SCHEDULE 4

Regulations 2(1), 6(2)(c),9(4)(d) and (e), 10(3)(b), (4)and (5), 11(1), 12(1), (2) and (3),15(4), 16(3) and 19(14)

REQUIREMENTS FOR PRE-BASIC SEED, BASIC SEED, CERTIFIED SEED AND SEED OF A CONSERVATION VARIETY

PART I

CONDITIONS RELATING TO CROPS FROM WHICH SEED IS OBTAINED

Methods of ascertaining whether crop requirements are met

1. The Scottish Ministers may ascertain, so far as practicable, whether the requirements for the crop set out in this Part of the Schedule are met by the use of methods which shall include official field inspection of the crop and which may include examination of a control plot sown with a sample from the seed lot and the consideration of any other relevant information.

Varietal identity and varietal purity

- **2.**—(1) The characteristics used for the determination of varietal identity and varietal purity shall be those to which regard was had when the relevant variety was accepted on to the relevant UK National List, an equivalent list in another EEA state or the Common Catalogue.
 - (2) The crop shall possess sufficient varietal identity and varietal purity.

Crop inspection

- **3.**—(1) An official examination of the crop shall be made by means of an official field inspection.
- (2) The official field inspection shall only be carried out when the cultural condition of the field and the stage of development and condition, including health, of the crop—
 - (a) are such as to permit suitable checks of varietal identity, varietal purity and species purity; and
 - (b) meets the requirements of the Scottish Ministers.
- (3) In the case of certified seed there shall be at least one official field inspection and in the case of Pre-Basic Seed and Basic Seed at least two official field inspections, one of stecklings and one of the seed-producing plants.

Previous cropping

- **4.**—(1) The previous cropping of the field shall not have been incompatible with the production of seed of the species and variety of the crop, and the field shall be sufficiently free from plants which are volunteers (plants of a species and variety that have grown from seed that was not deliberately sown as part of the crop) from previous cropping.
- (2) The crop may be grown only on land which complies with the Scottish Ministers' requirements in respect of previous cropping.

Isolation distances - minimum distances

5.—(1) There shall be a physical barrier or at least two metres of fallow between the seed crop and any crop likely to cause contamination in the seed.

(2) The minimum distances from neighbouring pollen sources shall be:

Crop Minimum distance

- 1. For the production of Pre-Basic and Basic Seed: from any pollen sources of the 1,000 m genus Beta
- 2. For the production of Certified Seed:
 - (a) of sugar beet:
 - from any pollen sources of the genus Beta not included below 1,000 m
 - the intended pollinator or one of the intended pollinators being diploid, 600 m from tetraploid sugar beet pollen sources
 - the intended pollinator being exclusively tetraploid, from diploid 600 m sugar beet pollen sources
 - from sugar beet pollen sources, the ploidy of which is unknown 600 m
 - the intended pollinator or one of the intended pollinators being diploid, 300 m from diploid sugar beet pollen sources
 - the intended pollinator being exclusively tetraploid, from tetraploid 300 m sugar beet pollen sources
 - between two sugar beet seed production fields in which male sterility 300 m is not used
 - (b) of fodder beet:
 - from any pollen sources of the genus Beta not included below
 1,000 m
 - the intended pollinator or one of the pollinators being diploid, from 600 m tetraploid fodder beet pollen sources
 - the intended pollinator being exclusively tetraploid, from diploid 600 m fodder beet pollen sources
 - from fodder beet pollen sources, the ploidy of which is unknown 600 m
 - the intended pollinator or one of the pollinators being diploid, from 300 m diploid fodder beet pollen sources
 - the intended pollinator being exclusively tetraploid, from tetraploid 300 m fodder beet pollen sources
 - between two fodder beet seed production fields in which male sterility 300 m is not used

The above distances can be disregarded if there is sufficient protection from any undesirable foreign pollinator. No isolation is necessary between seed crops using the same pollinator.

