

Peas

Cultivars

Contact Manitoba Agriculture and Food's Vegetable Specialist for variety information.

Climate and Soil Requirements

Peas are a cool season crop well suited to commercial production in Manitoba. Peas produce well on a wide range of well-drained mineral soils

Seeding Treatment

To maximize germination and good plant stands, seed should be treated to prevent loss to seed/root maggots, seed decay and damping off.

Seeding and Spacing

Row Spacing: 6-8 inches (15-20 cm)

In-Row Spacing: 1.5 to 2 inches (4-5 cm)

Rate: 90-270 lb/ac depending on seed size and % of germination

Depth: 1 to 2 inches (2.5-5 cm) Plant into moisture.

Date: As early as possible.

Fertility

Refer to Tables 1 through 9 for this crop. For general recommendations in the absence of a soil test refer to Table 10.

Pest Management

Diseases

Root Rot, Damping off, Wilt and Near-wilt

Follow a four-year rotation and other good management practices such as:

- Select and plant only in well-drained fields.
- Minimize soil compaction.
- Work fields immediately after harvest.
- Plant a green-manure crop such as oats, sorghum-sudan grass or fall rye.

Powdery Mildew

First appearing on the lower and older portions of the plant, small diffuse spots increase in size to become whitish-gray powdery areas, that can eventually cover all above ground parts of the plant. Severe infections can turn the infected crops to a light blue or gray colour. Tissue below the infected areas may darken, with the production of fungal structures. Severe pod infections can cause splitting of seed testa, and the seeds may become a gray to brown colour.

Severe epidemics have been associated with dry growing seasons. During warm, dry weather when dew forms over night, powdery mildew can develop. Unlike many diseases, powdery mildew is less severe in areas of high rainfall or where over-

head irrigation is applied regularly. Scouting for powdery mildew is very important to do at regular intervals as the disease can develop rapidly under suitable conditions.

Resistant pea cultivars are available, and should be used if powdery mildew has been a frequent and severe problem in previous years. Application of water through overhead irrigation systems will assist in preventing late season epidemics. Planting earlier in the season (if possible) will also help to reduce losses from powdery mildew.

Insects

Pea Aphid

This aphid is usually more abundant when peas are grown adjacent to clover or alfalfa.

Cutworms

Chemical controls are most effective if applied to moist soils in the early evening.

Weeds

Competition from weeds can reduce yield and also make harvesting more difficult. For recommended herbicides refer to the *Guide to Vegetable Crop Protection 2003*.

Peppers

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Climate and Soil Requirements

Peppers are a warm season crop producing best within the range of 20° to 27° C. Peppers are very susceptible to light frosts and freezing temperatures. As such the crop must be transplanted after the last spring frost, normally end of May or early June.

In Manitoba, peppers are successfully produced on a diversity of well drained soils. Ideally, loamy

soils with a pH 6.5 – 7.5 are best suited to pepper production.

Transplants

Use treated seed 2.8 oz. (80 g) seed is required for one acre of transplants) and a sterile media in 128 cell trays. The time required to produce field ready transplants is approximately eight weeks. Optimum temperature for germination is 29°C (range 18 to 35°C). Transplant growth requires daytime temperatures of 18 to 24°C and 15° to 18°C at night.