

SCHEDULE 4

REQUIREMENTS FOR PRE BASIC SEED, BASIC SEED, CERTIFIED SEED, CERTIFIED SEED OF THE FIRST GENERATION AND CERTIFIED SEED OF THE SECOND GENERATION

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 this 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.

Commencement Information

I1 Sch. 4 para. 1 in force at 1.7.2005, see [reg. 1\(1\)](#)

Varietal identity and varietal purity

2. 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 [^{F1}GB Variety List or NI Variety List].

Textual Amendments

F1 Words in [sch. 4 para. 2](#) substituted (31.12.2020) by [The Seed and Propagating Material \(EU Exit\) \(Scotland\) \(Amendment\) Regulations 2019 \(S.S.I. 2019/59\)](#), [regs. 1\(1\)\(b\)](#), [13\(22\)\(a\)\(i\)](#) (as substituted by [S.S.I. 2020/445](#), [regs. 1\(1\)\(b\)](#), [14\(19\)](#)); 2020 c. 1, [Sch. 5 para. 1\(1\)](#)

Commencement Information

I2 Sch. 4 para. 2 in force at 1.7.2005, see [reg. 1\(1\)](#)

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 state of health, of the crop—

- (a) are such as to permit suitable checks of varietal identity, varietal purity, species purity and wild oats contamination to be made; and
- (b) meet the requirements of the Scottish Ministers.

(3) A crop from which HVS level seed of Basic Seed, Certified Seed of the First Generation or Certified Seed of the Second Generation is to be produced shall not be more than one third lodged at the time of inspection.

(4) Subject to sub paragraphs (5) and (6), at least one field inspection of the crop shall be carried out.

Changes to legislation: There are currently no known outstanding effects for the The Cereal Seed (Scotland) Regulations 2005, PART I. (See end of Document for details)

(5) Subject to sub-paragraph (6), at least three field inspections shall be carried out in the case of an inbred line or hybrid of maize.

(6) In the case of maize, where the crop to be examined follows a maize crop in either the preceding or current year, at least one special field inspection shall be carried out to check that the condition contained in paragraph 1 has been complied with.

(7) For the purposes of this paragraph “lodged” means an area of crop which has been displaced from the vertical by more than 45 degrees.

Commencement Information

I3 Sch. 4 para. 3 in force at 1.7.2005, see [reg. 1\(1\)](#)

[^{F2}Pests in the crop

4.—(1) The crop must be practically free from any pests which reduce the usefulness and quality of the seed.

(2) The crop must also comply with the requirements concerning [^{F3}GB] quarantine pests, [^{F4}PFA] quarantine pests and RNQPs provided for in implementing acts adopted pursuant to the EU Plant Health Regulation, as well as the measures adopted pursuant to Article 30(1) of that Regulation.]

Textual Amendments

F2 Sch. 4 para. 4 substituted (1.7.2020) by [The Seed and Plant Material \(Miscellaneous Amendments\) \(Scotland\) Regulations 2020 \(S.S.I. 2020/165\)](#), regs. 1(1), [6\(3\)\(a\)](#)

F3 Word in [sch. 4 para. 4](#) substituted (31.12.2020) by [The Seed and Propagating Material \(EU Exit\) \(Scotland\) \(Amendment\) Regulations 2019 \(S.S.I. 2019/59\)](#), regs. 1(1)(b), [13\(22\)\(a\)\(ii\)\(aa\)](#) (as substituted by [S.S.I. 2020/445](#), regs. 1(1)(b), [14\(19\)](#)); 2020 c. 1, [Sch. 5 para. 1\(1\)](#)

F4 Word in [sch. 4 para. 4](#) substituted (31.12.2020) by [The Seed and Propagating Material \(EU Exit\) \(Scotland\) \(Amendment\) Regulations 2019 \(S.S.I. 2019/59\)](#), regs. 1(1)(b), [13\(22\)\(a\)\(ii\)\(bb\)](#) (as substituted by [S.S.I. 2020/445](#), regs. 1(1)(b), [14\(19\)](#)); 2020 c. 1, [Sch. 5 para. 1\(1\)](#)

Previous cropping

5.—(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 from previous cropping.

(2) The crop may be grown only on land which complies with the Scottish Ministers' requirements in respect of previous cropping.

Commencement Information

I4 Sch. 4 para. 5 in force at 1.7.2005, see [reg. 1\(1\)](#)

Isolation distances – general

6. There shall be either a physical barrier or at least 2 metres of fallow ground between the seed crop and any crop likely to cause contamination in the seed.

