

Growing Garlic in Saskatoon

Congratulations on choosing to grow your very own delicious, health-enhancing, garlic!

The two main varieties of garlic are hardneck and softneck. There are many different strains available within each of these types. Whether growing hardneck or softneck garlic, the growing requirements are the same.

Most of the garlic WAM has distributed as part of our garlic project has been hardneck, which has a woody stem encircled by the cloves. Hardneck garlic evolved directly from wild garlic and tends to produce larger cloves.

Planting Location

- Avoid a location where garlic, onions, or leeks have grown in the last two years.
- Loose sandy loam soil is best (loam = concentration of sand, silt, and clay).
- Our growers have found that garlic grows best in sunny locations.

Fertilizer

- Most of our growers prefer using natural and organic gardening techniques. Many gardeners simply mix compost with the soil prior to planting.
- The following fertilizers have been recommended. Choose what's best for you.
 - Well-rotted manure added in early fall and worked into the soil prior to planting OR
 - Chemical fertilizers
 - In the fall, add 2 kg of 11-51-0 per 90m² of garden space prior to rototilling and planting
 - In the spring, water in 0.5 kg of 46-0-0 per 60m of row alongside each planted row

Planting

- A cold period is required in order for garlic bulbs to form cloves, so fall planting is highly recommended.
- The best time to plant is approximately 7-10 days prior to freeze-up (early-mid October).
- Begin with a bulb. Separate cloves from the stem and from one another just prior to planting.
- Plant only healthy, intact cloves that are free from injury.
- Plant with the blunt end down and pointy side up.
- Plant 3-5cm deep with 10-15cm between cloves. Leave 30-50cm between rows.
- Gently firm soil over the bulbs and cover with 15-25cm of mulch to protect the cloves from extreme winter temperatures. We've found that some gardeners get away without mulching if heavy snow comes before extreme temperatures. If using straw mulch, ensure it is free of grain and weed seeds.

Spring/Summer Maintenance

- Remove mulch in the spring as soon as nighttime temperatures do not dip much below -3°C (late April).
- Some supplemental watering throughout the growing season is necessary to produce larger bulbs.

- Once cloves have emerged in spring and daily temperatures are at least 15°C, 2.5cm of water per week is recommended until early August.
- Water supply should be reduced in early August. Late season irrigation will encourage bulb rot.
- Garlic plants are poor weed-competitors, so get those weeds out of there!
- Remove scapes (curling flower stocks that will eventually go to seed) from hardneck varieties as they emerge throughout the season. This allows the plant's energy to focus on growing the cloves. Good news! Garlic scapes are edible and delicious.

Harvest and Curing

- Bulbs are ready to harvest when above-ground leaves are at least 50% yellow (around mid-August)
- Dig up with tops intact. The entire plant should be cured in a warm location. Ensure stems and leaves dry completely, the roots dry off, and the wound left when the stem and leaves are removed is dry.
- If the weather is warm, sunny, and dry, bulbs can be cured outdoors on the soil surface. If outdoor conditions are damp and cool, cure indoors for approximately 5-7 days in a warm, dry location.
- After bulbs have dried, clip roots close to the bulb and tops to about 2.5cm above the bulb. Do not store bulbs that are soft, wet, or that exhibit mold.

Storage

- Store indoors during the winter.
- Ideal conditions are 0°C at 65-70% relative humidity. Most home gardeners can replicate these conditions by storing garlic in gas permeable plastic bags in the fridge.
- Garlic bulbs should be stored intact.

Disease

- Viruses can be a significant disease problem in garlic. Gardeners often use the same garlic cloves for planting in fall that they grew during that summer, and the cycle can continue for years. The longer we use the same garlic, the more likely that the garlic will become infected by a virus.
- Minimize possibility of infection by reducing presence of aphids since they can transmit infection, and also ensure weeds are controlled since they can host viruses.
- Infected plants will have yellow streaking or mottling in their leaves, and the plants will appear stunted. Do not replant these bulbs. Rather, contact WAM or a grower to secure new seed.

Have fun!

***The above guide was prepared referencing the document, "Garlic.... the Stinking Rose"
by local horticulturist Jackie Bantle.***

Visit our website or email us to obtain Jackie's original document which offers more extensive information on garlic benefits, history, growing guidelines, growers and distributors, and recipes.

WAM extends our gratitude to Jackie for her permission to distribute and reference her work.