SECTION 14.12

FOUNDATION AND CERTIFIED PRODUCTION OF SUGAR BEET

In this Section:

- ***Sugar Beet*** includes all varieties of sugar beet (*Beta vulgaris).*

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

14.12.1 SEED CLASSES AND GENERATIONS

a) Breeder: controlled by the Breeder
b) Foundation: one generation
c) Certified: one generation

14.12.2 LAND REQUIREMENTS

14.12.2.1 Sugar Beet crops for foundation or Certified status must not be planted on land which has been planted with or produced any *Beta vulgaris* during the preceding 5 years (60 months from harvest to planting).

14.12.3 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:

14.12.3.1 It is the grower's responsibility to ensure that crops are inspected by an authorized inspector prior to harvesting.

14.12.3.2 A crop that is harvested prior to crop inspection is not eligible for pedigree.

14.12.3.3 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.

14.12.3.4 Two field inspections shall be made of Sugar Beet crops. First inspections shall be made when plants are in the early leaf stage and second inspections are at the flowering stage.

14.12.3.5 Sugar Beet crops must be planted in distinct rows.

14.12.4 CROP STANDARDS

14.12.4.1 **Isolation**

a) Under optimum conditions, not more than 3 plants per square meter of harmful contaminants (other Sugar Beet varieties and all sub-species of genus *Beta*) are permitted within the required isolation distance(s) adjacent to the inspected crops. The conditions of each crop are assessed by the CSGA which may alter this standard, usually by reducing the number of contaminant plants permitted per square meter, according to the contamination risks involved.

b) Harmful contamination within the required isolation distance, depending on density, location and distance from the inspected crop, may be cause for declining pedigreed status. Harmful contaminants for crop certification include other Sugar Beet varieties and all other sub-species of genus *Beta*. Examples include Fodder Beet, Mangels, Red Beet and Swiss Chard.

c) The required isolation in Table 14.12.4.2 must be provided prior to the time of flowering and crop inspection.

Table 14.12.4.2: Minimum Isolation Distances Required from an Inspected Sugar Beet Crop to Other Crops

Inspected Crop	Other Crops	Minimum Isolation Distance Required
Foundation	Crops planted with Foundation seed of the same pollen source	3 meters (10 feet), provided the pedigree of the Foundation seed used can be established and the prescribed isolation distance is free from harmful contamination (i.e. other species which can cross pollinate with the inspected crop)
	Non-pedigreed Sugar Beet pollen source	1525 meters (5000 feet) or more, as specified by the Breeder
	Other or unknown pollinator of genus *Beta* (including fodder beet, mangel, red beet, swiss chard)	3110 meters (10200 feet)
Foundation -Varieties with Monogerm pollinator	- Monogerm pollinator sources	1525 meters (5000 feet)
Certified	Crops planted with Foundation seed of the same pollen source	3 meters (10 feet), provided the pedigree of the Foundation seed used can be established and the prescribed isolation distance is free from harmful contamination (i.e. other species which can cross pollinate with the inspected crop)
	Non-pedigreed Sugar Beet pollen source	975 meters (3200 feet) or more, as specified by the Breeder
	Other or unknown pollinator of genus *Beta* (including fodder beet, mangel, red beet, swiss chard)	2440 meters (8000 feet)
Certified -Varieties with Monogerm pollinator	- Monogerm pollinator sources	1525 meters (5000 feet)

14.12.4.2 **Weeds**

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

14.12.4.3 **Maximum Impurity Standards**

a) During flowering or pollination, the maximum number of plants of other varieties, off-types or volunteers of genus *Beta* plants permitted in Certified status crops is fifty (50) plants in approximately 10,000 plants of the inspected crop (i.e. 0.5%).
b) During flowering or pollination, no plants of other varieties, off-types or volunteers of genus *Beta* plants are permitted in Foundation status crop (i.e. 0.0%).
c) The inspector makes 6 counts (10,000 plants each) in the field to determine the number of impurities. The resulting average must not exceed the maximum impurity standard.
d) Impurities in pedigreed crops should be removed prior to crop inspection.

14.12.5 SPECIFIC REQUIREMENTS

14.12.5.1 CSGA may require submission of a seed sample for varietal identity verification testing.