Commencement InformationI5 Sch. 4 para. 6 in force at 1.7.2005, see [reg. 1\(1\)](#)**[^{F5}Isolation distances — minimum distances**

7.—(1) Subject to sub-paragraph (2), for maize, self-pollinating varieties of triticale, rye and hybrids of barley [^{F6}, durum wheat, spelt wheat and wheat] produced by means of cytoplasmic male sterility, the minimum distance from neighbouring crops or plants of other species, or of other varieties of the same species, liable to cross-pollinate with the crop shall be the distance specified in column 2 of the following table for the corresponding crop specified in column 1 of the table (which can include any distance of at least 2 metres of fallow ground required under paragraph 6)—

<i>Column 1</i>	<i>Column 2</i>
<i>Crop</i>	<i>Minimum Distance</i>
(a) Maize—	
(i) for the production of Basic Seed	200 metres
(ii) for the production of Certified Seed	200 metres
(b) Self-pollinating variety of triticale—	
(i) for the production of Basic Seed	50 metres
(ii) for the production of Certified Seed	20 metres
(c) Rye (other than hybrids)—	
(i) for the production of Basic Seed	300 metres
(ii) for the production of Certified Seed	250 metres
(d) Hybrids of rye—	
(i) for the production of Basic Seed where male sterility is used	1,000 metres
(ii) for the production of Basic Seed where male sterility is not used	600 metres
(iii) for the production of Certified Seed	500 metres
(e) Hybrids of barley produced by means of cytoplasmic male sterility—	
(i) for the production of Basic Seed	100 metres
(ii) for the production of Certified Seed	50 metres
[^{F7} (f) Hybrids of durum wheat, spelt wheat and wheat produced by means of cytoplasmic male sterility—	
(i) for the production of Basic Seed	300 metres
(ii) for the production of Certified Seed	25 metres]

(2) The minimum distance specified in paragraph (1) may, subject to the approval of the Scottish Ministers, be modified or disregarded if the Scottish Ministers are satisfied that there is adequate protection against undesirable foreign pollen.]

Textual Amendments	
F5	Sch. 4 para. 7 substituted (1.7.2016) by The Seed (Licensing and Enforcement etc.) (Scotland) Regulations 2016 (S.S.I. 2016/68) , reg. 1(1), sch. 3 para. 2(6)(a)(i)
F6	Words in sch. 4 para. 7(1) inserted (6.10.2023) by The Cereal Seed (Scotland) Amendment Regulations 2023 (S.S.I. 2023/193) , regs. 1(1), 3(1)(a)(i)
F7	Words in sch. 4 para. 7(1) Table inserted (6.10.2023) by The Cereal Seed (Scotland) Amendment Regulations 2023 (S.S.I. 2023/193) , regs. 1(1), 3(1)(a)(ii)

Standards for varietal purity

- 8.—(1) The crop shall have sufficient varietal identity and varietal purity, including—
- (a) in the case of a crop of an inbred line, sufficient varietal identity and varietal purity as regards its characteristics; and
 - (b) in the case of a crop used for the production of seed of hybrid varieties, sufficient varietal identity and varietal purity as regards the characteristics of the components of the hybrid variety, including male sterility or fertility restoration.
- (2) In crops of rye, including hybrids of rye, the number of plants of the crop species which are recognisable as obviously not being true to the variety shall not exceed—
- (a) one plant in 30 square metres for the production of Basic Seed; and
 - (b) subject to sub-paragraph (4)(a) in relation to hybrids of rye, one plant in 10 square metres for the production of Certified Seed.
- (3) In crops of maize—
- (a) the percentage by number of plants which are recognisable as obviously not being true to the variety, to the inbred line or to the component shall not exceed the percentage specified in column 2 of the following table corresponding to the relevant crop specified in column 1 of the table—

Column 1 Crop of maize	Column 2 Percentage by number of plants
(i) For the production of Basic Seed—	
(aa) inbred lines	0.1%
(bb) simple hybrid, each component	0.1%
(cc) open-pollinated varieties	0.5%
(ii) For the production of Certified Seed—	
(aa) a component of a hybrid variety	
(aaA) in the case of an inbred line	0.2%
(aaB) in the case of a simple hybrid	0.2%
(aaC) in the case of open pollinated variety	1.0%
(bb) in the case of open pollinated varieties	1.0%

