

**DEPARTMENT OF AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT**

NO. 692

6 August 2021

PLANT IMPROVEMENT ACT, 1976  
(ACT No. 53 OF 1976)

**SOUTH AFRICAN SEED CERTIFICATION SCHEME: AMENDMENT**

I, Angela Thokozile Didiza, Minister of Agriculture, Land Reform and Rural Development, acting under section 23 of the Plant Improvement Act, 1976 (Act No. 53 of 1976), after consultation with the Minister of Finance, hereby substitutes the Scheme in the Schedule for the South African Seed Certification Scheme published under Government Notice No. R.2566 of 25 November 1983, as amended.

  
**MRS ANGELA THOKOZILE DIDIZA**  
**MINISTER FOR AGRICULTURE, LAND REFORM AND RURAL DEVELOPMENT**  
DATE: 22-04-2021

**SCHEDULE****Definition**

1. In this Schedule, "the Scheme" means the South African Seed Certification Scheme published by Government Notice No. R. 2566 of 25 November 1983, as amended by Government Notices No. R. 1196 of 30 May 1985, R. 1660 of 26 July 1985, R. 2352 of 14 November 1986, R. 16 of 8 January 1988, R. 1388 of 30 June 1989, R. 2093 of 29 September 1989, R. 121 of 26 January 1990, R. 2708 of 23 November 1990, R. 994 of 3 April 1992, R. 1494 of 29 May 1992, R. 2333 of 21 August 1992, R. 2230 of 26 November 1993, R. 1074 of 10 June 1994, R. 1781 of 17 November 1994, R. 1222 of 2 October 1998, R. 1326 of 12 November 1999, R. 1560 of 13 December 2002, R. 55 of 2 February 2007, R. 623 of 20 July 2007 and R. 519 of 18 June 2010.

**Substitution of the Scheme**

2. This Scheme is hereby substituted for the Scheme as published under Government Notice No. R.2566 of 25 November 1983.

**SOUTH AFRICAN SEED CERTIFICATION SCHEME****Definitions**

1. In this Scheme, unless the context indicates otherwise -

**"Analysis Report"**

means the test report issued by a seed testing laboratory which has been registered in terms of the Act;

**"authorized person"**

means a person authorized in terms of section 3(3) of this Scheme to carry out specific tasks in terms of recognised Schemes;

**"basic seed"**

means seed which has been certified in terms of an applicable recognised Scheme as basic seed, or in the case of AOSCA as "Registered Seed";

**"breeder seed"**

means seed of a particular generation of an inbred line or a variety which has been produced under the supervision of the breeder thereof, the person to whom the rights therein have been transferred, or another person who maintains the generation concerned;

**"bulking"**

means combining unprocessed seed of the same variety from different origins before conditioning and packaging takes place, and "bulked" has a corresponding meaning;

**"certificate of registration"**

means the certificate of registration which was issued in terms of section 6 of the Scheme in respect of the unit concerned;

**"Certification Standing Committee"**

means a body consisting of technical experts in seed certification of the various crop groups;

**"certified seed"**

means seed which has been certified in terms of a recognised Scheme as certified seed;

**"closed system"**

means that the plants intended for seed production are protected in such a way that contamination by pollen from unwanted sources and/or pathogens is prevented and includes structures such as greenhouses;

**"coated seeds"**

means seeds covered with material that may contain pesticides, fungicides, dyes or other additives. The following types of coated seeds are defined:

- (a) Encrusted seed – units more or less retaining the shape of the seed with the size and weight changed to a measurable extent.
- (b) Seed granules – units, more or less cylindrical, including types with more than one seed per granule.
- (c) Seed mats – broad sheets of material, such as paper or other degradable material, with seeds placed in rows, groups or at random throughout the sheets.
- (d) Seed pellets – more or less spherical units, usually incorporating a single seed with the size and shape of the seed no longer readily evident.
- (e) Seed tapes – narrow bands of material, such as paper or other degradable material, with seeds spaced randomly, in groups or in a single row.

**"cross"**

means the first generation of seed which has been obtained by controlled pollination between plants of -

- (a) an inbred line and another inbred line (single cross);
  - (b) an inbred line and a cross (three-way cross);
  - (c) an inbred line and a variety (top cross);
  - (d) a cross and another cross (double cross);
  - (e) a cross and a variety (top cross); or
  - (f) a variety and another variety (inter varietal cross),
- of the same or related kind of plant;

**"deviating plant"**

means a plant of a particular variety which does not correspond to the official recognised description of a typical plant of that variety;

**"field"**

means a specified portion or portions of a farm which is intended for registration as a unit, i.e. a seed production area enclosed by natural borders such as ditches, contours, roads, buildings, fences, tree lines, or a minimum of 3 meter tilled, cut or clean break.

**"hybrid"**

means seed which is the first generation of a cross between Basic seed of a female parent and a male parent, which is intended for the production of crops for purposes other than seed production.

**"inbred line"**

means a breeding line which has become homozygotic through inbreeding and selection;

**"mixture"**

means a lot consisting of seed of various varieties of the same or different species which, with a view to its usefulness for agricultural purposes, is obtained by mixing such varieties in particular proportions;

**"open-pollinated variety"**

for the purpose of this Scheme, means any non-hybrid variety where pollination occurs naturally, such as open-pollinated varieties, self-pollinated varieties, synthetic varieties, and apomictic varieties.

**"owner of a variety"**

means the applicant/holder/local distributor of a variety, as indicated against the denomination of the specific variety in the applicable varietal list.

**"post control sample"**

means a quantity of seed obtained from a registered unit in order to verify the varietal purity and identity;

**"pre-basic seed"**

means seed that has been certified as pre-basic seed in terms of an applicable recognised Scheme, or in the case of AOSCA as "Foundation Seed", and is the seed –

- (a) of generations preceding 'basic seed'; and
- (b) of the generations between 'breeder seed' and 'basic seed' if such seed have been produced in accordance with the stipulations of the Scheme and comply with the minimum requirements of 'basic seed' for the specific crop;

**"premises"**

means a premises which has been registered in terms of the Act;

**"pure seed"**

means seed free from inert matter and free from other seed distinguishable by appearance or by test;

**"recognised Scheme"**

means the following seed certification schemes, standards and/or protocols:

- (a) The South African Seed Certification Scheme;
- (b) the Organization of Economic Cooperation and Development (OECD) Seed Schemes;
- (c) the Association of Official Seed Certifying Agencies (AOSCA) Seed Certification Standards; and
- (d) The Southern African Development Community (SADC) Seed Certification Protocol;

“restricted weed seed”

means seed of the following plant species:

- (a) *Cuscuta* spp. – Dodder;
- (b) *Datura* spp. – Thorn apple/Stinkolieboom;
- (c) *Solanum elaeagnifolium* Cav – Silverleaf bitter apple/Silwerblaarbitterappel; and
- (d) *Stipa* spp. excluding *S. capensis* Thunb. and *S. dregeana* Steud.- Serrated Tussock, Nasella/Saagtandpolgras, Nasella-polgras

“seed”

means seed intended for cultivation;

“seed grower”

means a person to whom the certificate of registration in respect of a unit has been issued;

“seed lot”

means a specified quantity of seed that is physically and uniquely identifiable;

“the Act”

means the Plant Improvement Act, 1976 (Act No 53 of 1976), and the regulations made thereunder;

“the authority”

means the authority designated in section 3 of this Scheme;

“the Minister”

means the Minister responsible for the Act;

“traces”

means, with regard to the physical purity of seed, any fraction less than 0.05 percent and which will be indicated on an Analysis Report as “TR”;

“treated seed”

means seed that has been subjected to the application of a compound including film coatings, polymers, pesticides, fungicides, biologicals, identifying colourants, dyes and other additives, which have not resulted in a significant change in size, shape or addition to the weight of the original seed.

“unit”

means a field which is registered in terms of this Scheme, and on which seed is multiplied in terms of a recognised Scheme;

“varietal association”

means the association (mixture) of certified seed of a hybrid variety dependent on a specified pollinator with certified seed of one or more specified pollinator varieties; mechanically combined in proportions determined by the persons responsible for their maintenance, with such combination having been notified to the Authority.

“varietal identity”

means that all plants cultivated from the seed concerned correspond to the description of a plant of the variety concerned, and are clearly distinguishable from plants of any other variety of the same kind of plant; resulting from a given genotype or combination of genotypes;

“varietal list”

means the current version of the varietal list kept in terms of the Act; as well as the SADC Regional Variety Catalogue and the OECD Seed Schemes List of Varieties Eligible for Seed Certification;

“varietal purity”

means the percentage of plants or seed within the population that conforms to the official recognised description of the variety concerned. Plants or seeds are considered as deviating (off-types) when they are obviously different from the variety;

“visually free”

means that –

- (a) the authorized person has, without using a microscope or magnifying glass, found that the unit concerned is free from disease-infected plants, or that the plant or seed concerned is free from pathogens; or
- (b) where a plant or seed which has been visually identified as disease-infected, the results of a laboratory test, examination or analysis conducted by a registered laboratory, does not confirm such visual identification.