The ploidy of both seed-bearing and pollen-shedding components of seed-producing crops is to be established by reference to the Common Catalogue or UK National List.

If this information is not included for any variety, the ploidy is to be regarded as unknown, and a minimum isolation distance of 600 metres is required.

(3) With approval of the Scottish Ministers these distances may be modified if there is adequate protection against undesirable pollen.

PART II

CONDITIONS RELATING TO BASIC SEED, CERTIFIED SEED AND SEED OF A CONSERVATION VARIETY

Varietal identity and varietal purity

6. The seed shall have sufficient varietal identity and varietal purity.

State of health of seed

7. The seed must be of a satisfactory state of health insofar as seed-borne diseases and organisms affecting the seed are concerned.

Standard of germination, analytical purity and content of seed of other plant species

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(a) The seed shall conform to the standards or other conditions as regards germination, analytical purity and the content of seeds of other plant species as specified in the following table.

		Minimum analytical purity ^(*) (% by weight)	Maximum weight of seed of other plant species (% by weight)	Minimum germination (% by number of clusters or pellets)	Maximum moisture content*) (% by weight)
(i)	Sugar beet:				
	 monogerm seed 	97	0.3	80	15
	 precision seed 	97	0.3	75	15
	 natural seed of varieties with more than 85% diploids 	97	0.3	73	15
	 natural seed of varieties with 15% or more triploids and/or tetraploids 		0.3	68	15
(ii)	Fodder beet:				
	 monogerm seed, precision seed and natural seed of varieties with more than 85% diploids 		0.3	73	15

^(*) Excluding where appropriate, granulated pesticides, pelleting substances or other solid additives. The minimum weight of the sample to be submitted for moisture content testing shall be the minimum weight of a sample specified in paragraph 2(2) of Schedule 5 and this sample shall be submitted for testing in addition to the submitted sample and in an airtight moisture proof container.

	Minimum analytical purity ^(*) (% by weight)	Maximum weight of seed of other plant species (% by weight)	Minimum germination (% by number of clusters or pellets)	Maximum moisture content(*) (% by weight)
 natural seed of varieties with 15% or more triploids and/or tetraploids 	97	0.3	68	15

^(*) Excluding where appropriate, granulated pesticides, pelleting substances or other solid additives. The minimum weight of the sample to be submitted for moisture content testing shall be the minimum weight of a sample specified in paragraph 2(2) of Schedule 5 and this sample shall be submitted for testing in addition to the submitted sample and in an airtight moisture proof container.

(b) The special conditions for monogerm seed and for precision seed are—

(i) additional germination requirements

		Minimum percentage of germinated clusters with a single seedling	Maximum percentage of germinated clusters with 3 or more seedlings
(aa)	monogerm seed	90	5
(bb)	precision seeds of—		
	Sugar beet	70	5
	Fodder beet		
	 with more than 85% diploids 	58	5
	 with 15% or more triploids and/or tetraploids 	63	5

(ii) inert matter

		Maximum percentage by weight of inert matter
(aa)	Pre-Basic Seed and Basic Seed	1.0
(bb)	Certified Seed	0.5

In the case of pelleted seed the sample shall be drawn from processed seed which has undergone partial decortication (rubbing or grinding) but has not yet been pelleted.

^{9.} Beet seed may not be introduced into areas recognised as 'rhizomania free zones' unless the percentage by weight of inert matter does not exceed 0.5.

PART III

OFFICIAL EXAMINATIONS USED TO ASCERTAIN WHETHER A CROP OR SEED LOT MEETS THE CONDITIONS RELATING TO BASIC SEED, CERTIFIED SEED AND SEED OF A CONSERVATION VARIETY

Methods for official examinations

10. All official examinations used to ascertain whether crops or seed lots meet the standards specified in this Schedule shall be carried out in accordance with current international methods insofar as such methods exist.