

## SECTION 19

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### CROPS OF VEGETABLES

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Section 1, *Regulations for All Pedigreed Seed Crops*, together with the following, constitute the production regulations.

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#### **19.1 CLASSES, GENERATIONS AND REQUIREMENTS**

- 19.1.1 Breeder: under the control of the Breeder.
- 19.1.2 Foundation: the progeny of Breeder and limited to one generation.
- 19.1.3 Registered: the progeny of Breeder or Foundation seed and seed produced for Registered status from biennial plants grown under conditions which do not permit inspection at the marketable stage shall be demoted to Certified.
- 19.1.4 Certified: the progeny of Breeder, Foundation or Registered and limited to one generation.

#### **19.2 LAND REQUIREMENTS**

- 19.2.1 Foundation, Registered and Certified crops must be established on land which did not produce a crop the previous year which would naturally cross pollinate with the seed crop.

#### **19.3 CROP INSPECTION**

The basic standards for all crops are set out in Section 1.7. In addition, the following apply to crops in this section:

- 19.3.1 It is the grower's responsibility to ensure that crops are inspected by an authorized inspector prior to swathing or harvesting.
- 19.3.2 A crop that is cut, swathed or harvested prior to crop inspection is not eligible for pedigree.
- 19.3.3 The crop must be inspected at a stage of growth when varietal purity is best determined. Crops not inspected at the proper stage for best determining varietal purity may be cause for declining pedigreed status.
- 19.3.4 For **Hybrid Sweet Corn**, a minimum of three inspections shall be made to determine that requirements for isolation, planting, detasselling, weed control and harvesting have been carried out in accordance with the regulations for Hybrid Field Corn in Section 8.

**Table 19.3.5: Stages of Growth for Crop Inspection**

<b>Crop</b>	<b>Stage of Growth for Crop Inspection</b>
<b>Asparagus</b>	First inspection: not sooner than 10 days after cutting has been discontinued. Second inspection: prior to "blooming time."
<b>Bean, Dwarf and Pole</b>	One inspection to be made at the marketable stage. Where inspection for disease is required, it shall be made just prior to ripening.
<b>Bean, Broad and Lima</b>	One inspection to be made at green shell stage.
<b>Beet, Celериac, Parsnip</b>	First inspection: about the time the roots are mature and ready to be taken up for storage. Second inspection: blooming time in the second year.
<b>Broccoli, Brussel Sprout Cabbage, Cauliflower, Celery, Parsley</b>	First inspection: marketable stage. Second inspection: blooming time.
<b>Cucumber, Pickling and Table</b>	First inspection: marketable stage. Second inspection: when fruits are mature.
<b>Leek, Swiss Chard</b>	First inspection: marketable stage. Second inspection: blooming time in the second year.
<b>Lettuce</b>	First inspection: marketable stage. Second inspection: late bloom or early seed setting stage.
<b>Onion</b>	First inspection: field-run mature bulbs. Second inspection: blooming time in the second year.
<b>Parsley</b>	First inspection: marketable stage. Second inspection: during bloom.
<b>Pea</b>	First inspection: blooming stage. Second inspection: when crop has reached early edible stage.
<b>Radish</b>	First inspection: edible stage. Second inspection: when crop is in bloom.
<b>Spinach</b>	First inspection: marketable stage. Second inspection: when crop is in bloom.
<b>Tomato</b>	One inspection to be made when the crop is in full fruit.
<b>Eggplant, Pepper</b>	One inspection to be made at the marketable stage.
<b>Corn, Open-pollinated Sweet</b>	First inspection: edible stage. Second inspection: when the seed is mature in the ear.
<b>Citron, Muskmelon (Cantaloupe), Pumpkin, Squash, Vegetable Marrow, Watermelon</b>	One inspection to be made when in full fruit.
<b>Vegetable Soybean</b>	One inspection to be made just prior to maturity.

## 19.4 CROP STANDARDS

### 19.4.1 Isolation

- a) A crop for pedigreed status must be separated from crops or plants that are a source of contamination through cross pollination by the distances given in Table 19.4.2.
- b) Isolation distances must be provided before flowering commences and prior to crop inspection.

**Table 19.4.2: Minimum Isolation Distances Required**

<b>Crop Kind</b>	<b>Isolation Distance Required</b>
<b>Beet, Swiss Chard</b>	800 meters (2624 feet)
<b>Asparagus, Broccoli, Brussel Sprout, Cabbage, Cauliflower, Citron, Cucumber, Leek, Muskmelon, Onion, Parsley, Parsnip, Pumpkin, Radish, Squash, Vegetable Marrow, Watermelon</b>	400 meters (1312 feet)
<b>Celeriac, Celery, Spinach</b>	200 meters (660 feet)
<b>Eggplant, Pepper</b>	45 meters (150 feet)
<b>Tomato</b>	30.5 meters (100 feet)
<b>Bean, Lettuce, Pea</b>	7.6 meters (25 feet)
<b>*Hybrid Sweet Corn</b>	300 meters (990 feet) with at least four border rows of pollen parent plants around all sides of the crop
<b>*Sweet Corn – Open-pollinated</b>	400 meters (1320 feet) with at least four border rows of the same pollen parent plants around all sides of the crop

\*The corn from border rows, male rows and rejected parts of the field must not be mixed with the seed presented for pedigreed status.

### 19.4.3 Prevention of Disease and Varietal Contamination

- a) The minimum required isolation distances of 7.6 meters (25 feet) to 45 meters (150 feet) are not sufficient to prevent the spread of many diseases. Wherever possible a separation of at least 90 meters (300 feet) should be provided for pedigreed seed crops of Bean, Eggplant, Lettuce, Pepper, Tomato, and Pea from other crops susceptible to same diseases.
- b) Care must be taken to prevent varietal contamination of pedigreed seed crops, which may occur by:
  - (i) volunteer plants of the same kind or species;
  - (ii) cultivars of the same family or genus but of a different kind;
  - (iii) a different variety of the same kind.

### 19.4.4 Rogues and Bolters

- a) Rogue plants of all types must be removed as soon as they show in the crop. In certain vegetable crops this may mean frequent examination of the growing crop and the removal of rogue plants at three or four different times.
- b) A strict watch must be maintained at all times to prevent cross-pollination from bolters amongst adjacent root crops grown for seed or commercial vegetable production. A careful examination on two or three occasions during the blooming period should be made of crops growing within the specified isolation distance and the bolters removed.

**19.4.5 Disease**

- a) A strict watch must be maintained for disease at all periods of seed crop production.
- b) When seed treatment is required, the producer should treat all seed before planting to control the spread of seed borne diseases.
- c) The presence of disease in the crop or seed should be reported immediately to the nearest plant pathologist for advice on treatment to control the disease.
- d) Diseased plants removed must be immediately destroyed.

**19.4.6 Weeds**

- a) All crops for pedigree must be free of Prohibited noxious weeds.
- b) Very weedy crops will be declined pedigreed status.

**19.4.7 Maximum Impurity Standards**

- a) For other than OECD certification, the maximum standards for impurities of pedigreed vegetable seed crops shall be those standards established by the Association of Official Seed Certifying Agencies (AOSCA). For more information, refer to [www.aosca.org](http://www.aosca.org).