Factsheet

#22-033 | NOVEMBER 2022

replaces OMAFRA Factsheet #98-095, Currants and Gooseberries

Growing Currants and Gooseberries for Home Gardens

Also available in this series

- Growing Strawberries for Home Gardens
- Growing Raspberries and Blackberries for Home Gardens
- Growing Elderberries for Home Gardens

INTRODUCTION

Currants and gooseberries are a valuable addition to home gardens and could also be grown more extensively commercially. The plants are hardy enough for most areas of Ontario and can be grown in most garden soils. This factsheet discusses planting, care and selecting currant and gooseberry cultivars for the home garden.

Black currants are prized for their distinctive flavour in juice, jam, jelly, pies and other desserts. They are also rich in Vitamin C. Red currants (Figure 1) are used mainly for jelly or jam. White currants are not as popular as black and red currants. Gooseberries (Figure 2) are eaten fresh or made into jam, pies and other desserts. Both currants and gooseberries can be frozen easily and kept for later use.



Figure 1. Currants can be grown in most garden soils. *Photo source:* Shutterstock.com



Figure 2. Gooseberries can be eaten fresh or made into jam, pies or desserts. *Photo source:* Shutterstock.com



PLANTING SITE

A wide range of soils can be used to grow currants and gooseberries. However, plants grow best in a cool, moist but well-drained, rich clay loam. On sandy soils, pay close attention to mulching and watering.

Plants will tolerate partial shade, but a sunny site with good air movement gives higher yields. Powdery mildew and frost injury to blossoms can be problems in sites with poor air movement.

Currant and gooseberry plants are hosts for white pine blister rust (see <u>Diseases</u>). Do not grow these crops (except Titania or Consort black currant) near any valuable five-needle pines. Currants and gooseberries can serve as an alternate host for the rust fungus that causes white pine blister rust.

SOIL PREPARATION

Plantings should remain productive for at least 8–10 years, so prepare the soil carefully before planting.

Weeds

Eradicate all perennial weeds such as quackgrass, bindweed and Canada thistle in the year prior to planting. Do not permit weeds to go to seed.

Organic Matter

The soil should have a rich supply of organic matter to promote good drainage, aeration and moisture retention. Apply 45 t/ha or 20 L/m² of well-rotted manure in late summer or fall before planting. Work it thoroughly into the soil. Manure that is not well-rotted should be applied the previous fall to allow time for weed seeds to germinate so they may be destroyed.

Other organic materials such as weed-free straw at 15 t/ha may be used instead of manure, but such materials should be well decomposed by planting time. Incorporate straw the spring before planting, apply 55 kg/ha of nitrogen or 15 grams/m² of ammonium nitrate to aid decomposition.

Fertilizers

Apply fertilizer and adjust soil pH according to soil tests. Currants and gooseberries perform best in a pH between 6 and 7. With spring planting, work the fertilizer into the soil several days before planting. In the absence of a soil test, 500–750 kg/ha (50–75 g/m²) of 10-10-10 or equivalent is a general recommendation. If fall planting, do not apply fertilizer until early spring. Always follow label directions.

PLANTING

Time

Planting as soon as the soil is workable in early spring (April or May) is preferred over fall planting.

Plants

Use strong, well-rooted, dormant, 1-year-old plants. Two-year-old plants may also be used but are more expensive. Normally it is more satisfactory to purchase plants from a nursery. However, plants can be propagated as outlined under *Propagation*.

Obtain plants as close to planting time as possible. If necessary, plants can be stored for several days by putting them in a plastic bag in a refrigerator, cold storage or other cool place. If roots are very dry, they can be sprinkled with water before going in the plastic bag. Do not let roots sit in water or they may die. If plants must be kept longer than about 2 weeks before they can be planted, dig a trench in well-drained soil, spread out the plants, set them in the trench and cover the roots with soil. Water the soil if it is dry.

