SCHEDULE 4

Regulations 3(1) and (3), (5), (6) and (7) and 9(2) and (3)

REQUIREMENTS FOR BASIC SEED, CERTIFIED SEED, CERTIFIED SEED OF THE FIRST, SECOND AND THIRD GENERATIONSAND COMMERCIAL SEED

PART I

CONDITIONS RELATING TO CROPS FROM WHICH SEEDS OTHER THAN COMMERCIAL SEED ARE OBTAINED

1. So far as the Minister can ascertain them, by the use of methods which shall include official examination of the crop and which may include examination of a plot sown with a sample from the seed lot sown in the field and the consideration of any other relevant information, the requirements for the crop set out below shall be met.

Varietal identity and varietal purity

2. The characteristics for the determination of varietal identity and varietal purity shall be those recognised as those of the variety for the purposes of the National List or the Common Catalogue.

Crop inspection

- **3.** The crop shall be officially examined in such manner and at such times (when the cultural condition of the field and the stage of development and condition of the crop are such as to permit suitable checks of varietal identity, varietal purity and species purity to be made) as the Minister may reasonably require.
- **4.** Unless the crop's state of health is satisfactory so far as seed-borne disease and organisms affecting the seeds are concerned, the inspection shall not proceed.

Previous cropping

5. The crop may be grown only on land which has not previously been cropped in a manner which might adversely affect the nature or quality of the seeds to be produced and which complies with the Minister's requirements in that respect.

Isolation distances

- **6.** There shall be either a physical barrier or at least 2 metres of fallow between the seed crop and any crop likely to cause contamination in the seed.
- 7. For turnip rape, swede rape, brown mustard, black mustard and white mustard the minimum distance from neighbouring crops or plants or other species or of other varieties of the same species liable to cross-pollinate with the crop shall be for—
 - (a) crops to produce Basic Seed, 400 metres,
 - (b) crops to produce Certified Seed, 200 metres,
 - (c) crops to produce—
 - (i) Basic Seed of hybrids of sunflower, 1500 metres;
 - (ii) Basic Seed of sunflower, other than hybrids, 750 metres;
 - (iii) Certified Seeds of sunflower, 500 metres,

with the approval of the Minister these distances may be modified if there is adequate protection against undesirable pollen.

Standards for varietal purity

- 8. The crop shall have sufficient varietal identity and varietal purity. In particular—
 - (a) for crops of swede rape (other than varieties to be used solely for fodder purposes), turnip rape (other than varieties to be used solely for fodder purposes), soya bean, flax, linseed, sunflower (other than hybrid varieties including their components) and white mustard the minimum varietal purity standards shall be:—

Minimum varietal purity (percentage by number)	Basic Seed	Certified Seed or Certified Seed of the First Generation	Certified Seed of the Second or Third Generation
Swede rape and Turnip rape*	99.9	99.7	_
Soya bean	97.0	95.0	95.0
Flax and Linseed	99.7	98.0	97.5
Sunflower and White mustard	99.7	99.0	_

^{*} For swede rape and turnip rape of varieties to be used solely for fodder purposes the standards shall be 99.7 per cent for Basic Seed and 99 per cent for Certified Seed.

- (b) In crops of brown mustard and black mustard the number of plants of the crop species which are recognisable as obviously not being true to the variety shall not exceed—
 - (i) one plant in 30 sq m for the production of Basic Seed, and
 - (ii) one plant in 10 sq m for the production of Certified Seed.
- (c) A crop of an inbred line of sunflower shall have sufficient identity and purity as regards its characteristics. For the production of seed of hybrid varieties of sunflower the characteristics of sufficient identity and purity shall extend to its components, including male sterility or fertility restoration.
- (d) In the case of hybrid of sunflower—
 - (i) the percentage by number of plants which are recognisable as obviously not being true to the inbred line or to the component shall not exceed—
 - (aa) for the production of Basic Seed
 - (A)

inbred lines, 0.2

(B)

simple hybrids—

- male parents, plants which have shed pollen while 2% or more of the female plants have receptive flowers, 0.2
- female parent, 0.5
- (bb) for the production of Certified Seed—
 - male component, plants which have shed pollen while 5% or more of the female plants have receptive flowers, 0.5
 - female component, 1.0

- (ii) for the production of seed hybrid varieties the following standards shall be satisfied—
 - (aa) sufficient pollen shall be shed by the plants of the male component while the plants of the female component are in flower;
 - (bb) where the female component plants have receptive stigmas, the percentage by number of female component plants which have shed pollen or are shedding pollen shall not exceed 0.5;
 - (cc) for the production of Basic Seed the total percentage by number of plants of the female component which are recognisable as obviously not being true to the component and which have shed pollen or are shedding pollen shall not exceed 0.5%;
 - (dd) where a male-sterile component has been used to produce Certified Seed by using a male component which contains a specific restorer line or lines, at least one-third of the plants grown from the resulting hybrid shall produce pollen which appears normal in all aspects.

