

## **ONIONS**

Onions (Allium cepa) are well suited to grow in Canadian climate and soils. Both the bulbs and tops are edible, depending on the type grown.

**Seed:** You can have larger onions if you plant the seed indoors in Mid to late March. Plant in soil paks or 20-row seed flat and keep seedlings trimmed to 10 cm (4 in) high. Transplant when soil has warmed in spring in rows 45 cm (18 in) apart and space plants 15 cm (6 in) apart. You also can direct seed into the garden in spring when soil is warm and use for green onions. Fertilize with Rose & Strawberry Fertilizer 10-52-17 and liquid seaweed every two weeks for incredible growth and healthy bulbs.

**Sets:** Onion sets should be planted as soon as the ground can be worked in early spring. Press the small bulbs into the soil, spacing them about 5-7cm (2-3") aprart. As they grow, thin the plants to 14cm (5-6") aprart. An application of fertilizer at planting and again when the bulbs begin to swell will encourage large healthy onions.

#### **Soil Conditions**

Onion seedlings are fragile at emergence. A well-worked seedbed and light textured soils are essential to proper emergence. The ideal soil for onions is well-drained but also has good water-holding capacity, as onions are shallow-rooted. Onions will mature earlier on lighter, sandy soils than on heavier soils. Onions can grow on a range of soil pH, and do well on peat and muck soils.

## Hilling

Onion bulbs emerge from the soil as they grow. Lightly hilling bulbs will reduce the amount of sunburn to the onion, will help maintain moisture close to the roots, and will reduce weed competition.

### **Fertilizer**

Onions have a limited and shallow root system; therefore nitrogen, phosphorus and potassium levels near the soil surface must be relatively high.

### Water

Onions are a shallow-rooted crop; therefore they require frequent but thorough irrigation to achieve maximum yields. Thick necks on bulbs can result if water level is too low. To promote maturity, water should be stopped 14 to 21 days before undercutting occurs. This will allow for maturing and ripening of the bulbs and die-back of the tops.

# Harvesting

Dry onions have reached maturity when the tops have fallen over and started to dry. It is important that the onion mature before storage. Otherwise, neck rot will enter. Once the tops are beginning to dry, undercutting the roots will speed maturity. Onions are best harvested when no rain is expected for a few days.

#### Storage

Onions should be stored at 0°C (32°F) and at 65 to 70 percent relative humidity. Temperatures above 0°C (32°F) will cause the onion to sprout. This sprouting will lead to bulb rot and increase moisture loss. Relative humidities exceeding 70 percent will cause the onion's roots to sprout. Air movement through the pile is beneficial to reduce disease spread that could occur from a wet pile.