Planting Distance

Plant gooseberries and red currants 1.0–1.25 m apart in rows. Black currants are more vigorous and should be spaced about 0.6–1.5 m apart. Rows can be as close as 2 m apart, but 3–3.5 m is preferable for mechanical harvesting.

Setting Plants

Set the plants slightly deeper than they were growing in the nursery (note the soil mark on the plant). The top roots should be at least 1 inch below the soil. Spread out the roots and cover them with soil. Firm the soil around the roots, being careful not to break off young shoots. Do not let the roots dry

out during planting. Water after planting if the soil is dry. Prune branches to a length of 10–15 cm at planting time. This stimulates new growth. With fall planting, this pruning should be delayed until spring. Also, with fall planting, mulch around the plants to protect the roots.

CARE OF PLANTINGS Blossom Removal

Remove any blossoms that appear the year the plants are set. This helps plants become well established and make good root growth.

Weed Control and Mulching

Control weeds by shallow hoeing and cultivating, or by mulching with straw, sawdust, etc. Mulching is recommended for home gardens.

The mulch should be 5–10 cm deep, and additional applications will be needed to maintain this depth. Black plastic mulch has increased yields by as much as 26% in provincial trials.

Fertilizers

Fertilize plants each spring according to soil test results. As a guideline for home gardens, apply 175–225 g of 10-10-10 per mature bush (in the absence of a soil test). Information on soil testing can be obtained from the <u>Agricultural Information Contact Centre</u> at 1-877-424-1300.

Use fertilizer made with potassium sulfate rather than with potassium chloride (muriate of potash). Fertilizer should be spread in a 30-cm band from the base of the plant. If plants are not mulched, apply manure annually in spring at the rate of 20–40 L per plant, under the branches. In large plantings, a cover crop of Italian ryegrass, spring wheat, oats or buckwheat, etc., should be planted between rows from mid-August to September. Work the cover crop into the soil as soon as possible in the spring.

Sod Culture

A permanent sod, such as creeping red fescue seeded at 20 kg/ha, may be grown between the rows. The sod eliminates the need for cultivation and cover crops. Sod makes a clean walking area for hand picking. Keep the sod mowed closely until after harvest; let the sod grow in late summer.

Irrigation is necessary in sod plantings. Growing in sod may reduce yield. In trials in Southern Ontario over a 6-year period, cultivation gave a 32% increase in yields over sod culture.

Irrigation

Adequate soil moisture is important for good plant growth, high yields and large berry size. Plants need about 25 mm of water each week from bloom time to the end of harvest. If rain does not provide this water, watering is advised. Plants should also be watered during prolonged dry periods after harvest until late August or early September. However, do not stimulate plant growth in late fall, as hardening of the plants is necessary to prevent winter injury. When watering, add enough water to moisten the soil to a depth of 15–20 cm and let the soil dry out somewhat before watering again. Be careful not to water excessively or roots will be injured.

Trickle irrigation is essential for currants and gooseberries. The system slowly adds small amounts of water each day directly to the soil around the base of each plant. Various types of equipment are available. More information on irrigation is available on the OMAFRA website. Trickle irrigation does not provide frost protection; for frost protection, a sprinkler irrigation system is necessary.

Pruning

Prune when the plants are dormant in late winter or early spring.

Black currants produce the best fruit on 1-year-old wood. Strong 1-year-old shoots, and 2- or 3-year-old shoots that have an abundance of strong 1-year-old wood, are the most productive. Keep a total of 10–12 shoots per mature bush, with about half being 1-year-old shoots. A few more shoots may be kept if plant vigour is very good. Remove all shoots that are more than 3 years old. Make pruning cuts close to the ground.

Red currants and gooseberries produce most of their fruit on spurs that are located on 2- and 3-year-old wood. After pruning, a healthy bush should have 3–4 shoots each of 1-, 2- and 3-year-old shoots (a total of 9–12 shoots). Remove all shoots older than 3 years.

