Grapevine

The most common grape in the Mediterranean region is *Vitis vinifera*, one of many types of grape that are native to the northern hemisphere, including Asia and North America. Only *Vitis vinifera* is native to Europe. *Vitis vinifera* is the type grown for wine-making, table grapes, and raisins (dried grapes). The grape vine grows quickly and can climb onto trees or grape arbors as high as 16 to 20 meters. From its stem, tendrils extend to anchor the vine as it climbs. It has large leaves in the shape of a hand, 9 to 28 centimeters wide. The leaves are used to make stuffed grape leaves, a Mediterranean delicacy. Grape vines flower and produce bunches of round fruits (berries). A grape vine can take several years to produce, and live from 50-70 years, but there are vines known to be over 120 years old.

Wild grapes grow today from the Atlantic seacoast to the Himalayan mountains. Grapes are among the oldest domesticated fruits, with evidence of seeds from 4500 BCE on Cyprus, in the city of Jericho, and other sites around 3200 BCE. Evidence of wine production in Egypt from hieroglyphics and tomb paintings dates to approximately 2400 BCE. Wine and olive oil were products traded most often by sea on Mediterranean trade routes.

Grapes contain 15% to 25% sugars (including glucose, fructose and a small amount of sucrose). Grapes contain vitamin C, tartaric acid, and malic acid. The pigments responsible for coloring grapes have antioxidant properties that may prevent some diseases.

*Vitis vinifera* was cultivated in the Middle East by 4000 BCE, and probably earlier. Egyptian records dating from 2500 BCE refer to grapes for making wine, and numerous biblical references to wine prove the early origin and significance of that industry in the Middle East. The Greeks actively produced and traded wine and planted grapes in their colonies. The northern and southern limits of wine cultivation are shown on the map below. Notice that much of the southern shore of the Mediterranean lies outside that zone.
To create wine from grapes, the grapes are crushed and then the juice must ferment. Fermentation is a chemical process that produces alcohol and preserves the wine. Aging the fermented juice using various types of containers, amounts of time, and varieties of grapes produces many different types of wine. In earlier times, before people understood the source of water-borne illnesses, fermented beverages were known to be safe to drink. The alcohol in wine and other fermented drinks also produces the effect of intoxication on the nervous system. Use of wine in festivals and ceremonies celebrated these qualities, but its dangers were also well known.

*Figure 6 The global distribution of viticulture*