<i>Vitis vinifera</i>	European Grape, Vinifera grape	Many	Asia Minor	Widely planted in western US, but on hybrid rootstocks, as <i>V. vinifera</i> rootstocks are susceptible to phylloxera. Generally not as cold hardy as native <i>V. labrusca</i> grapes, so less widely planted in the Northeast. Vinifera grapes can be generally characterized as requiring a long growing season, relatively high summer temperatures, low humidity, a ripening season free of rainfall, and mild winter temperatures.	
<i>Vitis rotundifolia</i> , (Please note that some authorities place this species in a separate genus, <i>Muscadinia</i> .) also: <i>Vitis acerifolia</i> (Le Conte), <i>Vitis angulata</i> (Le Conte), <i>Vitis callosa</i> , <i>Vitis cordifolia</i> , <i>Vitis hyemalis</i> , <i>Vitis incisa</i> (Rafinesque), <i>Vitis muscadina</i> (Rafinesque), <i>Vitis mustangensis</i> , <i>Vitis peltata</i> (Rafinesque), <i>Vitis rotundifolia</i> Flowers, <i>Vitis rotundifolia Scuppernong</i> , <i>Vitis taurina</i> (Bartram), <i>Vitis verrucosa</i> (Muhlenberg), and <i>Vitis vulpina</i> (Linnaeus).	Arkansas Grape, Big White Grape, Black Grape, Bull Grape, Bullace Grape, Bullet Grape, Bullit Grape, Bush Grape, Bushy Grape, Currant Grape, Flowers Grape, Green Muscadine, Hickman's Grape, Muscadine Grape, Muscadinia Rotundifolia, Mustang Grape, Roanoke Grape, Scuppernong Grape, Southern Fox Grape, Warty Grape, White Grape, White Muscadine, White Musky Grape, and Yellow Muscadine	Black Beauty, Black Fry, Bountiful, Carlos, Chief, Cowart, Darlene, Dearing, Delight, Dixie, Doreen, Florida Fry, Fry, Higgins, Hunt, Ison, Janebell, Janet, Jumbo, Loomis, Magnolia, Nesbitt, Noble, Pineapple, Regale, Scuppernong, Sterling, Summit, Supreme, Sweet Jenny, Tara, Tarheel, and Triumph	Southern Delaware to southern Illinois, south by southwest to northeastern Texas, south to the Gulf, and east to the Atlantic.	Adapted to humid southeast. Lacks frost hardness and can be injured by minimum winter temps of 0 degrees F. Should avoid growing in areas that often have 10 degree F temps. It is most abundant on sandy, well-drained bottom lands and along river banks and in swamps, thick woodlands and thickets. They tolerate hot summers but do not withstand drought and do not adapt well to semi-arid conditions. Satisfactory growth in warmer grape growing areas of Washington, California and Oregon. Nearly immune to phylloxera, Pierce's disease and nematodes.	Because of its resistance to many pests, <i>V. rotundifolia</i> would be the ideal rootstock candidate for Vinifera grafts were it not for the fact that it will rarely accept a graft from any but its own species. Some authorities consider that this species (along with the related <i>V. munsoniana</i> ) should be in a different genus, due to a number of morphological differences (not to mention that <i>V. rotundifolia</i> has a different number of chromosomes (n=20) than other Vitas species (n=19). California Rare Fruit Growers website provides much information about planting and care of this species, as well as a listing of the various cultivars and their characteristics: <a href="http://www.crfg.org/pubs/ff/muscadinegrape.html">www.crfg.org/pubs/ff/muscadinegrape.html</a> . Also, Jack Keller's website has a wealth of information on this species: <a href="http://winemaking.jackkeller.net/rotundif.asp">http://winemaking.jackkeller.net/rotundif.asp</a>