Remove branches hanging close to the ground to improve ease of harvest. Also, for control of diseases and insects, remove and destroy any diseased tips of branches as well as branches that are late leafing out, dying or sickly.

Frost Injury to Blossoms

Currants and gooseberries bloom early in the spring. Severe frosts can injure blossoms and young developing berries. Frosts cause fewer problems in sites with good air drainage.

In small plantings, cloth or paper covers can be put over plants for frost protection. Plastic usually gives little or no protection. In larger plantings, sprinkler irrigation is effective. Special nozzles that deliver about 2.5 mm of water/hr are used. The conversion of water to ice on the plants releases heat that protects blossoms and berries. Start applying water over the plants when the temperature is low enough that the water freezes (about -1°C). Irrigation should continue until the film of water covering the blossoms and berries would not freeze if irrigation stopped. Trickle irrigation is not useful for frost protection.

Pollination

Currant and gooseberry cultivars are self-fruitful and do not need pollen from another cultivar to produce good crops. Honeybee hives are recommended for larger plantings, as they may set more fruit with increased pollination.

Harvesting

The berries on a currant bush ripen over a 2-week period. Once a berry ripens, it can usually be left on the bush a week or more without dropping or becoming over-mature. Therefore, most of the berries on a bush can be harvested in one picking. With more frequent picking, there is a tendency to pick berries that are not fully ripened.

Black currants are usually picked as individual berries. With red currants, whole clusters are picked, and berries are stripped from the stems later. For making juice or jelly, the berries may be crushed without removing them from the fruit stems, since the product is strained.

Gooseberries are harvested as individual berries. Some people prefer immature berries for jams and pies, so harvest the berries when they have nearly reached full size but before they are ripe. Other people prefer fully mature berries. If desired, canvas or other material can be spread under the bush, and the gooseberries knocked off onto it.

YIELDS

Plants should not be permitted to bear fruit the year they are planted. In the second year, a light crop can be harvested; and, by the third year, plants usually bear full crops. Beginning in the third year, a harvest of 1 kg/plant is considered average, However, yields of black currants are often only about half of this amount. Plants should remain productive for at least 8–10 years.

CULTIVARS Black Currents

Ben Alder: Mid-season, consistent cropping, producing large, firm berries. Plants of medium vigour. They are resistant to powdery mildew and susceptible to white pine blister rust. Good for mechanical harvesting. Berries of high juice quality.

Ben Sarek: Mid-season, consistent cropping, producing very large, firm berries. Plants are semi-dwarf. They are resistant to powdery mildew and moderately resistant to white pine blister rust. Berries are suitable for processing but are considered to have low juice quality.

Consort: Early mid-season and only fair in productivity. The clusters are medium in length with berries medium-small, medium in firmness, poor to fair for mechanical harvesting. Berries shake off with some tearing at the stem end, and quite a few berries have stems attached. Plants are susceptible to leaf spot and extremely susceptible to mildew, but resistant to white pine blister rust. Of value where resistance to rust is required.

Titania: Mid-season, consistent cropping, producing large firm berries. Plants are extremely vigorous. They are resistant to powdery mildew and white pine blister rust. Berries are good for processing, with moderately high juice quality.

Red Currants

Cascade: Early season. Ripens several days earlier than Red Lake. Plants are vigorous, have a slightly sprawling type of growth with medium productivity. The clusters are medium-short to medium in length with large, medium dark red, attractive berries. Berries are susceptible to sunscald and must be picked promptly when mature.

Red Lake: Late mid-season (ripens in mid-July in moderate hardiness zones such as 7a Vineland in the Niagara Region). Plants are vigorous, very productive. The clusters are medium long and easy to pick. Berries are medium large, light red and attractive. This is the highest-yielding cultivar in Vineland trials.

Gooseberries — American Type

Captivator: Ripens slightly after Clark. Plants are tall, vigorous, almost spineless, fairly resistant to mildew, only moderate in productivity. Berries are medium-small, dull red when ripe, good quality and easy to harvest by hand or machine. Plants have a fairly open and upright type of growth. Propagated by hardwood cuttings.