“Wild Oats”

means plants or seed of the species *Avena fatua*, *A. barbata* and *A. sterilis*

## NAME OF SCHEME

2. This Scheme shall be known as the South African Seed Certification Scheme.

## DESIGNATION OF AUTHORITY

- 3.(1) The South African National Seed Organization (SANSOR), a voluntary organisation which is a juristic person by virtue of a provision to this effect in its statute, is hereby designated, at own expenses, as authority to exercise the powers, perform the functions and carry out the duties conferred upon, assigned to or imposed upon the authority under this Scheme and all the recognized Schemes and has no recourse against the State for any expenses thus incurred. The authority will be supported and advised in decision making by the Certification Standing Committee.
- 3.(2) The authority referred to in subsection (1), shall exercise its powers, perform its functions and carry out its duties subject to the directions of the Registrar of Plant Improvement designated by the Minister under section 3(1) of the Act.
- 3.(3) The authority designated in terms of subsection (1), may in terms of section 24(2)(a) of the Act, authorise a person to exercise the powers, perform the functions and carry out the duties conferred upon that authority.
- 3.(4) The authority determines the requirements and conditions according to which a person contemplated in subsection (3) is authorised.

## APPLICATION OF SCHEME

- 4.(1) This Scheme shall apply to seed of -
- (a) those varieties of the kinds of plants specified in column 1 of Table 1, the denominations of which are entered in the varietal list;
  - (b) multiplication of generations of pre-basic and basic seed of varieties in process of examination for the purpose of varietal listing;
  - (c) those inbred lines and crosses which are used in the production of seed of the varieties referred to in paragraph (a); and
  - (d) varieties of kinds of plants which are eligible for certification in terms of a recognised Scheme.
- 4.(2) The provisions of the applicable recognised Scheme shall be binding on the seed grower as from the date of registration of the unit concerned.

## CONDITIONS FOR CERTIFICATION

5. Seed may be certified in terms of a recognised Scheme if -

- (a) the field on which it was produced, is registered by the authority in terms of section 6 of this Scheme as a unit;
- (b) it has, subject to the provisions of sections 8 and 16 of this Scheme, been produced by the seed grower to whom the certificate of registration in respect of the unit concerned has been issued;
- (c) the seed which was used to establish the plants from which it has been produced, complies with the requirements referred to in section 11 of this Scheme, and was planted in accordance with the establishment requirements referred to in that section;
- (d) the unit on which it was produced has been isolated in accordance with the isolation requirements referred to in section 12 of this Scheme, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme; provided that productions that are done in closed systems are exempt from any isolation requirements. Such a closed system must be confirmed by the authorized person as such.
- (e) The plants from which it was produced, comply with the requirements referred to in section 12 of this Scheme, and have been inspected in accordance with the provisions of section 13 of this Scheme, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme;
- (f) it complies with the physical requirements referred to in section 14 of this Scheme, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of that Scheme;
- (g) the containers thereof comply with the requirements set out in section 18 of this Scheme, and are labelled as required in that section, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of that Scheme;
- (h) it is presented for certification in accordance with the provisions of section 19 of this Scheme, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme; and
- (i) all the other provisions of this Scheme, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme with regard to the seed concerned and the processes in connection with the production thereof have been complied with.

## REGISTRATION OF UNITS

- 6.(1) An application for the registration of a field as a unit shall be made on a form which is obtainable from the authority or has been approved by the authority for this purpose.
- 6.(2) Such a form shall –
  - (a) be completed by the person who intends to produce seed for certification in terms of a recognised Scheme on the field concerned, who may be either the grower or the seed company for which the seed is being produced for under contract;
  - (b) be lodged with the authority; be it in hard copy or electronic. In the last-mentioned case, a signed hard copy must be produced to the authority on request;
  - (c) in the case of a field on which plants of a perennial crop are established which have also been used for the production of seed for certification in terms of a recognised Scheme during the preceding growing season, be thus lodged after the seed crop of the preceding growing season has been removed therefrom, but not before regrowth of the plants concerned can be observed;
  - (d) otherwise be thus lodged within 28 days of the date on which the establishment of seed or planting material on the field concerned has commenced;
  - (e) be accompanied by the applicable amount determined by the authority, or proof of payment of the amount concerned, and
  - (f) produce on request a locality map or locality information which clearly indicates where the field concerned is situated.
- 6.(3) The authority may, in the case of an application for the registration of a field which is intended for the production of seed of an inbred line or cross referred to in section 4(1)(c) of this Scheme or a variety referred to in sections 4(1)(b) and 4(1)(d) of this Scheme, regardless in terms of which recognised Scheme the seed will be certified, require that the recognised description of a typical plant of that inbred line, cross or variety be furnished, and

- such application shall be considered only if the authority is satisfied that the description concerned is sufficient to determine whether the plants of that inbred line, cross or variety –
- (a) are by reason of a conspicuous characteristic clearly distinguishable from the plants of any other inbred line, cross or variety of the same kind of plant;
  - (b) are sufficiently homogeneous having regard to the particular features of the reproduction thereof;
  - (c) are stable with regard to the essential characteristics thereof, and remain true to the description thereof after repeated propagation; and
  - (d) are identified by a denomination which can be linked by the authority to a specific line, cross or variety.
- 6.(4) In the case where application is made for the registration of a field for the production of a specific variety, where the owner of the variety concerned is not the applicant, the authority will only approve the application for the certification of that variety if the owner of the variety concerned provide written approval for such application.
- 6.(5) Separate applications shall be submitted in terms of this section in respect of different fields on the same farm on which seed of different varieties is to be produced.
- 6.(6) If the authority approves an application, the field concerned shall be registered as a unit, and the authority shall confirm it as such.
- 6.(7) A field shall not be registered as a unit if the authority or authorised person is satisfied that –
- (a) the seed used to establish the unit concerned does not comply with the requirements as determined in section 11(1) of this Scheme or another recognised Scheme;
  - (b) the field concerned –
    - (i) does not comply with the field requirements referred to in section 10 and isolation requirements in section 12 of this Scheme;
    - (ii) is situated in an area which does not lend itself to the production of seed of the variety concerned which will be suitable for certification in terms of a recognised Scheme; or
    - (iii) cannot at all times readily be reached for the purpose of inspection;
  - (c) in the case of an application referred to in subsection 6(3), the description submitted does not comply with the provisions of that subsection; or
  - (d) the application concerned contains a material misrepresentation.

#### TERM OF REGISTRATION

7. The registration of a unit shall, subject to earlier termination in terms of this Scheme, be valid only from the date of issue of the certificate of registration concerned to the removal from the unit concerned of the seed crop of the growing season to which such registration relates.

#### TRANSFER OF REGISTRATION

- 8.(1) The certificate of registration which has been issued to a seed grower in respect of a unit shall not be transferable to any other person.
- 8.(2) If a seed grower transfers his right of disposal in the plants which have been established on a unit, to another person, he shall forthwith notify the authority thereof in writing.
- 8.(3) If a person to whom a right of disposal referred to in subsection (2) has been transferred, desires to continue with participation in this Scheme in respect of the unit concerned, he shall, notwithstanding the provisions of section 6(2)(c) or 6(2)(d) of this Scheme, forthwith lodge an application in accordance with section 6 of this Scheme for the registration of that unit in his name.

#### TERMINATION OF REGISTRATION

- 9.(1) The registration of a unit shall lapse if the seed grower concerned transfers his right of disposal referred to in section 8(2) of this Scheme, to another person.
- 9.(2) The registration of a unit may at any time be withdrawn if the authority is satisfied that –



- (a) the applicable provisions of this Scheme with regard to the unit concerned, the plants established thereon or the seed produced thereon, have not been complied with; or
  - (b) circumstances prevail or information has come to light which, if it had prevailed or come to light earlier, would have resulted in a refusal to register the unit concerned.
- 9.(3) The authority shall withdraw the registration of a unit which is intended for the production of certified seed if the seed or vegetative propagating material which was used to establish plants thereon –
  - (a) was seed in respect of which an approval referred to in section 11(2) of this Scheme was issued, and such approval has since then been withdrawn; or
  - (b) was pre-basic or basic seed, and the certification thereof has since then been withdrawn in terms of section 21 of the Scheme.
- 9.(4) If the withdrawal of the registration of a unit in terms of subsection (2) arises from a deficiency which could in the opinion of the authority possibly be rectified through the application of a particular treatment, the authority and/or authorised person shall advise the seed grower concerned of such deficiency and treatment.
- 9.(5) A seed grower who applied a treatment referred to in subsection (4) may request that the authority and/or authorised person re-inspect the unit concerned with a view to revoke the withdrawal of the registration thereof.
- 9.(6) If an application referred to in subsection (5) is approved, the authority may require that the amount determined by it, be paid by the seed grower concerned.

#### FIELD REQUIREMENTS

- 10.(1) A field on which plants of a kind specified in column 1 of Table 1 are established, may be registered as a unit if it complies with the field requirements as set out in the Annexure of which the number is specified in column 2 of the said Table opposite the name of the kind of plant concerned, or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme.
- 10.(2) A unit shall, while the registration thereof remains in force, comply with the requirements referred to in subsection (1) or if it has been produced in terms of another recognised Scheme, in accordance to the requirements of the applicable Scheme.

