

Vitis vinifera L.

Standardized Common Name: Grape

Family: Vitaceae

Taxonomy: *Vitis* includes about 65 species, which are widely distributed in the Northern Hemisphere. Nearly a dozen species have been cultivated for their edible fruits. *Vitis vinifera* is by far the most important of these; it is cultivated nearly worldwide, and numerous distinctive cultivars exist.

Description: Woody climbing vines, to 35 m high (usually pruned and trained to a much lesser height); bark shredding; foliage leaves alternate, with single tendrils opposite some leaves; at least every third node lacking a tendril; tendrils slender, once or twice branched, to >30 cm long. Leaves 5–15 cm long, orbicular and palmately lobed, or rarely reniform and unlobed; base cordate, or nearly truncate if unlobed; lobe apices broadly acute to obtuse; margins coarsely and irregularly serrate-dentate to serrate; main venation palmate; upper surface glabrous, sometimes pubescent over veins; lower surface glabrous to pubescent. Inflorescences lateral, opposite the leaves, panicate, many-flowered; flowers hermaphroditic or unisexual and plants dioecious (in wild plants). Flowers small, greenish; sepals 5, fused into slightly 5-lobed cup; petals 5, ca. 5 mm long, free at base but fused at apex, deciduous; stamens 5. Fruit a fleshy, juicy berry, yellowish to red, purple or black, 6–30 mm long, oblong to ellipsoid or globose; seeds absent or 1–2(–3) per fruit, often reduced.

Parts in Commerce: Seed (in addition to fruit, juice, skins, and derived products)

Identification:

- Pear-shaped to ovoid with a distinct narrow end or beak, moderately flattened, often irregularly shaped depending upon number of seeds in fruit
- Size varies among cultivars, usually (4.5–)5.5–8(–11) mm long
- Surface hard, deep brown
- Broad end emarginate (notched)
- One broad side has a prominent longitudinal ridge (raphe) with a groove on either side
- Opposite side of seed has groove running from apical notch to a circular scar (“chalazal knot”) in middle of seed surface
- Narrow sides of seed smoothly curved

Adulterants: Grape seed is always harvested from cultivated grapes, so confusion of identity is essentially impossible. Some cultivars produce an excessive number of undeveloped sterile seeds, which float in water, whereas good seeds sink. Aside from *V. vinifera* itself, the native *V. rotundifolia* Michx. (Muscadine Grape) is the most commonly cultivated species of *Vitis* in North America. Its seeds are oblong with a short beak and several conspicuous transverse ridges on the sides.

References:

International Plant Genetic Resources Institute. *Descriptors for Grapevine (Vitis spp.)*. Rome: IPGRI; 1997.

Webb DA. *Vitis*. In: Tutin TG, Heywood VH, Burges NA, et al., eds. *Flora Europaea*. Vol. 2. Cambridge: Cambridge University Press; 1968:246.

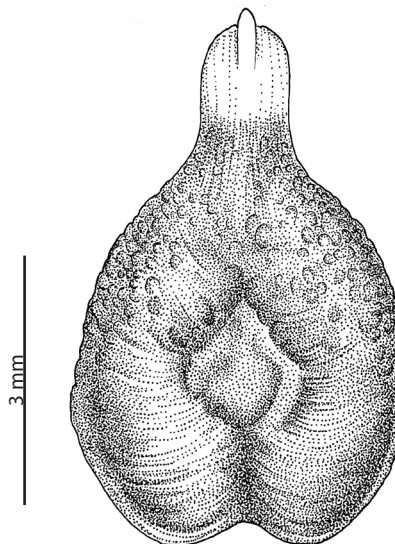


Figure 84: *Vitis vinifera* seed.