Gooseberries — European or English Type

Cultivars of this type have large berries but are susceptible to mildew and may not be hardy enough for colder regions of Ontario.

Clark: Early (ripens in late July at Vineland). The most productive of European gooseberry types tested at Vineland. The berries are very large, red when ripe, and fairly easy to harvest by hand or machine. Plants are spiny, short, moderately vigorous, fairly dense, with many branches close to the ground. Require careful pruning to be able to place a collection frame under branches for mechanical harvesting. Propagated by layering.

Fredonia: Early mid-season. Ripens several days after Clark. Medium in productivity. Berries are large, red when ripe, somewhat difficult to pick but can be shaken off by machine. Plants are spiny, slightly short, fair in vigour with a somewhat upright and fairly open type of growth. Propagated by layering.

PROPAGATION

Currants and American-type gooseberry cultivars can be propagated from cuttings. Take cuttings in late fall from healthy wood produced that summer. Make cuttings 15–20 cm long with the bottom cut just below a bud, and the top cut about 10 mm above a bud. That fall, set cuttings 15 cm apart in well-drained soil in a nursery area. Plant them deep enough so that one or two buds extend out of the soil and cover them with straw. In the spring, the straw can be removed or left as mulch around the cuttings. Cuttings can also be taken in early spring before buds leaf out. Store the cuttings in a plastic bag in a refrigerator and plant them out in the nursery row as soon as possible. After a season's growth, plants grown from cuttings can be planted in their permanent place.

European-type gooseberries do not grow well from cuttings as described above. Instead, European types can be propagated by layering in fall or spring. Bend down branches, still attached to the plants, and partly cover them with soil. Use pegs to hold down the branches. Roots will form along the branches where they contact the soil. After a season's growth, the branches should have rooted well enough for digging. Often several plants can be obtained from one branch.

CONTROL OF DISEASES AND INSECTS

Common disease and insect pests are described below. To protect Ontarians from unnecessary risk, Ontario bans the cosmetic use of pesticides by only allowing certain, low-risk pesticides for controlling weeds and pests in gardens. Pesticides can only be used for cosmetic purposes if the use is permitted under an exception to the ban, or the active ingredient in the pesticide is included on the Allowable List, found here www.ontario.ca/page/using-pesticides-ontario.

Visit the Ontario Crop Protection Hub and consult fruit specialists from the Ontario Ministry of Agriculture, Food and Rural Affairs for additional information.

DISEASES

Anthracnose (Leaf Spot)

This is a serious disease of black currants and can also cause severe injury to red currants and gooseberries. Many small, brown spots occur on leaves from mid-summer to late fall. Badly infected leaves turn yellow and drop. The main damage is the defoliation, which may occur as early as the end of July. Early defoliation reduces growth and causes loss of crop the following year. Spots can also occur on young shoots, leaf petioles, fruit stems and berries. The fungus lives over winter, mainly in fallen leaves. Remove and destroy fallen infected leaves in late fall or in the early spring before buds burst. Apply any new mulch after leaves drop.

Powdery Mildew

Black currants and European types of gooseberries are especially susceptible to powdery mildew. In early summer, a white powdery fungus growth appears on young leaves and tips of branches and new shoots. The fungus may spread over much of the bush and often occurs on gooseberry fruits. It seldom occurs on the berries of currants. Later, the white powdery growth becomes brown, and forms a felt-like coating over affected parts. Shoot growth is often stunted, tips may be killed and gooseberry fruits may also be stunted. The fungus is spread by spores. Warm, humid conditions favour its development. Cut off and destroy diseased tips of shoots and branches when pruning in the winter or early spring. Provide a site with good air circulation. Control can be obtained by planting resistant cultivars.