#### PARENTAL SOURCE REQUIREMENTS

- 11.(1) The seed which is used to establish plants on a unit for certification purposes shall –
  - (a) in the case of the intended production of pre-basic seed, be breeder seed or pre-basic seed;
  - (b) in the case of the intended production of basic seed, be breeder seed or pre-basic seed;
  - (c) in the case of the intended production of 1st generation certified seed, subject to the provisions of subsection (2), be certified basic seed; and
  - (d) in the case of the intended production of 2nd generation certified seed, be 1st generation certified seed.
  - (e) in the case of a recognised Scheme where the generations are identified differently, then according to the provisions of the Scheme concerned.
- 11.(2) The authority may on application of a seed grower approve in writing that seed other than basic seed may be used to establish plants for the production of certified seed.
- 11.(3) An application referred to in subsection (2) shall be submitted in writing to the authority by the seed grower concerned, and shall state the reasons for such application, and supply any other information requested by the authority in this regard.
- 11.(4) An approval referred to in subsection (2) –
  - (a) shall be granted only if the authority is satisfied that the seed concerned was produced in accordance with a method which renders it suitable for use in terms of this Scheme in the place of basic seed and if all requirements of the authority were complied with; and
  - (b) may at any time be withdrawn if the authority is satisfied that the plants which have been established from the seed concerned, are not true to variety.



- 11.(5) All labels and seals on containers of seed which are planted with a view to the production of seed in terms of a recognised Scheme shall be retained until those labels and seals have on request been produced to the authority or authorised person, or the seed which was produced from that seed has been certified, whichever may be the earlier date.
- 11.(6) Seed established on a unit intended for certification shall be planted in accordance with the planting requirements as set out for the specific crop in the recognised Scheme concerned.

## ISOLATION AND PLANT REQUIREMENTS

- 12.(1) A unit on which plants are established for certification in accordance of a recognised Scheme, shall be isolated in accordance with the isolation requirements as set out for the specific crop in the recognised Scheme concerned.
- 12.(2) The plants which are established on a unit shall –
- (a) be cared for in a manner which is conducive to the production of seed of a high quality;
  - (b) not be overgrown by weeds; and
  - (c) comply with the requirements for plants of the kind concerned as set out for the specific crop in the recognised Scheme concerned.
- 12.(3) A seed grower shall remove all plants which are or appear to be deviating, or the pollen-shedding or seed-bearing parts of such plants, from the unit on a continuous basis: Provided that the authority or authorised person may, at the time of inspection in terms of this Scheme, direct a seed grower or a person acting on instructions from a seed grower, to suspend such removal for the duration of inspection concerned.
- 12.(4) A seed grower shall notify the authorised person and/or authority forthwith of –
- (a) the occurrence of any harmful insect pest or pathogen on the plants which are established on a unit; or
  - (b) any damage to such plants through climatological or other factors.
- 12.(5) Subject to the provisions of subsection (7), no person shall –
- (a) establish on a unit any plants other than plants of a variety which is intended for the production of seed in terms of a recognised Scheme; or
  - (b) use any plant or part or yield of a plant which is established on a unit, for any purpose other than the production of seed in terms of this Scheme.
- 12.(6) On recommendation from the authorised person, the authority may exempt a seed grower in writing from compliance with the provisions of subsection (5).
- 12.(7) An application for an exemption referred to in subsection (6) shall be submitted in writing to the authorised person by the seed grower concerned, and shall state the reasons for such application.
- 12.(8) An exemption referred to in subsection (6) –
- (a) shall only be granted if the authority is satisfied that the quality of the seed to be harvested from the plants on the unit concerned will not be detrimentally affected by such exemption; and
  - (b) shall be subject to such conditions as the authority may in each case determine.

## INSPECTION REQUIREMENTS

- 13.(1) (a) The plants which are established on a unit shall be inspected by a person authorised as such by the authority, on the times and methods in accordance with the inspection requirements as set out for the specific crop in the recognised Scheme concerned;
- (b) The authority may require that the amount determined by it, be paid by the seed grower concerned in respect of each inspection referred to in paragraph (a).
- 13.(2) The authorised person must carry out as many additional inspections as may be deemed necessary for the purposes of subsection (1)(a).
- 13.(3) If the authorised person fails to carry out the required inspections referred to in subsection (1)(a) in respect of a unit due to circumstances beyond his/her control, the certification of the seed produced thereon shall not be refused solely on account thereof. The authority may in such cases set additional conditions.
- 13.(4) Reporting in respect of each inspection referred to in subsection (1)(a) must be done in a manner that has been approved by the authority.

## PHYSICAL REQUIREMENTS FOR SEED

- 14.(1) Seed harvested from plants which were established for certification in terms of a recognised Scheme, shall comply with the physical requirements as set out for the specific crop in the recognised Scheme concerned.
- 14.(2) Notwithstanding the provisions of subsection (1), basic seed which does not comply with the physical requirements referred to in that subsection may also be certified as basic seed if –
  - (a) all the other applicable provisions of this Scheme with regard to the seed concerned have been complied with; and
  - (b) the authority is of the opinion that the genetic value thereof justifies such deviation.
- 14.(3) Seed which has been produced in a unit on which plants visually infected with a seed-borne disease have occurred, for which there are requirements prescribed in this regard in the specific requirements for the crop concerned in this Scheme, shall only be considered for certification after it has been treated for that disease with a substance that has been registered for this purpose.
- 14.(4) Seed of the same variety and generation which was produced on different units may, prior to the presentation thereof for certification, only be bulked with the written approval of the authorised person, after which the particulars must be supplied to the authority. The requirements for bulking are determined by the authority.

## HARVESTING, THRESHING AND STORAGE

- 15.(1) Equipment which is used in connection with the harvesting or threshing of seed which has been produced in terms of a recognised Scheme shall be cleaned beforehand in order to prevent the admixing of any other seed with the seed concerned.
- 15.(2) Seed which has been produced in terms of a recognised Scheme shall be kept in containers which are sound and clean.
- 15.(3) The containers in which seed which has been produced in terms of a recognised Scheme is kept prior to the cleaning thereof shall be marked in clearly legible symbols, letters and figures with, or be provided with labels on which are likewise indicated –
  - (a) the words "uncleaned seed";
  - (b) the name of the kind of plant to which that seed belongs;
  - (c) the denomination which identify the variety of that seed;
  - (d) the code number which is used by the seed grower concerned for the identification of the unit on which that seed was produced; and
  - (e) the name of the seed grower by whom that seed was produced.
- 15.(4) Seed which has been produced in terms of a recognised Scheme shall at all times be stored in such a manner that –
  - (a) it is protected against damage by insects and rodents;
  - (b) excessive humidity and high temperatures which may affect it adversely are avoided;
  - (c) it is kept separately from anything else, including other seed intended for certification, by storing it in a separate store, or by separating it from anything else by means of solid partitions or by means of open spaces of at least one metre wide;
  - (d) has efficient lighting so that any marks, printing or writing on containers of propagating material or on labels attached to such containers may readily be read;
  - (e) access thereto can readily be obtained; and
  - (f) the admixing thereof with other seed is prevented.
- 15.(5) The provisions of subsection (4) shall *mutatis mutandis* apply to the storage of vegetative material which are intended for use in connection with the production of seed in terms of a recognised Scheme.

## MOVEMENT OF SEED

- 16.(1) A seed grower may prior to the certification of the seed which has been produced by him in terms of a recognised Scheme –
  - (a) remove such seed to another premises in order to clean it there or to present it there for certification.

- (b) remove such seed to a premises where seed is cleaned in order to have it cleaned there; or
  - (c) subject to the provisions of subsection (2), sell such seed to the owner or occupier of premises where seed is cleaned or prepacked for sale, or where seed is sold.
- 16.(2) Seed may be sold in terms of subsection (1)(c) only if the buyer concerned has furnished an undertaking on a form which is obtainable from the authority, or approved by the authority, for this purpose, to comply, as from the date on which such seed is delivered or sold to him, with the provisions of the recognised Scheme concerned.
- 16.(3) the provision of subsection (2) is *mutatis mutandis* applicable on seed being moved from one premises to another.
- 16.(4) An undertaking referred to in subsection (2) –
- (a) shall be lodged with the authority within 14 days of the sale concerned; and
  - (b) shall have the effect that the buyer of the seed concerned shall in the application of a recognised Scheme be deemed to be the seed grower in respect of that seed.

### CLEANING OF SEED

- 17.(1) Seed which has been produced in terms of a recognised Scheme shall be cleaned before being presented for certification.
- 17.(2) The premises where the seed referred to in subsection (1) is cleaned, and/or graded and/or treated with the purpose to present it for certification, must be registered in terms of the Act as a cleaner of seed.
- 17.(3) Equipment which is used in connection with the cleaning of seed shall be cleaned beforehand to prevent the admixing of any other seed with the seed which is to be presented for certification.

### CONTAINERS AND LABELLING OF SEED

- 18.(1) The containers in which seed which has been produced in terms of this Scheme is presented for certification, shall –
- (a) be new and not previously have been used for another purpose; and
  - (b) be closed up in such a manner that entry to the seed therein can only be obtained by forcible opening, or leaving evidence that the container was opened, or by the removal of the seals that were affixed to such containers in terms of section 19 of this Scheme.
- 18.(2)
- (a) Each container shall be provided with a label that is obtainable on request from the authority – only labels that have been obtained from the authority may be used for this purpose. Such labels are identified with a unique number. Different labels will be supplied for seed that is being certified under the various recognized Schemes.
  - (b) The amount determined by the authority for this purpose shall be payable in respect of labels thus issued.
  - (c) The labels for the various generations shall be identified with –
    - (i) in the case of pre-basic seed, a white label with a diagonal purple band;
    - (ii) in the case of basic seed, a white label;
    - (iii) in the case of certified seed, 1st generation, a blue label; and
    - (iv) in the case of certified seed, 2nd generation, a red label.
  - (d) In the case of mixtures of seed of different varieties and/or species, regardless of the generations contained in the mixture, the label shall be green.
  - (e) In the case of varietal associations, the label shall be blue with a diagonal green band.
  - (f) In the case where seed referred to in section 16(1) where a certification label is attached to the containers, the label shall be grey.
  - (g) In the case of a recognised Scheme where the labels are identified differently, then according to the provisions of the Scheme concerned.
  - (h) Complete records must be kept on the use of every certification label received from the authority and annual returns thereof must be submitted to the authority.