<i>Vitis labrusca</i> , also: <i>Vitis blandii</i> (Prince), <i>Vitis canina</i> , <i>Vitis catawba</i> (Hort.), <i>Vitis ferruginea</i> , <i>Vitis labrusca alexandrer</i> , <i>Vitis labrusca champion</i> , <i>Vitis labrusca var. subeden tata</i> (Fernald), <i>Vitis labrusca var. typica</i> (Regel), <i>Vitis latifolia</i> , <i>Vitis luteola</i> , <i>Vitis sylvestris virginiana</i> (Bauh), <i>Vitis taurina</i> (Walter), <i>Vitis vinifera sylvestris americana</i> (Pluk), and <i>Vitis vulpina</i> (Marshall)	Alexander Grape, Alexandria Grape, Beaconsfield Grape, Black Cape Grape, Black Champion, Black Fox Grape, Black Grape, Buck Grape, Cape Grape, Champion Grape, Clifton's Constantia Grape, Clifton's Lombardia Grape, Columbian Grape, Constantia Grape, Early Champion Grape, Farker's Grape, Fox Grape, Frost Grape, Madeira of York Grape, Northern Muscadine Grape, Plum Grape, Rothrock Grape, Rothrock of Prince Grape, Schuykill Muscadel, Schuykill Muscadine, Skunk Grape, Springmill Constantia Grape, Swamp Grape, Talmam's Seedling Grape, Tasker's Grape, Tolman, Vevay Grape, Winne Grape, and York Lisbon Grape	Alexander, Catawba, Champion, Concord (80% of <i>V. labrusca</i> production), Delaware, Niagara, Lakemont, Reliance, and Himrod	Northeast and east of US.	Nearly immune to phylloxera. <i>Vitis labrusca</i> has long been used as rootstock for <i>V. vinifera</i> grafts and for development of hardy hybrids.	Tougher skin than European grapes. Deep purple in color. Major use is for sweet grape juice (Welch's) and associated products—jelly, jam, preserves, some wine.

Grapes grow all over North America, except in the most extreme desert and tundra. North America is home to more than half of the world's 50 or so species of grapes. Various authorities recognize between 19 and 29 species of native North American grape. Table 1 lists the four American grape species used in wine production: *V. rotundifolia*, *V. labrusca*, *V. aestivalis*, and *V. riparia*. Please note, however, that except for *Vitis rotundifolia* and *Vitis munsoniana*, these "species" readily hybridize, resulting in a situation where one species' traits and range overlap with another (or several others!). Some areas may have two or more species co-existing and with the various permutations of hybrid offspring possible, identification becomes difficult. This is why there are so many names listed under "Grape Species"—some authorities described "new" grape species that had already been described by others under a different name. (Table adapted from: Winemaking Homepage, Jack Keller, 2005. <http://winemaking.jackkeller.net/natives.asp>)

Table 1. Wine Grape Species (continued)

Grape Species	Common Names	Cultivars and Hybrids	Native to	Climatic/pest considerations	Additional Information
<i>Vitis aestivalis</i> (Munson), also: <i>Vitis nortonii</i> , <i>Vitis lincecumii</i> , <i>Vitis bicolor</i> . The later two are considered varieties of <i>V. aestivalis</i>	Cynthiana Grape, Arkansas Grape, Norton Grape, Norton Virginia Grape, Norton's Seedling Grape, Norton's Virginia Seedling Grape, and Red River Grape	Norton, Cynthiana, America		Tolerant of Pierce's Disease. (Rombough, 2002)	Dormant cuttings of this species do not root well and this trait is commonly passed on to hybrids (an exception is the hybrid America, a cross with <i>V. rupestris</i> , which roots readily from dormant cuttings). Green cuttings will root on mist benches (Rombough, 2002). This grape can make an excellent red wine that can compete in quality with that made from vinifera grapes.