White Pine Blister Rust

The fungus causing this disease spends part of its life cycle on currants or gooseberries and part on white pine. The disease can cause serious problems with white (five-needle) pines. Do not plant currants or gooseberries within 300 m of susceptible pines. Black currant cultivars such as Titania and Consort are resistant to rust.

INSECTS Aphids

Small greenish-yellow aphids feed on the under surface of young leaves at the tips of shoots. These leaves curl downward and have a blistered appearance. Red currants are particularly susceptible, and affected leaves are weakened and may die. Small numbers of aphids can be removed or crushed by hand when they are discovered. Small, localized populations on leaves or stems can be pruned off. Do not overfertilize plants, as aphid outbreaks tend to be worse when nitrogen levels are high.

Currant Borer

This insect can cause serious injury to currant and, to some extent, gooseberries. The adult is a clear-winged moth similar in size and appearance to a thin housefly. Wings have black bands, and the body has several narrow yellow bands. The moths appear in mid-June and lay eggs in the axils of leaves. The young larvae bore into the pith of the shoot and feed there. The following spring, affected shoots often leaf out late, are sickly and may die. When an injured shoot is cut, a dark hole can be seen where the larva has tunneled in the pith. The yellowish-white larvae, which are about 12 mm long, may also be present. When pruning, remove and destroy branches that have dark, hollow piths. Also, remove and destroy any dying or sickly branches during the growing season. Follow recommended pruning practices and do not let shoots become too old. Keep plants growing vigorously.

Currant Fruit Fly

The adult flies emerge about the time currants are in bloom. The female lays eggs in developing berries. The eggs hatch into maggots, which feed inside the berries. Affected fruits of currants and gooseberries ripen prematurely, and many drop to the ground before the normal harvest time. A small white maggot will be found in each fallen berry. The insect leaves the berry and spends the winter in the soil. Remove and destroy infested berries to reduce risk the following season.

Currant Sawfly

The larvae of this insect are smooth greenish worms with many black spots. The worms are about 20 mm long when fully grown. They feed on the edge of leaves and can strip plants of much of their foliage. When signs of feeding are noticed, usually early in the season, kill any worms present.

Scale Insects

Several scale insects attack currants and gooseberries. The small scales (round or like an oyster shell) can easily be seen on dormant wood. These insects suck juices from the tender wood and sometimes occur on the fruit. A light infestation may be kept in check by birds and beneficial insects. Scale biological controls are commercially available and may help reduce populations.

PREMATURE FRUIT DROP

Black currants frequently suffer from premature fruit drop several weeks after bloom. In Europe, this phenomenon is called "run-off" and is thought to be caused by lack of seed set in the fruit.

Run-off is a complex problem with a number of causes, including susceptible cultivars, self-incompatibility, lack of pollination (too few pollinators or poor pollinating conditions), soil fertility levels, virus, currant fruit fly, drought, excessive moisture, botrytis, frost or varietal intolerance of cold above 0°C temperatures.

Research at the Vineland Horticultural Research Institute found that the variety Magnus can lose 60% of its fruit if the overwintering buds are subjected to 2°C for 2 days when the fruit buds are at the grape stage, the period when the fruit buds are just beginning to expand (usually 1 or 2 weeks before flowering).

Many home gardeners have problems with premature fruit drop. In most cases, the variety that they are growing is susceptible to cold, above-0°C temperatures before bloom. Growers should avoid Magnus and Willoughby, as these cultivars are particularly prone to this phenomenon. Ben Alder and Ben Sarek produce less ethylene and are therefore less susceptible to "runoff."

This factsheet was written by Ontario Ministry of Agriculture, Food and Rural Affairs fruit specialists.

Published by the Ontario Ministry of Agriculture, Food and Rural Affairs © KIng's Printer for Ontario, 2022 ISSN 1198-712X Également disponible en français (Fiche technique 22-034) **Agricultural Information Contact Centre:**

1-877-424-1300 1-855-696-2811 (TTY)

E-mail: ag.info.omafra@ontario.ca

ontario.ca/omafra