- 18.(3) After the applicable particulars have been entered on the labels referred to in subsection (2), it must be affixed to the containers of the seed concerned in such manner as the authority may determine.
- 18.(4) The letters and figures which are used to indicate the particulars concerned on such labels shall –
- (a) be of a letter type which can easily be read;
  - (b) be of a colour which is clearly contrasting to the colour of the labels on which they appear
  - (c) be entered indelibly in black type by using a printer with colour-fast ink.
- 18.(5) (a) All labels referred to in subsection (2), shall indicate –
- (i) the words “Spesie:” and/or “Specie:” followed by the Botanical name of the kind of plant to which such seed belongs;
  - (ii) the words “Soort:” and/or “Kind:” followed by the recognised common name of the kind of plant to which such seed belongs;
  - (iii) the words “Variëteit:” and/or “Variety:” followed the recognised name of the variety of the plant to which such seed belongs;
  - (iv) the words “Klas Nr.:” and/or “Class No.:” followed by the class or size of the seed, where applicable;
  - (v) the words “Verwysings Nr.:” and/or “Reference No.:” followed by the reference or lot number assigned to the seed lot concerned;
  - (vi) the words “Sertifikaat Nr.:” and/or “Certificate No.:” followed by the certificate number assigned to the seed lot concerned;
  - (vii) the words “Netto Massa:” and/or “Nett Mass:” followed by the nett mass, in kilograms, of the seed in the container concerned; and/or the words “Aantal sade per houer:” and/or “Number of seeds per container:” followed by the number which represent the calculated number of seeds in the container concerned;
  - (viii) the words “S.A. Gesertifiseerde (Generasie) Saad” and/or “S.A. Certified (Generation) Seed” with the applicable generation to which the seed belongs inserted respectively where (Generasie) and/or (Generation) is indicated; and in the case of seed referred to section 16(1), the words “Nie-Finaal Gesertifiseerde Saad” and/or “Not-Finally Certified Seed” followed by the Generation to which the seed belongs; and
  - (ix) the name of the Designated Authority.
- (b) in the case where seed is certified according to the provisions of another recognised Scheme, information required by the Scheme concerned must be indicated.
- 18.(6) Any space not occupied by the information required in subsection (5)(a) may be used for additional information, provided the information –
- (a) is in letters not larger than those used for the prescribed information;
  - (b) contain no advertising matter;
  - (c) do not create or could create a false or misleading impression relating to the possible certification of the seed concerned;
  - (d) do not qualify the possible certification of the seed concerned or are not in conflict therewith; or
  - (e) are not false, derogatory, inaccurate or vague in relation to any seed or seed grower.

## PRESENTATION FOR CERTIFICATION

- 19.(1) (a) The total mass of seed which has been produced in terms of a recognised Scheme on a unit during a particular growing season shall be presented for certification within 18 months of being harvested, unless the authority, after consideration of a written request by the seed grower concerned, determines otherwise.
- (b) In cases where the total mass of seed mentioned in paragraph (a) which is presented for certification exceeds the maximum mass of a seed lot allowed for the species concerned by the current Rules of the International Seed Testing Association (ISTA); the seed shall be sub-divided into separate, identifiable seed lots which do not exceed the maximum seed lot size, each of which shall be identified by a separate unique reference number and Certificate number. This also applies to seed lots of which the seed has been coated.

- (c) Every container of a seed lot presented for certification must be readily reachable for sampling and sealing purposes.
- 19.(2) (a) The authorised person must ensure that as soon as possible after the date of which he has been notified that the seed is ready for certification –
  - (i) examine the containers of the seed concerned in order to determine whether the provisions of section 18 of this Scheme, or in the case where the seed was produced in terms of another recognised Scheme, the provisions of the Scheme concerned, have been complied with in connection therewith;
  - (ii) a person that has been authorised as such, must take a sample of the seed in accordance to the methods as determined by the International Seed Testing Association (ISTA); and affix a seal to each such container, where the sealing method provides for it.
  - (iii) Only seals supplied by the authority may be used for this purpose. Such seals are identified by a unique identification number.
  - (iv) Complete records must be kept and annual returns must be submitted on the use of all certification seals received from the authority.
- (b) Such seal shall -
  - (i) be of a type which cannot be removed or reused without becoming damaged; and
  - (ii) be affixed in such a manner that a label affixed to a container in terms of section 18(2) of this Scheme can be removed only by removing or damaging the seal concerned in the process.
- 19.(3) (a) The authorised person shall obtain an Analysis Report in respect of a sample which was taken in terms of subsection (2)(a)(ii).
- (b) An Analysis Report referred to in paragraph (a) shall be issued by the responsible analyst of a test laboratory for seed which is registered in terms of the Act.
- (c) Such an Analysis Report shall contain at least the following particulars:
  - (i) The respective dates on which the seed lot was sampled and when the sample of the seed concerned was received at the laboratory.
  - (ii) The name and authorisation number of the authorised sampler who took the sample concerned;
  - (iii) The kind of seed of the sample concerned as indicated on the containers or on labels attached to the containers from which the sample was taken;
  - (iv) The name of the variety of the seed concerned, as indicated on the containers or on labels attached to the containers from which the sample was taken;
  - (v) The number of containers and the total weight of the seed lot concerned from which the sample was taken;
  - (vi) The serial numbers of the labels attached to the containers, as contemplated in section 18(2)(a),
  - (vii) The serial numbers of the seals attached to the containers, as contemplated in subsection (2)(a),
  - (viii) The weight of the submitted sample;
  - (ix) The name and address of the owner of the seed lot concerned;
  - (x) The reference number allocated to the seed lot concerned, of which the first part must contain the code number of the unit on which the seed was produced, as it was registered with the authority;
  - (xi) The certificate number, as provided by the authority and allocated by the owner to the seed lot concerned;
  - (xii) The laboratory reference number which was allocated by the person referred to in paragraph (b) to the sample concerned;
  - (xiii) The date on which the testing, examination or analysis of the sample concerned was concluded; and
  - (xiv) The results of the test, examination or analysis of the sample concerned in which the applicable particulars are indicated.
- (d) The authority and/or authorised person may require that the seed grower concerned reimburse him/her for any expenses incurred to obtain such Analysis Report.
- 19.(5) (a) An authorised person must obtain a sample from seed produced on a registered unit for the purpose of determining the varietal purity and identity according to procedures determined by the authority. Such sample must be submitted to the authority before

- the deadline for the submission of post control samples for the crop concerned expires.
- (b) The authority may plant such sample as a post control, or have it planted or otherwise tested in order to determine the varietal purity and/or identity.
- 19.(6) (a) The authority or authorised person may require that the amount determined by the authority, be paid by the applicant concerned in respect of the performance of the acts referred to in subsection (3)(a).
- (b) The amount determined by the authority shall be payable to it by the applicant concerned in respect of seals attached to the containers of seed as contemplated in subsection (2)(a).
- (c) The authority may, in the case of the determination of the varietal purity and/or identity of seed of a specie, require that the amount determined by it, be paid to it by the applicant concerned.

## CERTIFICATION OF SEED

- 20.(1) A seed lot may be certified if the authority is satisfied that –
- (a) the applicable Analysis Report referred to in section 19(3)(a) of this Scheme, confirms that the seed lot concerned complies with the applicable seed requirements referred to in section 14 of this Scheme, or in the case where the seed was produced in terms of another recognised Scheme, the requirements of the Scheme concerned. The date between the sampling of the seed lot and submission of the Analysis Report to the authority may not exceed six months; and
- (b) all the other applicable provisions of the Scheme concerned have been complied with in relation to that seed.
- 20.(2) The certification of seed in terms of a recognised Scheme shall be confirmed by a certificate in which such particulars as the authority may deem necessary are indicated, or prescribed by a recognised Scheme, as well as whether that seed is certified as pre-basic seed, basic seed or 1st or 2nd generation certified seed.
- 20.(3) Such a certificate is identified by a unique number allocated by the owner and which must be obtained from a list of numbers provided by the authority annually. Such certificate number must be indicated on each container or on a label attached to the containers of the seed lot concerned to which the certificate relates to.
- 20.(4) Such certificate shall only be issued after the applicant concerned has paid to the authority all amounts due by him in terms of this Scheme.
- 20.(5) If the authority refuses to certify seed which has been presented for certification in terms of a recognised Scheme, that seed may be sold in terms of section 13(1) of the Act for purposes of cultivation, or for any other purpose only after the seed grower concerned has removed the labels referred to in section 18(2) of this Scheme and the seals referred to in section 19(2) of this Scheme from the containers of that seed.
- 20.(6) If a refusal to certify seed arises from a deficiency, which could in the opinion of the authority possibly be rectified through the application of a particular treatment, the authority shall advise the applicant concerned of such deficiency and treatment.
- 20.(7) An applicant who applied a treatment referred to in subsection 20(6) may request that the authority re-examine the seed concerned with a view to revoke the refusal to certify that seed.
- 20.(8) If the authority approves an application referred to in subsection 20(7), the provisions of sections 18 and 19 of this Scheme shall *mutatis mutandis* apply to the representation of the seed concerned for certification.
- 20.(9) A certificate may also be issued on request in terms of a recognised Scheme for seed lots of different varieties of the same and/or different species that have been mixed, provided all the constituent seed lots of the mixture concerned, individually complied with the provisions of the Scheme concerned. The requirements for such mixtures are determined by the authority.



