

GRAPES

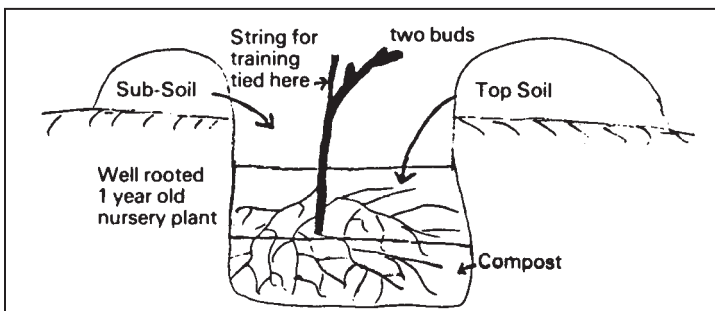
GRAPES IN THE HOME GARDEN

Horticulture Branch, B.C. Ministry of Agriculture

SOIL AND SITE. Grapes should be grown in full sunlight.

They can be successfully grown in home gardens where peaches or sweet cherry trees will survive the winter and where tomatoes or sweet corn will mature. Well drained, sandy loam containing 3 percent or more organic matter is best for grapes. Clay soils delay maturity, sandy soils advance maturity. Avoid planting in low lying areas.

PLANTING. Plant well-rooted one or two-year old nursery plants in the spring. Dig a hole deep and wide enough to accommodate the root system. Place compost or well rotted barnyard manure at the bottom of the hole to give young plants a good start. Cover the root system with topsoil to half the depth of the hole; water generously. Completely fill the hole with subsoil and firm with your feet.



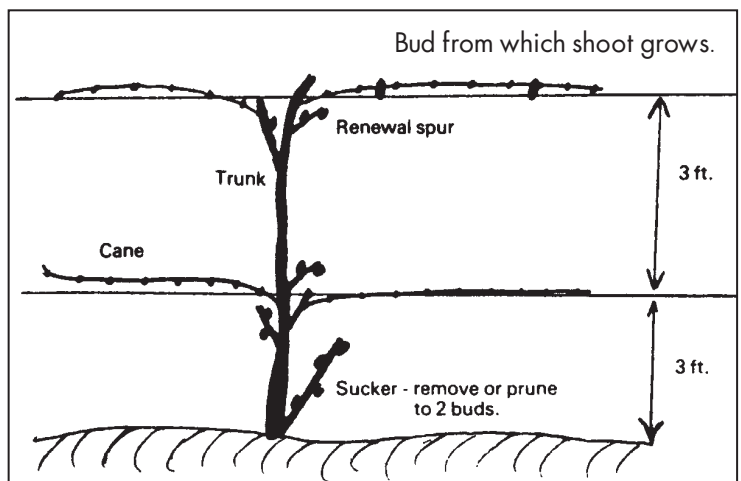
Space plants 150 cm. (5 ft.) apart in the row. Rows can be spaced 180 - 210 cm. (6 - 7 ft.) apart.

TRAINING AND PRUNING. Newly planted vines should have all dormant wood removed, with the exception of 2 buds that are left on the most vigorous cane.

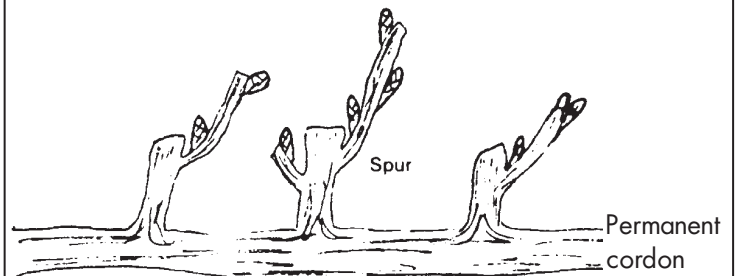
Growth during the first two or three years should be directed into one or two shoots. The flower clusters produced during this period should be removed before they bloom. Excess growth should be pinched to encourage the development of a strong framework.

When pruning, keep in mind that: (a) fruit is produced on current season's growth, that in turn grows from last year's wood, (b) light pruning results in over-cropping and large yields of poor quality fruit; heavy pruning produces too much growth and little or no fruit.

While pruning mature plants, select straight, mature, unbranched one-year old canes approximately 6 mm. (1/4 in.) in diameter. Leave a few two-bud spurs on the trunk near the wires. Growth produced from these spurs will produce wood for the next year's crop. Approximately 50 buds are left on moderately vigorous plants. Plants with more, or less vigour are pruned to leave more or fewer buds.