PART II

A. CONDITIONS RELATING TO BASIC SEED, CERTIFIED SEED AND CERTIFIED SEED OF THE FIRST, SECOND AND THIRD GENERATIONS

- 1. The seeds shall possess the varietal identity and varietal purity, as appropriate to the kind of seed, specified in Part I. Where a female male-sterile component and a male component which does not restore male fertility have been used for the production of Certified Seed of hybrids of sunflower, the seed produced by the male-sterile parent shall be blended with seed produced by the fully fertile seed parent. The ratio of male-sterile parent seed to male-fertile parent shall not exceed two to one.
 - 2. The seeds shall comply with the following standards:—

	Analytical purity		Maximum content by number of seeds of other plant species in a sample of the weight specified in Part II of Schedule 5							
Kind		unMinimu nationlytic purity (% by weight)	acontent of seed	plant	Wild Oat (Avena fatua, A. ludovic A. sterilis)	spp.)		nuspp.	(Alope myosu	graßsolium ecu reis notum roides)
(1) Brassica species	(2) a	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

^(*) The maximum content of seeds laid down in Column 5 includes also the seeds of the kinds in Columns 6 to 11.

[†] The presence of one seed of dodder (*Cuscutaspp.*) in a sample of the prescribed weight shall not be regarded as an impurity where a second sample of the same weight is free from any seeds of dodder.

Analytical purity			Maximum content by number of seeds of other plant species in a sample of the weight specified in Part II of Schedule 5							
Kind		unMinimu na tion lytic purity (% by weight)	acontent of seed	plant species ⁶	Wild Oat (Avena fatua, A. ludovic A. sterilis)	iana,		nuspp.	(Alopeo myosur	raksolium curesnotum roides)
— Basic Seed	85	98	0.3	_	0	0^{\dagger}	10	2		
— Certified Seed	85 1	98	0.3	_	0	0^{\dagger}	10	5		
Sunflow	e 35	98	_	5	0	0				
Flax	92	99	_	15	0	0^{\dagger}			4	2
Linseed	85	99	_	15	0	0^{\dagger}			4	2
Soya bean	80	98	_	5	0	0				
White mustard										
Basic Seed	85	98	0.3		0	0^{\dagger}	10	2		
— Certified Seed	85 1	98	0.3	_	0	0†	10	5		

^(*) The maximum content of seeds laid down in Column 5 includes also the seeds of the kinds in Columns 6 to 11.

[†] The presence of one seed of dodder (*Cuscutaspp.*) in a sample of the prescribed weight shall not be regarded as an impurity where a second sample of the same weight is free from any seeds of dodder.

^{3.}—(1) The seeds shall be of a satisfactory state of health as far as seed-borne organisms and diseases affecting the seeds are concerned. In particular the seeds shall not exceed the following standards:

	Harmful organisms							
	Harmful organisms Maximum percentage by number of seeds							
	contaminated by harmful organisms (total per column)							
Kind	Botrytis spp.	Alternaria spp., Phoma exiqua var.linicola, Colletotrichum lini, Fusarium spp.	Sclerotinia sclerotiorum (maximum number of sclerotia or fragments of sclerotia in a sample of the weight specified on Column 4 of Part II of Schedule 5)					
1	2	3	4					
Turnip rape			5					
Swede rape			10					
Sunflower	5		10					
Flax and Linseed	5	5 ^(*)						
White mustard			5					

^(*) In flax the maximum percentage by number of seeds contaminated by Phoma exiqua var. linicola shall not exceed 1%.

(2) In soya bean,

- (a) the maximum number of sub-samples within a sample of 5,000 seeds minimum per lot subdivided into 5 sub-samples which have been found to be contaminated by *Pseudomonas syringae pv. glycinea* shall not exceed 4;
- (b) the maximum number of seeds contaminated by *Diaporthe phaseolorum* shall not exceed 15%, and
- (c) the percentage by weight of inert matter shall not exceed 0.3%.