<i>Vitis riparia</i> , also: <i>Vitis amara</i> , <i>Vitis boulderensis</i> , <i>Vitis callosa</i> (Le Conte), <i>Vitis canadensis acceris folio</i> (Tournefort), <i>Vitis colombina</i> , <i>Vitis concolor</i> , <i>Vitis cordifolia</i> (Darlington), <i>Vitis cordifolia riparia</i> (Torr. et Gray), <i>Vitis cordifolia var. Riparia</i> (Gray), <i>Vitis cordifolia var. culpina</i> (Eaton), <i>Vitis dimidiata</i> (Le Conte), <i>Vitis hyemalis</i> (Le Conte), <i>Vitis illinoensis</i> (Prince), <i>Vitis incisa</i> (Planchon), <i>Vitis intermedia</i> (Nuttall), <i>Vitis missouriensis</i> (Prince), <i>Vitis montana</i> , <i>Vitis odoratissima</i> (Donn.), <i>Vitis odoratissima</i> (Pursh), <i>Vitis palmata</i> (Vahl), <i>Vitis populifolia</i> , <i>Vitis riparia var. palmata</i> (Planchon), <i>Vitis riparia var. praecox</i> (Englemann), <i>Vitis rubra</i> (Desf.), <i>Vitis serotina</i> (Bartram), <i>Vitis tenuifolia</i> (Le Conte), <i>Vitis virginiana</i> (Hort.), <i>Vitis virginiana</i> (Poir), <i>Vitis virginiana sylvestris</i> (Parkins), <i>Vitis virginiana</i> (de Juss), <i>Vitis vulpina</i> (Linnaeus), <i>Vitis vulpina var. praecox</i> (Bailey), <i>Vitis vulpina var. riparia</i> (Regel), and <i>Vitis vulpina var. syrt.</i> (Fernald and Weigand).	Bermuda Vine, Frost Grape, June Grape, Maple Leaved Canadian Grape, Mignonne Vine, River Grape, Riverside Grape, Riverbank Grape, Scented Grape, Sweet-Scented Grape, Uferrebe Grape, and Vignes des Battures	The better rootstocks in France have been given varietal names such as Riparia Gloire, Riparia Grand Glaire, Riparia Scribner, Riparia Martin and others. There are no American or Canadian counterparts to these French varieties.	Riparia is the most widely distributed of any American species of grape. It is found in New Brunswick and northern Quebec to Manitoba and Montana, south to Tennessee, northern Texas, Colorado, and Utah, and from the Atlantic to the Rockies in all areas in between.	It is known to withstand temperatures to -60 degrees F., is moderately drought resistant when naturalized to such conditions, and is found along the banks of streams, in ravines, on the islands of rivers, and in wet places. It is very resistant to phylloxera. It is less resistant to rot than <i>Aestivalis</i> , but somewhat more resistant than <i>Labrusca</i> . The foliage is rarely attacked by mildew, but is susceptible to the leaf-hopper.	Riparia grows readily from cuttings and makes a good stock for grafting, where the union with other species is usually permanent. Native Riparias are early bloomers but late ripeners, and their fruit is best for wine when left on the vine until over-ripe and even slightly shriveled.
<i>Vitis rupestris</i> , also: <i>Vitis populi foliis</i> (Lindh.), <i>Vitis rupestris var. dissecta</i> (Eggert), and <i>Vitis vinifera var. rupestris</i> (Kuntze).	Beach Grape, Bush Grape, Currant Grape, Felsenrebe Grape, Ingar Grape, July Grape, Mountain Grape, Rock Grape, Sand Grape, and Sugar Grape	Cultivated French rootstocks are variously known as Rupestris Mission, Rupestris do Lot, Rupestris Ganzin, Rupestris Martin, Rupestris St. George, and other names. These have no American counterparts other than simple Rupestris.	Southern Missouri to Kentucky, western Tennessee, Arkansas, Oklahoma, eastern and central Texas to the Rio Grande, westward into New Mexico. Wild stands in Pennsylvania, Delaware and Washington, D.C. are probably due to escaped cultivars.	Rupestris is remarkably resistant to phylloxera. Its propensity to put down deep rather than lateral roots make it especially suited to dry, rocky soils on southern slopes.	Rupestris bench-grafts well but is less successful in field grafts. It is not widely cultivated in the United States as rootstock and its own fruit are unprofitable. It is considered drought-resistant, but not if the land dries out deeply. It was widely and successfully used in France as grafting rootstock where deep roots were desired.

A note about French Hybrids: Seibel is the common name for a number of *Vitis vinifera* hybrids that have been introduced over the years in a quest to develop climate tolerant grape varieties that are resistant to rot, mildew and phylloxera. Some of these, notably the bunch rot resistant Chambourcin, were widely planted in France in the 1970s. However, stringent European Union rules forbidding the blending of hybrids in traditional wine varieties have led to their disappearance from most European vineyards. Nonetheless, several hybrids have found acceptance as wine grapes in the Eastern United States, Canada and England, including the dark-skinned Chambourcin (Noir), Chancellor (Seibel 7053), Chelois, and Vignoles (Ravat 51). Widespread light-skinned hybrids include Seyval Blanc, Vidal Blanc and Villard Blanc. Seyval Blanc is in fact so widely planted in parts of the Eastern United States that it is sometimes referred to as "Indiana Chardonnay." It is also quite widespread in England. (from: *Grapes, Wines, and Vines*, Bella Vista Ranch webpage, 1999. <http://members.aol.com/bellavue/grapes.html>)