**WITHDRAWAL OF CERTIFICATION**

- 21.(1) The certification of seed in terms of a recognised Scheme may at any time be withdrawn if the authority is satisfied that –
- (a) the seed concerned is not true to variety;
  - (b) the seed concerned no longer complies with the applicable physical requirements referred to in section 14 of this Scheme; or in the case where the seed was produced in terms of another recognised Scheme, the provisions of that Scheme; or
  - (c) any other provision of a recognised Scheme with regard to the seed concerned has not been complied with.
- 21.(2) The authority shall, after considering reasons furnished by the applicant in terms of subsection (4) and still being convinced that certification must be withdrawn, notify the applicant in writing of the withdrawal of the certification of seed, and such applicant shall thereupon forthwith –
- (a) remove the labels referred to in section 18(2) of this Scheme and the seals referred to in section 19(2)(a) of this Scheme from the containers of the seed concerned which is still in his custody;
  - (b) notify each person to whom one or more containers of the seed concerned have been delivered, in writing of the withdrawal of the certification thereof and request such persons to remove the labels referred to in section 18(2) and seals specified in section 19(2)(a) from the containers of that seed; and
  - (c) furnish the authority with a copy of each such notice issued by him.
- 21.(3) The authority may publish a notice in the Government Gazette or an applicable publication in which the relevant particulars of the withdrawal of the certification of seed and the name of the applicant affected thereby, are indicated.
- 21.(4) Prior to issuing a notice as contemplated in subsection (2), the Authority shall notify the applicant in writing of the Authority's intention to withdraw the certification and the reasons for such intended withdrawal and afford the applicant 30 days within which to furnish reasons why the certification should not be withdrawn.

**POWERS OF INSPECTION**

- 22.(1) The powers of inspection specified in section 25 of the Act are hereby for the purpose of the application of this Scheme granted to the authority, as well as to any person authorized in writing by the authority to enforce any provision of this Scheme and any other recognised Scheme, or to conduct specific tasks in terms of the Scheme concerned.
- 22.(2) An inspection in terms of the recognised Scheme concerned shall be carried out in accordance with the methods determined by the authority.
- 22.(3) The number of plants which are inspected on a unit and the quantity of seed which is taken as a sample shall for the purpose of the application of the recognised Scheme concerned be deemed to be representative respectively of all the plants which have been established on the unit concerned, and of all the seed from which the sample concerned has been taken.
- 22.(4) The authority and a person authorized as contemplated in subsection (1) may require that an applicant or his employee, agent or manager shall render to him all reasonable assistance which he may require to enable him to carry out an inspection in terms of the recognised Scheme concerned.
- 22.(5) No compensation shall be payable in respect of assistance rendered in terms of subsection (4).

**DISCRETIONARY POWER OF THE AUTHORITY**

- 23.(1) The authority may consider any application or request made in terms of the recognised Scheme concerned, and may make any investigation or enquiry in connection therewith which he may deem necessary, and may for the purposes of such investigation or enquiry require that the applicant concerned submit to him such other documents or evidence as he may require.
- 23.(2) A permission or an approval or authorisation by the authority in terms of a recognised Scheme may –



- (a) be made subject to such conditions as the authority may in each case determine in writing; and
  - (b) in a particular case, be amended or withdrawn by the authority in writing if he deems it necessary.
- 23.(3) If the authority by virtue of a discretionary power vested in him by this or another recognised Scheme –
  - (a) refuses to approve an application or a request which has been submitted to him in writing;
  - (b) amends or withdraws a permission or an approval or authorisation;
  - (c) withdraws the registration of a unit; or
  - (d) refuses to certify seed which has been presented for certification in terms of section 19 of this Scheme or in terms of a stipulation of another recognised Scheme, the authority shall notify the applicant or person concerned in writing of his decision and of the grounds on which it is based.

## APPEALS

24. The provisions of section 32 of the Act shall *mutatis mutandis* apply with regard to any person who feels aggrieved by any decision or action taken by the authority in terms of this and other recognised Schemes.

## PAYMENT OF FEES

- 25.(1) Postage on and delivery costs of any application, notice, appeal or other document which is submitted in terms of this and other recognised Schemes, as well as on or of anything else pertaining thereto, shall be prepaid by the sender thereof.
- 25.(2) Any amount which is payable in terms of this Scheme to the authority shall be paid by bank deposit or by electronic funds transfer in favour of SANSOR.
- 25.(3) An amount paid in terms of this and other recognised Schemes shall not be refundable.

## ADDRESSES FOR THE SUBMISSION OF DOCUMENTS AND PAYMENT OF FEES

- 26.(1) Any application, notice or other documents, as well as anything else pertaining thereto, which in terms of this and other recognised Schemes is required to be submitted to the authority, and any fees which are payable to the authority in terms of other recognised Schemes shall –
- (a) when forwarded by post, be addressed to the Technical Manager, South African National Seed Organization, P.O. Box 72981, Lynnwood Ridge, 0040; and
  - (b) when submitted by hand, be delivered at the office of the Technical Manager, South African National Seed Organization, 5 Glenwood Road, Lynnwood Glen, Pretoria 0081.
- 26.(2) The document by means whereof an appeal referred to in section 24 is lodged, shall –
- (a) when forwarded by post, be addressed to the Director-General: Department of Agriculture, Land Reform and Rural Development, Private Bag X250, Pretoria, 0001; and
  - (b) when submitted by hand, be delivered at the office of the Director-General: Department of Agriculture, Land Reform and Rural Development, Agriculture Place, 20 Steve Biko Street, Arcadia, Pretoria, 0001.

**TABLE 1**  
**KINDS OF PLANTS AND NUMBERS OF ANNEXURES**

Kind of plant		Number of Annexure in which specific requirements are set out
Botanical name	Common name	
Column 1		Column 2
<i>Allium cepa</i> L.	Onion	1
<i>Allium fistulosum</i> L. x <i>A. cepa</i> L.	New Bunching onion	2
<i>Allium fistulosum</i> L.	Bunching onion	3
<i>Allium porrum</i> L.	Leek	4
<i>Antheophora pubescens</i> Nees	Bottle Brush Grass	5
<i>Arachis hypogaea</i> L.	Groundnut	6
<i>Avena sativa</i> L.	Oats	7
<i>Avena nuda</i> L.	Naked Oats	7
<i>Avena strigosa</i> Schreb.	Black Oats	7
<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>conditiva</i> Alef.	Garden beet	8
<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> var. <i>flavescens</i> A.DC	Swiss chard	9
<i>Brassica napus</i> L. var. <i>oleifera</i> Delile	Oil Seed Rape	10
<i>Brassica napus</i> L. x <i>B. rapa</i> L.	Intraspecific Hybrid Oil Seed Rape	10
<i>Brassica napus</i> L. var. <i>napobrassica</i> (L.) Rchb.	Forage rape and Swede	11
<i>Brassica oleracea</i> L.	Fodder Cale, Borecole	11
<i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef. var. <i>cymosa</i> Duch.	Broccoli	12
<i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef. var. <i>botrytis</i> L.	Cauliflower	12
<i>Brassica oleracea</i> L. var. <i>capitata</i> L.	Cabbage	12
<i>Brassica rapa</i> L.	Oil Seed Rape	10
<i>Brassica rapa</i> L.	Fodder Rape	11
<i>Bromus catharticus</i> Vahl.	Rescue grass	13
<i>Cajanus cajan</i> (L.) Millsp.	Pigeon Pea	14
<i>Capsicum</i> spp.	Chillies, Sweet Pepper, Paprika	15
<i>Cenchrus ciliaris</i> L.	Buffalo grass	16
<i>Chloris gayana</i> Kunth	Rhodes grass	17
<i>Citrullus lanatus</i> (Thunb.) Matsumura et Nakai	Watermelon	18

Kind of plant		Number of Annexure in which specific requirements are set out
Botanical name	Common name	
Column 1		Column 2
<i>Coriandrum sativum</i> L.	Coriander	19
<i>Cucumis melo</i> L.	Sweet melon	20
<i>Cucumis sativus</i> L.	Cucumber	21
<i>Cucurbita maxima</i> Duch.	Pumpkin & Squash	22
<i>Cucurbita moschata</i> (Duch.) Duch ex Poir	Pumpkin & Squash	22
<i>Cucurbita pepo</i> L.	Squash	22
<i>Dactylis glomerata</i> L.	Cocksfoot	23
<i>Daucus carota</i> L.	Carrot	24
<i>Digitaria eriantha</i> Steud.	Smuts Finger grass	25
<i>Dolichos biflorus</i> L.	Dolichos	68
<i>Echinochloa crus-galli</i> (L.) P. Beauv.	Japanese Millet	26
<i>Eleusine corocana</i> L.	Finger Millet	27
<i>Eragrostis curvula</i> (Schrud.) C.G. Nees	Weeping Love Grass	28
<i>Eragrostis tef</i> (Zucc.) Trotter	Teff	29
<i>Fagopyrum esculentum</i> Moench	Buckwheat	30
<i>Festuca arundinacea</i> Schreb	Tall Fescue	31
* <i>Festulolium</i> Asch. & Graebn.	Festulolium	31
<i>Foeniculum vulgare</i> Mill.	Fennel	32
<i>Glycine max</i> L. Merrill	Soybean	33
<i>Gossypium hirsutum</i> L.	Cotton	34
<i>Gossypium hirsutum</i> L. x <i>G. barbadense</i>	Intraspecific Hybrid Cotton	34
<i>Helianthus annuus</i> L.	Sunflower	35
<i>Hordeum vulgare</i> L. subsp. <i>vulgare</i>	Barley	36
<i>Kummerowia striata</i> (Thunb.) Schindl.	Common Lespedeza	37
<i>Lablab purpureus</i> (L.) Sweet	Lab-lab beans	68
<i>Lactuca sativa</i> L.	Lettuce	38
<i>Lespedeza cuneata</i> (Dum. Cours.) G. Don	Chinese Lespedeza	37
<i>Lespedeza striata</i> (Thunb.) Hook. & Arn	Common Lespedeza	37
<i>Lolium multiflorum</i> Lam.	Italian & Westerwold Ryegrass	39
<i>Lolium rigidum</i> Gaudin	Annual Ryegrass, Rigid Ryegrass	39
<i>Lolium perenne</i> L.	Perennial Ryegrass	40
<i>Lolium ×hybridum</i> Hausskn.	Hybrid Ryegrass	40

