

COMMODITY

FIELD VEGETABLES

Description

Field vegetable production is a dynamic and diverse industry. A wide variety of field vegetables are grown in British Columbia with potatoes, cole crops (such as broccoli, brussels sprouts, cabbage, and cauliflower), sweet corn, beans, cucurbits (such as pumpkins, squash, and zucchini), lettuce, carrots, and peas being produced in relatively large quantities. Asparagus, beets, Chinese vegetables, celery, cucumbers, onions, radishes, rutabaga, spinach, and a variety of other vegetables are also grown. Most field vegetable industry is located in the Fraser Valley although some production occurs throughout other regions of the province.

Field vegetable production is dependent on practices that provide well-drained soils, adequate irrigation and good fertilization. Careful management is necessary for pest control. Some field vegetables are grown from seed whereas others are started in greenhouses after which seedlings are transplanted. Some vegetables such as carrots, corn, peas, beans, and potatoes are mechanically harvested. Others such as lettuce, celery and cabbage are harvested by hand.

Field vegetables are produced primarily for the fresh market, are highly perishable, and must therefore be harvested and handled quickly. They are either washed, graded, packed and shipped immediately to market or are held in cooling facilities until required for retail distribution. Some field vegetables such as potatoes, carrots, turnips and onions lend themselves well to extended cold storage and are shipped when more favourable marketplace conditions exist.

Field vegetables are also produced for the processing market, with the harvested crop usually trucked immediately to a designated processing plant.

Farm Practices of Particular Interest

Practices for specific farm activities can be found in the Farm Practice section of this reference guide. Farm practices that are of particular interest to field vegetable production include the following.

Crop Residue Management

Under specific cropping, soil and weather conditions, it will be necessary for vegetable producers to leave crop residue on the soil surface. These residues offer protection against soil erosion but may result in odours from decomposing cole crops, for example, or the presence of waterfowl in potato fields, for example.

See also Farm Practice: [Crop Residue Management](#)
[Cultivation](#)

On-Farm Produce Handling and Sales

Vegetable farmers must often wash, grade, package, cool and store produce on their own farms. This will require the operation of tractors, compressors, washers, conveyors, graders and other equipment. Farmers may process, pack, store and ship produce at any time during the day or night.

See also Farm Practice: [Direct Farm Marketing and Agriculture Tourism](#)
[Product Processing](#)
[Stationary Equipment](#)

Pesticide Management

Vegetable growers may apply pesticides to their crops to protect them from weeds, insects and diseases. The use of pesticides is typically part of a program that incorporates integrated pest management practices.

See also Farm Practice: [Pesticide](#)
[Storage of Hazardous Material](#)

Tillage, Traffic and Machinery Operation

Vegetable operations require the use of equipment such as tractors, cultivators and harvesters for land preparation, planting, harvesting and pesticide application. A major component of vegetable production involves the preparation of soil by cultivation for seeding, planting, nutrient application, weed control and harvest. Farm machinery may be operated 24 hours a day during the production season. Equipment requirements are, however, dependent on the weather, production cycles and crop quality.

See also Farm Practice: [Cultivation](#)
[Mobile Equipment](#)

Water Management

Water is a critical input for vegetable producers. Application is possible through irrigation systems if supply is available as surface water or ground water. To maintain crop quality and to maximize production, fields may be installed with drainage systems to expedite the removal of excess water created by precipitation events or caused by storm water flooding from higher ground or nearby uplands.

See also Farm Practice: [Drainage](#)
[Irrigation](#)
[Stormwater](#)

Principal and Accessory Buildings

From an operational perspective, principal farm buildings for field vegetable enterprises are typically those used for produce storage, sorting, separating, cleaning, grading, packing, processing, or direct farm marketing. Accessory farm buildings may include storages for agricultural wastes, chemicals, compost input materials, compost products, and wood waste. Other accessory structures could include processing facilities, machine sheds, and on-farm composting buildings. From a watercourse protection perspective, however, the definition of principal and accessory buildings may differ. For the purposes of determining applicable setbacks from watercourses and property lines, therefore, local government bylaws or the *Guide for Bylaw Development in Farming Areas* should be consulted. Building assessments may need to be conducted on a case-by-case basis if the designation of a building as principal or accessory is unclear.

Legislation

Agricultural producers are expected to follow all legislation that pertains to their farming operations. The *Farm Practices Protection (Right to Farm) Act* stipulates that the farm operation must meet the *Public Health Act*, *Integrated Pest Management Act*, *Environmental Management Act* and the regulations under those Acts. Information on federal and provincial legislation can be found in Appendices B and C.

Acts that pertain to specific farm activities are listed in the Farm Practices section of this reference guide. Local government bylaws may also apply to some farm practices. Acts that are not referenced elsewhere and which may be of special interest to field vegetable producers include the following.

Provincial Legislation

The *Agricultural Produce Grading Act* provides a control framework for the classification of agricultural products within a standard grading system.

The *Seed Potato Act* facilitates the growing of certified seed potatoes in specified control areas.

Local Government Legislation

Local government legislation may include applicable noise and zoning bylaws.

Publications

Publications that provide information on field vegetable production include, but are not limited to, the following. Refer to Appendix D for details.

British Columbia Environmental Farm Plan Reference Guide
Guide for Bylaw Development in Farming Areas
Vegetable Production Guide for Commercial Growers in British Columbia