

Grapes

Grow with USask



Cultivation of grapes is believed to have begun about 8000 years ago in Georgia. The oldest winery to be discovered was from 4000 BC and was found in Armenia. Both the ancient Egyptians and the ancient Greeks used the grapes for both fresh eating and wine. Wine began as a fermented drink for ritual use in ancient Egypt but became a social drink in ancient Rome and Greece. The Greeks even had a god that was in charge of wine and grapes-Dionysus.

In North America a different type of grape was used. Vitis Riparia or the river grape was used as part of the Native American diet. This grape has been used extensively in breeding work for cold hardy grapes and is a popular rootstock.

Growth Habit

- Grapes are a vine and can grow 5-20 feet high depending on trellising. They are natural climbers and will climb up anything you give them. They can be used as ground covers in some areas as well
- Grapes are wind pollinated and therefore have quite inconspicuous flowers. There is usually between 15-300 flowers per cluster.
- The fruit can be purple, green or red. The hardy grapes that grow well in Saskatchewan are usually purple. The fruit will have seeds and is usually ripe mid September. The fruit can be picked after a frost.

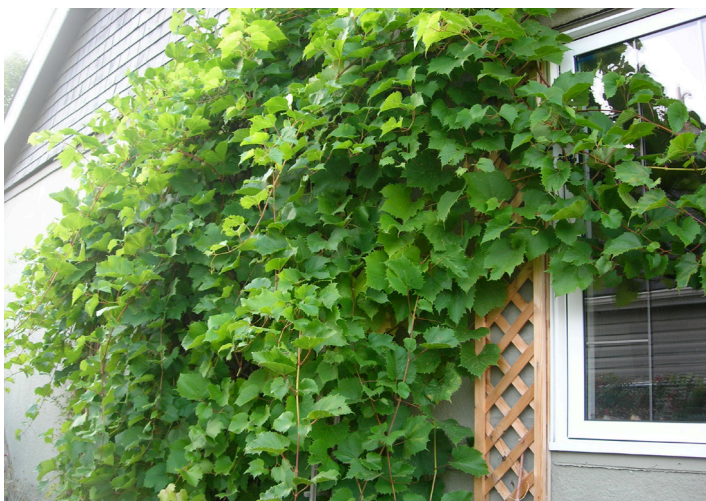


Planting

- Grapes should be planted in a sheltered location so they don't get beaten up by the wind and in full sun. The more sun you can give a grape plant the better. The south facing side of a shed or fence is perfect.
- Grapes should be planted in the spring or fall into moist fertile soil. They should be well watered all through the season. Grapes do not like to be bone dry for extended periods of time and will start to wilt if that happens.
- They should be planted about 6-8 feet apart to allow for trellising.

Pollination

- Grapes are self compatible so only one vine is required. There have been cases of some vines being strictly female so if you are not getting fruit off of your vine, firstly make sure there is enough air movement around the vine to pollinate the flowers and secondly plant another vine. It can be the same kind or different variety but as long as it's not a female you should get fruit.





Pruning

- You can remove up to 90% of the vine in the fall. Grapes flower on new growth so you will not be losing any of the fruit. Just make sure you have a couple of good buds left on the stalk. This will also help your grape to overwinter as the majority of it will be below the snow line.
- Grapes can also have the lower growth removed so that they look more maintained.

Cultivars

- The selection of grapes for our hardiness zone is fairly limited. Being in the city you can try a zone 3 but it may need to be laid down on the ground over winter or cut right back. All of the varieties that are suitable to grow here come from the Minnesota breeding program. The U of S is hoping to release some hardy new varieties in the future.

Cultivar	Fruit Colour	Hardiness Zone	Use	Other
Valiant	dark purple	2	fresh eating or jellies	very productive, large seeds
Beta	purple	2	best for processing (jams & jellies)	consistently productive and hardy, tart flavour
Frontenac	purple or white	3	wine	vigorous growth, resistant to some mildews
Marquette	purple	3	wine	can be hard to find

Harvesting

- Grapes are typically ripe in late September but can be picked whenever you like the flavour
- Some years the grapes will not ripen in time but they can be picked after frost. The grape plant itself is very frost sensitive so the leaves will freeze and die with a very weak frost, but the fruit will remain edible.
- Typically the grape cluster in its entirety is cut off of the vine and then the individual berries are removed after.



Pests

Grapes have relatively few major pests

- Mildews (Powdery and Downy)- This cause the leaves to be covered with a white film at first, and as the infection progresses causes the leaves to brown and fall off. Treatments like sulfur powders and garlic sprays can be sprayed preventively but will not help once the infection has happened. Powdery Mildew thrives in high humidity
- Crown Gall-Swellings form at the base of the vine and up the trunk which turn dark brown as they age. It does not do a ton of damage but can cause girdling of the vines and reduced vigour and yield. Planting disease free stock is the best control as well and making sure your vines are not prone to winter injury.
- Herbicide drift-grapes are very sensitive to herbicide damage especially 2-4-D. If you notice your plants having shriveled up distorted leaves in the new growth that's probably what it is. The vine will eventually grow out of that in the next year.