Kind of plant		Number of Annexure in which specific requirements are set out
Botanical name	Common name	
Column 1		Column 2
<i>Lupinus albus</i> L.	White Lupin	41
<i>Lupinus angustifolius</i> L.	Narrow Leaf Lupin	41
<i>Lupinus luteus</i> L.	Yellow Lupin	41
<i>Medicago littoralis</i> Rohde ex Loisel	Strand medic	42
<i>Medicago polymorpha</i> L.	Burr medic	42
<i>Medicago rugosa</i> Desr.	Gama medic	42
<i>Medicago sativa</i> L.	Lucerne	43
<i>Medicago scutellata</i> (L) Miller	Snail medic	42
<i>Medicago truncatula</i> (Gaertn.)	Barrel medic	42
<i>Megathyrsus maximus</i> (Jacq.) B.K.Simon & S.W.L.Jacobs (Synonym <i>Panicum maximum</i> Jacq.)	White Buffalo grass	44
<i>Melilotus albus</i> Medik.	White sweet clover	45
<i>Nicotiana tabacum</i> L.	Tobacco	46
<i>Ornithopus compressus</i> L.	Yellow Serradella	47
<i>Ornithopus sativus</i> Brot.	French Serradella	47
<i>Oryza sativa</i> L.	Rice	48
<i>Panicum coloratum</i> L.	Small Buffalo grass	44
<i>Paspalum dilatatum</i> Poir.	Paspalum	49
<i>Paspalum notatum</i> Früggé	Paspalum	49
<i>Pennisetum glaucum</i> L. R.Br	Pearl Millet	50
<i>Phaseolus coccineus</i> L.	Kidney Bean	51
<i>Phaseolus vulgaris</i> L.	Dry Bean	51
<i>Phaseolus vulgaris</i> L.	Dwarf & Runner Garden Bean	52
<i>Pisum sativum</i> L. <i>sensu lato</i>	Dry Pea & Garden Pea	53
<i>Raphanus sativus</i> L.	Garden & Fodder Radish	54
<i>Raphanus sativus</i> var. <i>oleiferus</i>	Oil Seed Rape	10
<i>Secale cereale</i> L.	Rye	55
<i>Solanum lycopersicum</i> L.	Tomato	56
<i>Solanum melongena</i> L.	Eggplant, Brinjal	57
<i>Sorghum alnum</i> L. Parodi	Columbus grass	58
<i>Sorghum bicolor</i> (L.) Moench subsp. <i>bicolor</i>	Grain Sorghum	59

Kind of plant		Number of Annexure in which specific requirements are set out
Botanical name	Common name	
Column 1		Column 2
<i>Sorghum bicolor</i> (L.) Moench subsp. <i>drummondii</i> (Steud.) de Wet ex Davidse (syn. <i>Sorghum sudanense</i> (Piper) Stapf)	Sudan grass	58
<i>Sorghum vulgare</i> Pers.	Grain Sorghum, Broomcorn	59
<i>Sorghum</i> spp.	Annual Fodder Sorghum Hybrids	60
<i>Sorghum</i> spp.	Perennial Forage Sorghum	61
<i>Sporobolus fimbriatus</i> (Trin.) Nees	Bushveld Dropseed Grass	62
<i>Trifolium repens</i> L.	White Clover	63
<i>Trifolium vesiculosum</i> Savi	Arrow Leaf Clover	64
× <i>Triticosecale</i> L. Witt.	Triticale	65
<i>Triticum aestivum</i> L. subsp. <i>aestivum</i>	Wheat	66
<i>Triticum turgidum</i> L. subsp. <i>durum</i> (Desf.) van Slangeren	Durum wheat	66
<i>Vicia faba</i> L.	Broad Bean	67
<i>Vigna unguiculata</i> L. Walp.	Cowpea	68
<i>Zea mays</i> L.	Grain Maize	69
<i>Zea mays</i> L. var. <i>saccharata</i> Baily	Sweetcorn	70

**SOUTH AFRICAN SEED CERTIFICATION SCHEME****ANNEXURES FOR SPECIFIC REQUIREMENTS FOR SPECIES AS SPECIFIED IN TABLE 1**

**N.B.: REDISTRIBUTION OR ADDITION WITH THE SAME PLANT MATERIAL IS NOT CONSIDERED TO BE GAP-FILLING**

**ANNEXURE 1****REQUIREMENTS RELATING TO ONION (*Allium cepa* L.)****1 Field requirements**

A field may be registered as a unit only if no plants of any *Allium* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows is not permissible.

2.3 In the case of the intended production of seed of a hybrid variety -

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked.

2.4 If it is intended to produce seed by the seed-to-seed method, at least 500 plants of the variety concerned shall be established specially with a view to evaluating the bulbs thereof before the seed concerned is presented for certification.

**3 Isolation requirements**

3.1 Subject to the provisions of paragraph 3.3 and 3.4, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed of -

3.1.1.1 an open-pollinated variety, is at least 2 000 metres wide; and

3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and

3.1.2 in the case of the intended production of certified seed of -

3.1.2.1 an open-pollinated variety, is at least 1 000 metres wide; and

3.1.2.2 a hybrid variety, at least 1 500 metres wide.

3.1.3 in the case of the intended production of white and straw-coloured onion varieties, the isolation distance to red onions, be at least 5 000 metres wide: Provided that the isolation areas between the different red onion varieties shall apply as indicated in paragraphs 3.1.1 and 3.1.2.

3.1.4 in the case of white onions which have been established in the proximity of straw-coloured onions and vice versa, at least 3 000 metres wide.

3.2 Such isolation area shall be free from plants of any other *Allium* spp. or onion variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of 2nd generation certified seed, they have been established from 1st generation certified pre-basic seed or basic seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

**4 Requirements for plants**

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants and bulbs on a unit shall -

- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
  - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen susceptible flowers; and
  - 4.2.1.2 in the case of the intended production of certified seed not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers;
  - 4.2.2 the number of deviating plants of the seed parent on a unit shall -
  - 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the of the plants of the seed parent; and
  - 4.2.2.2 in the case of the intended production of certified seed not exceed 1,0 percent of the plants of the seed parent; and
  - 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
  - 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
  - 4.2.3.2 in the case of the intended production of certified seed not exceed 2,0 percent of the plants of the seed parent.
- 5 Inspection requirements
- 5.1 Plants and bulbs which were established on a unit with a view to obtaining bulbs to be used for the production of seed shall be inspected during the mature stage thereof.
  - 5.2 Such bulbs shall be inspected not more than 30 days before they are established on a unit and the number of deviated bulbs shall -
  - 5.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not to exceed 0,2 percent; and
  - 5.2.2 in the case of the intended production of certified seed, not to exceed 0,5 percent.
  - 5.3 Plants which are established on a unit from such bulbs shall be inspected -
  - 5.3.1 before the flowering stage thereof;
  - 5.3.2 during the flowering stage thereof; and
  - 5.3.3 during the full seed stage thereof; and
  - 5.3.4 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.
  - 5.4 If plants of a hybrid variety have been established on a unit -
  - 5.4.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
  - 5.4.1.1 the plants of the seed parent are expected to start flowering; and
  - 5.4.1.2 the seed heads of the pollen parent are to be removed; and
  - 5.4.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.3.4 has been carried out.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 80;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
  - 6.3.1 0,1 percent other seed; and
  - 6.3.2 2,0 percent other material.
  - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.



**ANNEXURE 2****REQUIREMENTS RELATING TO NEW BUNCHING ONION (*Allium cepa* L. x *A. fistulosum* L.)****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any *Allium* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 Plants established on a unit registered for the production of certified basic seed or of certified seed, may, after the establishment thereof, be used for such purpose for a period of not more than three years, provided the unit concerned is registered annually for the production of certified basic seed or certified seed, as the case may be.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

**3 Isolation requirements**

A unit shall be surrounded by an isolation area which -

3.1 in the case of all generations of an open pollinated variety of new bunching onion and any other *Allium* spp., is at least 1000 metre wide.

**4 Requirements for plants**

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed; not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 The number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 In the case of the intended production of certified seed, not exceed 0,5 percent of the plant of the pollen parent at the stage at which 5 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

**5 Inspection requirements**

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected during -

5.2.1 before the flowering stage thereof;

5.2.2 during the flowering stage thereof; and

5.2.3 during the full seed stage thereof.