- (b) used for the production of seed of hybrid varieties—
 - (i) sufficient pollen shall be shed by the plants of the male component while the plants of the female component are in flower;
 - (ii) where appropriate emasculation shall be carried out; and
 - (iii) where 5% or more of the female component plants have receptive stigmas, the percentage of female component plants which have shed pollen or are shedding pollen shall not exceed—
 - (aa) 1% at any official field inspection; and
 - (bb) 2% at the total of the official field inspections;
 - (c) for the purposes of sub paragraphs (b)(i) and (iii) plants shall be considered as having shed pollen or to be shedding pollen where, on 50 millimetres or more of the central axis or laterals of a panicle, the anthers have emerged from their glumes and have shed or are shedding pollen.
- (4) In crops of hybrids of rye—
- (a) in an official field inspection the standard in paragraph (2)(b) shall apply to the female component only;
 - (b) in the case of Basic Seed, where male sterility is used, the level of sterility of the male sterile component shall be at least 98%; and
 - (c) where appropriate, Certified Seed shall be produced in mixed cultivation of a female male sterile component with a male component which restores male fertility.
- [^{F8}(5) [^{F9}In crops of hybrids of barley, durum wheat, oats, self-pollinating triticale, spelt wheat or wheat other than hybrids of barley, durum wheat, spelt wheat or wheat produced by means of cytoplasmic male sterility—]
- (a) subject to sub-paragraph (b), varieties of the female component of the crop shall be at least 25 metres from a crop of any other variety of the same species except from a crop of the male component;
 - (b) sub-paragraph (a) shall not apply if there is sufficient protection from any undesirable foreign pollination;
 - (c) where seed is produced using a chemical hybridisation agent, the crop shall conform to the following standards or other conditions—
 - (i) the minimum varietal purity of each component shall be—
 - (aa) in the case of barley, durum wheat, oats, spelt wheat or wheat, 99.7%; and
 - (bb) in the case of self-pollinating varieties of triticale, 99.0%; and
 - (ii) the minimum hybridity must be 95%; and
 - (d) in cases where the hybridity is determined during seed testing prior to certification, the determination of the hybridity during a field inspection need not be done.
- (6) In crops of hybrids of barley produced by means of cytoplasmic male sterility—
- (a) the percentage by number of plants which are recognisable as obviously not being true to the variety shall not exceed—
 - (i) where the crop is used for the production of Basic Seed, 0.1% for the maintainer and the restorer line and 0.2% for the cytoplasmic male sterility female component; and
 - (ii) where the crop is used for the production of Certified Seed—
 - (aa) 0.3% for the restorer and the cytoplasmic male sterility female component;
- or

Changes to legislation: There are currently no known outstanding effects for the *The Cereal Seed (Scotland) Regulations 2005, PART I*. (See end of Document for details)

[^{F10}(bb) 0.3% for the restorer and 0.5% for the cytoplasmic male sterility female component, where the cytoplasmic male sterility component is a simple hybrid;]

- (b) the level of sterility of the female component shall be at least—
- (i) where the crop is used for the production of Basic Seed, 99.7%; and
 - (ii) where the crop is used for the production of Certified Seed, 99.5%; and
- (c) in the case of Certified Seed, the crop may be produced in mixed cultivation of a female male-sterile component with a male component which restores fertility.]

[^{F11}(7) In crops of hybrids of durum wheat, spelt wheat and wheat produced by means of cytoplasmic male sterility—

- (a) the percentage by number of plants which are recognisable as obviously not being true to the variety shall not exceed—
- (i) where the crop is used for the production of Basic Seed—
 - (aa) 0.1% for the maintainer and the restorer line and 0.3% for the cytoplasmic male sterility female component; and
 - (ii) where the crop is used for the production of Certified Seed—
 - (aa) 0.3% for the restorer line and 0.6% for the cytoplasmic male sterility female component; or
 - (bb) 0.3% for the restorer line and 1% for the cytoplasmic male sterility female component, where the cytoplasmic male sterility female component is a simple hybrid;
- (b) the level of sterility of the female component shall be at least—
- (i) where the crop is used for the production of Basic Seed, 99.7%; and
 - (ii) where the crop is used for the production of Certified Seed, 99%; and
- (c) in the case of Certified Seed, the crop may be produced in mixed cultivation of a female male-sterile component with a male component which restores fertility.]