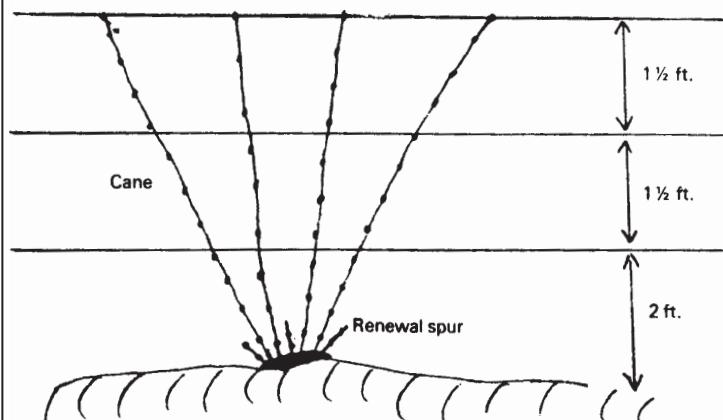


The Kniffen system of training; intended for use where grapes do not need winter protection.

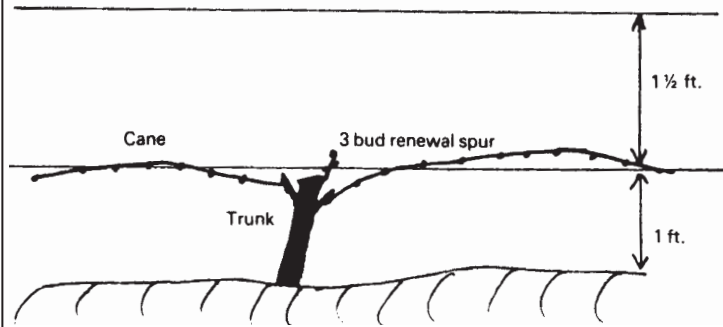


Vines trained to the two wire Kniffen and Guyot system can be spur pruned. Spurs are spaced evenly along a permanently established cordon and pruned to 2 or 3 buds. This system of pruning eliminates the need for annual tying and speeds up the pruning program.

The fan system of training; intended for grapes that must be covered for the winter.



The Dwarf Guyot system of training; intended for use in areas such as the Fraser Valley, Vancouver Island and other cooler areas of the province where grapes do not require winter protection.



FERTILIZER. A well drained, loamy soil, rich in organic matter will not require any fertilizer. Where fertilizer is required, well rotted barnyard manure can be supplied in the spring at a rate of 9 kg. (20 lbs.) per vine. Freshly cut grass and garden refuse of all kinds can be mulched into the soil to control weeds, conserve moisture and maintain the organic matter. Care must be taken to avoid root injury when using commercial fertilizers. As the vines begin to bear fruit, the amount of fertilizer supplied will depend upon the growth made, fruit and wood maturity. Some plants may not require any fertilizer. Vines growing in sod may need extra care in order to remain vigorous.

WATERING. Grape plants should have moisture available to them at all times during the growing season. Reduce watering in late summer to encourage good wood and fruit maturity. A late watering after the leaves have fallen will keep the soil moist for most of the winter thus protecting the roots from winter damage.

WINTER PROTECTION. In areas where winter temperatures fall below -30°C , vines should be laid flat on the ground and covered with 6 inches of soil in the fall. Remove the soil when the danger of severe cold is past. Covering the vines with straw or grass clippings will also provide some winter protection.

INSECTS AND DISEASES. Grape leafhoppers appear as small white "flies" that feed on the leaves. Feeding damage can result in reduced yields. They are extremely annoying to pickers. Leafhoppers are easily controlled with a spray of Sevin, 50% Wettable Powder at 1 gm/L (1/2 tsp. per gallon of water).

Do not use Sevin within 3 days of harvest.

Cutworms appear as grayish brown "worms" near the base of grape plants. They hide in the soil during the day and feed at night. Cutworms will feed on grasses and weeds if these are left in the garden. Once the weeds are removed, the cutworms move to the grapes to eat large holes in the developing buds or leaves. Cutworms can be controlled by a search and destroy procedure, Sevin dust or baits.

Powdery mildew is a fungus disease. It affects the new shoots, leaves and fruit. Infected foliage becomes distorted and mottled in appearance. A dull grey-white mat of fungal growth will eventually form over fruit and leaves. Powdery mildew can be controlled with repeated sprays of wettable sulfur when the growth measures 10 -15 cm. (4 - 6 in.), 30 cm. (12 in.), and at 14-day intervals throughout the season. Use 2.2 gm. of wettable sulphur per litre of water (2 tsp. per gallon).

If the grapes are to be used for wine, do not use wettable sulfur within 30 days of harvest.

BIRDS. Netting is the only sure way to protect your grapes from bird damage.

2,4-D. Grape leaves are extremely sensitive to the fumes of 2,4-D. This product is widely used by most home gardeners to control dandelions in the lawn. Severe injury can result from spray overdrift. On minor cases of herbicide overdrift the grape vine will outgrow early effects.

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