**6 Physical requirements**

Seed shall -

6.1 have a germination percentage of at least 80;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 3

### REQUIREMENTS RELATING TO BUNCHING ONION (*Allium fistulosum* L.)

#### 1 Field requirements

A field may be registered as a unit only if no plants of any *Allium* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

#### 2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

#### 3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3 a unit shall be surrounded by an isolation area that in the case of all generations of -

3.1.1 different varieties of open pollinated early/ normal bolter bunching onion, be at least 1 000 metres wide; and

3.1.2 different varieties of open pollinated late bolter bunching onion is at least 1 500 metres wide; and

3.1.3 between varieties of open pollinated open pollinated early/ normal bolter and late bolter bunching onion is at least 1 500 metres wide; and

3.1.3 a hybrid variety of both types, is at least 1 500 metres wide.

3.1.4 The isolation area between onion and bunching onion shall -

3.1.4.1 in the case of the intended production of certified pre-basic seed or basic seed of -

3.1.4.1.1 an open-pollinated variety, is at least 1 000 metres wide; and

3.1.4.1.2 a hybrid variety, is at least 3 000 metres wide; and

3.1.4.2 in the case of the intended production of certified seed of -

3.1.4.2.1 an open-pollinated variety, is at least 1 000 metres wide; and

3.1.4.2.2 a hybrid variety, at least 3 000 metres wide.

3.2 Such isolation area shall be free from plants of any other *Allium* spp. or bunching onion variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of 2nd generation certified seed, they have been established from 1st generation certified pre-basic seed or basic seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed; not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 The number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 In the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 In the case of the intended production of certified seed, not exceed 0,5 percent of the plant of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

## 5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings should be inspected -

5.2.1 before the flowering stage thereof;

5.2.2 during the flowering stage thereof;

5.2.3 during the full seed stage thereof; and

5.2.4 in the case of a hybrid variety, after the heads of the plants of the pollen parent have been removed.

5.3 If plants of a hybrid variety have been established on a unit -

5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.3.1.1 the plants of the seed parent are expected to start flowering; and

5.3.1.2 the seed heads of the pollen parent are to be removed; and

5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.4 has been carried out.

## 6 Physical requirements

Seed shall -

6.1 Have a germination percentage of at least 80;

6.2 Have at least 98.0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 4

### REQUIREMENTS RELATING TO LEEK (*Allium porrum* L.)

#### 1 Field requirements

A field may be registered as a unit only if no plants of any *Allium* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

#### 2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

#### 3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3 a unit shall be surrounded by an isolation area that in the case of all generations of -

3.1.1 an open pollinated variety of a leek be at least 500 metres wide; and

3.2 such isolation area shall be free from plants of any leek variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of 2nd generation certified seed, they have been established from 1st generation certified pre-basic seed or basic seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed; not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 The number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 In the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 In the case of the intended production of certified seed, not exceed 0,5 percent of the plant of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers;

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

#### 5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings should be inspected -

5.2.1 before the flowering stage thereof;

5.2.2 during the flowering stage thereof;

5.2.3 during the full seed stage thereof; and

5.2.4 in the case of a hybrid variety, after the heads of the plants of the pollen parent have been removed.

5.3 If plants of a hybrid variety have been established on a unit -

5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.3.1.1 the plants of the seed parent are expected to start flowering; and

5.3.1.2 the seed heads of the pollen parent are to be removed; and

5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.4 has been carried out.

#### 6 Physical requirements

Seed shall -

6.1 Have a germination percentage of at least 80;

6.2 Have at least 98.0 percent pure seed; and

6.3 Not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 5

### REQUIREMENTS RELATING TO BOTTLE BRUSH GRASS (*Antheophora pubescens* Nees)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Antheophora* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of certified basic seed or certified seed of a particular bottle brush grass variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season;

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

2.1 Seed may be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.

#### 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and

3.1.2 in the case of the intended production of certified seed -

3.1.1.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.

3.2 Such isolation area shall be free from plants of any bottle brush grass variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

- 5.3 during the full seed stage thereof.
- 6 Physical requirements  
Seed shall -
- 6.1 have a germination percentage of at least 20;
- 6.2 in the case of coated seed, have a germination percentage of at least 30;
- 6.3 have at least 98,0 percent pure seed; and
- 6.4 not contain more than -
- 6.4.1 0,1 percent other seed; and
- 6.4.2 2,0 percent other material.
- 6.4.3 Notwithstanding the provisions of paragraph 6.4.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 6

### REQUIREMENTS RELATING TO GROUNDNUTS (*Arachis hypogaea* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of *Arachis* spp., have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 A field which is intended for the production of certified basic seed or certified seed of a particular groundnut variety may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements  
Plants shall be established in rows on a unit.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.
- 3.2 Such isolation area shall be free from plants of any groundnut variety.
- 4 Requirements for plants
- 4.1 The number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre- basic seed or basic seed, not exceed 0,2 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 The number of disease-infected plants on a unit shall -
- 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and
- 4.2.2 in the case of the intended production of certified seed, not exceed 10,0 percent.
- 4.3 For the purposes of paragraph 4.2 "disease-infected plants" shall mean plants which are not visually free from the pathogen *Chalara elegans* (previous name *Thielaviopsis basicola*).
- 5 Inspection requirements
- 5.1 Plants which are established on a unit shall be inspected -
- 5.1.1 before the flowering stage thereof;
- 5.1.2 during the flowering stage thereof; and
- 5.1.3 during the lifting thereof.
- 5.2 A seed grower shall notify the authorised person at least 10 days prior to the date on which plants are to be lifted.

- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 70;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,05 percent other seed;
    - 6.3.2 0,2 percent seed of deviating plants; and
    - 6.3.3 2,0 percent seed of other material.
    - 6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 7

### REQUIREMENTS RELATING TO OATS, NAKED OATS & BLACK OATS (*Avena sativa* L., *A. nuda* L. & *A. strigosa* Schreb.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Avena* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular oat variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season;
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements  
Seed may be sown or be established in rows on a unit.
- 3 Isolation requirements
  - 3.1 The isolation area surrounding a unit shall be at least 5 meters wide.
  - 3.2 Such isolation area shall be free from plants of any oat species.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 Methods for determination of deviating plants shall be as determined by the Authority.
- 5 Inspection requirements  
Plants which are established on a unit shall be inspected -
  - 5.1 before the booting stage thereof;
  - 5.2 during the flowering stage thereof; and
  - 5.3 during the ripening thereof.
- 6 Physical requirements
  - 6.1 Seed shall in the case of *Avena sativa* and *A. strigosa* -
    - 6.1.1 have a germination percentage of at least 80.
    - 6.1.2 have at least 99,0 percent pure seed; and
    - 6.1.3 not contain more than -
      - 6.1.3.1 0,3 percent other seed, but not more 0,02 percent weed seed; and
      - 6.1.3.2 1,0 percent other material.



6.1.3.3 Notwithstanding the provisions of paragraph 6.1.3.1, not more than one seed of wild oats may occur in a 400 g seed sample, and not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

6.2 Seed shall in the case of *Avena nuda* -

6.2.1 have a germination percentage of at least 80.

6.2.2 have at least 99,5 percent pure seed; and

6.2.3 not contain more than -

6.2.3.1 0,3 percent other seed, but not more than traces of weed seed; and

6.2.3.2 0,5 percent other material.

6.2.3.3 Notwithstanding the provisions of paragraph 6.2.3.1, not more than one seed of wild oats may occur in a 400 g seed sample, and not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 8

### REQUIREMENTS RELATING TO GARDEN BEET

(*Beta vulgaris* L. subsp. *vulgaris* var. *conditiva* Alef.)

#### 1 Field requirements

A field may be registered as a unit only if no plants of any species of a *Beta* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

#### 2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

#### 3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3 a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed of -

3.1.1.1 an open pollinated variety, is at least 3 000 metres wide; and

3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and

3.1.2 in the case of the intended production of certified seed of -

3.1.2.1 an open-pollinated variety, is at least 2 000 metres wide; and

3.1.2.2 a hybrid variety, is at least 2 000 metres wide; and

3.1.3 in the case of garden beet, which has been established in the proximity of swiss chard, is at least 5 000 meters wide.

3.1.3 in the case of beet of different colours, is at least 5 000 meters wide.

3.2 Such isolation area shall be free from plants of any *Beta* spp. which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of a variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 In the case of red beet, the isolation between different red beet varieties -

3.3.1 in the case of the intended production of certified pre-basic seed or basic seed, shall be at least 2 000 metres wide; and

3.3.2 in the case of the intended production of certified seed, shall be at least 1 000 metres wide.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
- 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage on which 2,0 percent or more of the plants of the seed parent has pollen-susceptible flowers; and
- 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage on which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers.
- 4.2.2 the number of deviating plants of the seed parent on a unit shall -
- 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
- 4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
- 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
- 4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.
- 4.3 The number of disease-infected plants on a unit shall -
- 4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent; and
- 4.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent.
- 4.4 For the purposes of paragraph 4.3 "disease-infected plants" shall mean plants which are not visually free from the pathogen *Perenospora schachtii* Fckl.
- 5 Inspection requirements
- 5.1 Beets shall be inspected before it is established on a unit.
- 5.2 Plants of such beets which are established on a unit shall be inspected -
- 5.2.1 before the flowering stage thereof;
- 5.2.2 during the flowering stage thereof; and
- 5.2.3 during the full seed stage thereof.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 70;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed; and
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 9

### REQUIREMENTS RELATING TO SWISS CHARD (*Beta vulgaris* L. subsp. *vulgaris* var. *flavescens* A.DC.)

- 1 Field requirements
- A field may be registered as a unit only if no plants of any species of a *Beta* spp., have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 2 Planting requirements
- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.