Textual Amendments

- F8** Sch. 4 para. 8(5)(6) substituted for sch. 4 para. 8(5) (1.7.2016) by [The Seed \(Licensing and Enforcement etc.\) \(Scotland\) Regulations 2016 \(S.S.I. 2016/68\)](#), reg. 1(1), **sch. 3 para. 2(6)(a)(ii)**
- F9** Words in sch. 4 para. 8(5) substituted (6.10.2023) by [The Cereal Seed \(Scotland\) Amendment Regulations 2023 \(S.S.I. 2023/193\)](#), regs. 1(1), **3(1)(b)(i)**
- F10** Sch. 4 para. 8(6)(a)(ii)(bb) substituted (6.10.2023) by [The Cereal Seed \(Scotland\) Amendment Regulations 2023 \(S.S.I. 2023/193\)](#), regs. 1(1), **3(1)(b)(ii)**
- F11** Sch. 4 para. 8(7) inserted (6.10.2023) by [The Cereal Seed \(Scotland\) Amendment Regulations 2023 \(S.S.I. 2023/193\)](#), regs. 1(1), **3(1)(b)(iii)**

Commencement Information

- I6** Sch. 4 para. 8 in force at 1.7.2005, see [reg. 1\(1\)](#)

Standards for wild oats contamination

9. The maximum number of wild oats per hectare shall be as follows—

Changes to legislation: There are currently no known outstanding effects for the The Cereal Seed (Scotland) Regulations 2005, PART I. (See end of Document for details)

Crops to produce	Level where applicable	Barley (other than hybrids)	Hybrid of barley	Durum wheat, spelt wheat and wheat (other than hybrids in each case)	Hybrid of durum wheat, spelt wheat and wheat	Maize and rye (including hybrids)	Oats (other than hybrids)	Hybrid of oats	Hybrid of self-pollinating varieties of triticale	Triticale
Basic Seed	HVS	7	n/a	7	n/a	n/a	0	n/a	n/a	n/a
	Minimum	7	n/a	7	n/a	7	0	n/a	n/a	7
Certified Seed	–	n/a	20	n/a	50	50	n/a	0	50	n/a
Certified Seed of the First Generation	HVS	7	n/a	7	n/a	n/a	0	n/a	n/a	n/a
	Minimum	20	n/a	50	n/a	n/a	0	n/a	n/a	50
Certified Seed of the Second Generation	HVS	7	n/a	7	n/a	n/a	0	n/a	n/a	n/a
	Minimum	20	n/a	50	n/a	n/a	0	n/a	n/a	50

Commencement Information

I7 Sch. 4 para. 9 in force at 1.7.2005, see [reg. 1\(1\)](#)

Standards for other cereal species

10. In the case of barley, durum wheat, oats, spelt wheat and wheat, the crop shall conform to the following standards as regards the minimum species purity–

Crops to produce	Minimum standard (percentage by number)	Higher Voluntary Standard (percentage by number)
(a) (a) Basic seed	n/a	99.99%
(b) (b) Certified Seed of the First Generation	n/a	99.99%

Changes to legislation: There are currently no known outstanding effects for the The Cereal Seed (Scotland) Regulations 2005, PART I. (See end of Document for details)

Crops to produce	Minimum standard (percentage by number)	Higher Voluntary Standard (percentage by number)
(c) (c) Certified Seed of the Second General	n/a	99.99%

Commencement Information

18 Sch. 4 para. 10 in force at 1.7.2005, see [reg. 1\(1\)](#)

Crop standards for loose smut infection

11. The maximum percentage by number of loose smut infection shall be as follows–

Column 1 Category (Barley, durum wheat, spelt wheat and wheat)	Column 2 Level (where appropriate)	Column 3 Maximum percentage by number of loose smut infection
(a) (a) Basic Seed	HVS	0.1%
	Minimum	0.5%
(b) (b) Certified Seed	–	0.5%
(c) (c) Certified Seed of the First Generation	HVS	0.2%
	Minimum	0.5%
(d) (d) Certified Seed of the Second Generation	HVS	0.2%
	Minimum	0.5%

Seeds produced from a crop which has failed on official examination to meet the standards laid down by this paragraph may nevertheless be eligible for official certification–

- (a) if they have been adequately treated by any method approved by the Scottish Ministers for the control of loose smut; or
- (b) if an embryo test carried out by an official seed testing station, on the sample submitted for official examination shows that the seeds meet the seed standards in paragraph 18.

Commencement Information

19 Sch. 4 para. 11 in force at 1.7.2005, see [reg. 1\(1\)](#)

Crop conditions for Pre basic Seed

12. For the purpose of determining whether a crop from which Pre basic Seed is to be produced meets the conditions specified in this Part of this Schedule, the crop from which such seed is to be

produced shall be treated in the same way as a crop from which minimum level Basic Seed is to be produced.

Commencement Information

I10 Sch. 4 para. 12 in force at 1.7.2005, see [reg. 1\(1\)](#)

Changes to legislation:

There are currently no known outstanding effects for the The Cereal Seed (Scotland) Regulations 2005, PART I.