### 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 3 000 metres wide;

3.1.2 in the case of the intended production of certified seed, is at least 2 000 metres wide; and

3.1.3 in the case of garden beet, which has been established in the proximity of swiss chard, is at least 5 000 meters wide.

3.1.3 in the case of swiss chard of different colours, is at least 5 000 meters wide.

3.2 Such an isolation area shall be free from plants of any swiss chard variety or species of *Beta* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, it have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 The number of disease-infected plants on a unit shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent.

4.3 For the purposes of paragraph 4.2 "disease-infected plants" shall mean plants which are not visually free from the pathogen *Perenospora schachtii* Fckl.

### 5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 before the flowering stage thereof;

5.2.2 during the flowering stage thereof; and

5.2.3 during the full seed stage thereof.

### 6 Physical requirements

Seed shall

6.1 have a germination percentage of at least 70;

6.2 have at least 98.0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 10

### REQUIREMENTS RELATING TO OIL SEED RAPE

(*Brassica napus* L. var. *oleifera*; *Brassica rapa* L.; *Raphanus sativus* var. *oleiferus*)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Brassica* or *Raphanus* or *Brassica* as the case may be, have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.

- 1.2 Only in the case of an open-pollinated variety, a field which is intended for the production of basic seed or certified seed of a particular oil seed rape variety, may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season;
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

## 2 Planting requirements

- 2.1 Seed shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
- 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
- 2.3.2 the rows containing the plants of the pollen parent shall be clearly marked.

## 3 Isolation requirements

- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic and basic seed of -
- 3.1.1.1 an open-pollinated variety, is at least 300 metres wide; and
- 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
- 3.1.2 in the case of the intended production of certified seed -
- 3.1.2.1 of an open-pollinated variety, is at least 200 metres wide; and
- 3.1.2.2 of a hybrid variety, is at least 2 000 metres wide.
- 3.2 Such isolation area shall be free from plants of any *Brassica* or *Raphanus* related variety which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
- 3.3.1 a common pollen parent is used; and
- 3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

## 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,3 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
- 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers;
- 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.
- 4.2.2 the number of deviating plants of the seed parent on a unit shall -
- 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and
- 4.2.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
- 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent at the stage at which 2,0 percent or more of the plants of

the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of pollen-shedding flowers found during inspections shall not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers. Provided that the aggregate number of plants with pollen-shedding flowers found during inspections shall not for the three inspections showing the highest incidence of such plants, exceed 1,0 percent of the plants of the seed parent.

## 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof;

5.1.3 during the full seed stage thereof; and

5.1.4 in the case of a hybrid variety, after the plants of the pollen parent have been removed.

5.2 If plants of a hybrid variety have been established on a unit -

5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.2.1.1 the plants of the seed parent are expected to start flowering; and

5.2.1.2 the pollen parent to be removed; and

5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,2 percent other seed;

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and

6.4 Not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

## ANNEXURE 11

### REQUIREMENTS RELATING TO ALL BRASSICA SPECIES UTILISED FOR FODDER, INCLUDING FORAGE RAPE, SWEDE, FODDER KALE, BORECOLE, & FODDER TURNIP [*Brassica napus* L. var. *napobrassica* (L.) Rchb., *Brassica oleracea* L. & *Brassica rapa* L.]

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of the Brassicaceae family have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular *Brassica* variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

Plants may be sown or be established in rows on a unit.

- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 2 500 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed, is at least 1 000 metres wide.
  - 3.2 Subject to the provisions of paragraph 3.3, such isolation area shall be free from plants of a species of *Brassica* which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.
    - 3.2.3 in the case of the intended production 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants

The number of deviating plants on a unit shall –

  - 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 5 Inspection requirements

Plants which are established on a unit shall be inspected -

  - 5.1 before the flowering stage thereof;
  - 5.2 during the flowering stage thereof; and
  - 5.3 during the full seed stage thereof.
- 6 Physical requirements

Seed shall -

  - 6.1 have a germination percentage of at least 75;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed; and
    - 6.3.2 2,0 percent other material;
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and
  - 6.4 Not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

## ANNEXURE 12

### REQUIREMENTS RELATING TO CAULIFLOWER, CABBAGE & BROCCOLI [*Brassica oleracea* L. var. *capitata* L., *Brassica oleracea* L. convar *botrytis* (L.) Alef. var. *botrytis*] & [*Brassica oleracea* L. convar *botrytis* (L.) Alef. var. *cymosa* Ducheneuse]

- 1 Field requirements

A field may be registered as a unit only if no plants of any *Brassica* spp., have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed of -
      - 3.1.1.1 an open-pollinated variety, is at least 3 000 metres wide; and



- 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
- 3.1.2 in the case of the intended production of certified seed -
  - 3.1.2.1 of an open-pollinated variety, is at least 1 500 metres wide; and
  - 3.1.2.1 of a hybrid variety, is at least 1 500 metres wide
- 3.2 Such an isolation area shall be free from plants of any *Brassica* variety or species of *Brassica* which flower at the same time as the plants on the unit concerned, unless -
  - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
  - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
  - 3.2.3 in the case of the intended production of a variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

#### 4 Requirements for plants

- 4.1 The number of deviating plants on a unit shall -
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
    - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage on which 2,0 percent or more of the plants of the seed parent has pollen susceptible flowers;
    - 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage on which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers.
  - 4.2.2 the number of deviating plants of the seed parent on a unit shall -
    - 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed not exceed 0,5 percent of the plants of the seed parent; and
    - 4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and
  - 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
    - 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent at the stage at which 2,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of pollen-shedding flowers found during inspections shall not exceed 0,5 percent of the plants of the seed parent; and
    - 4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers. Provided that the aggregate number of plants with pollen-shedding flowers found during inspections shall not for the three inspections showing the highest incidence of such plants, exceed 1,0 percent of the plants of the seed parent.

#### 5 Inspection requirements

- 5.1 Seedlings shall be inspected before they are established on a unit.
- 5.2 Plants which are established on a unit from such seedlings shall be inspected –
  - 5.2.1 before the flowering stage thereof;
  - 5.2.2 during the flowering stage thereof;
  - 5.2.3 during the full seed stage thereof; and
  - 5.2.4 in the case of a hybrid variety, after the plants of the pollen parent have been removed.
- 5.3 If plants of a hybrid variety have been established on a unit -
  - 5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
    - 5.3.1.1 the plants of the seed parent are expected to start flowering; and
    - 5.3.1.2 the pollen parent to be removed; and
  - 5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.4 has been carried out.

#### 6 Physical requirements

Seed shall -



- 6.1 have a germination percentage of at least 75;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
  - 6.3.1 0,1 percent other seed; and
  - 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 13

### REQUIREMENTS RELATING TO RESCUE GRASS (*Bromus catharticus* Vahl.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Bromus* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed of the same variety, as the case may be.
  - 1.2 A field which is intended for the production of -
    - 1.2.1 pre-basic seed, be registered as a unit for two consecutive growing seasons if breeder seed of the same variety is annually established thereon;
    - 1.2.2 basic seed, be registered as a unit for two consecutive growing seasons if pre-basic seed of the same variety is annually established thereon: Provided that such field may also be registered as a unit if pre-basic seed of the same variety has been produced thereon during the preceding growing season;
    - 1.2.3 certified seed, be registered as a unit for no more than two consecutive growing seasons if basic seed of the same variety is annually established thereon: Provided that such field may also be registered as a unit if basic seed of the same variety has been produced thereon during the preceding growing season.
    - 1.2.4 2<sup>nd</sup> generation certified seed, be registered as a unit for no more than one growing season if 1<sup>st</sup> generation certified seed of the same variety is established thereon: Provided that such field may also be registered as a unit if 1<sup>st</sup> generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed may be sown or be established in rows on a unit.
  - 2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
      - 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and
    - 3.1.2 in the case of the intended production of certified seed -
      - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.
  - 3.2 Such isolation area shall be free from plants of any *Bromus* which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

#### 4 Requirements for plants

4.1 Plants established on a unit may be grazed, provided that the livestock must be timely withdrawn at a stage that will optimize seed production as determined by the breeder of the particular variety

4.2 The number of deviating plants on a unit shall –

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 55% or a viability percentage of at least 75%;

6.2 have at least 95,0 percent pure seed;

6.3 not contain more than -

6.3.1 0,5 percent other seed; and

6.3.2 5,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the species being tested.

## ANNEXURE 14

### REQUIREMENTS RELATING TO PIGEON PEA [*Cajanus cajan* (L.) Millsp.]

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any pigeon pea variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of certified basic seed or certified seed of a particular pigeon pea variety may also be registered as a unit, if-

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

Plants shall be established in rows on a unit.

#### 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 400 metres wide;

3.1.2 in the case of the intended production of certified seed, is at least 200 metres wide; and

3.2 Such isolation area shall be free from plants of any pigeon pea variety.

- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 5 Inspection requirements
  - Plants which are established on a unit shall be inspected -
    - 5.1 before the flowering stage thereof;
    - 5.2 during the flowering to pod stage thereof; and
    - 5.3 during the full pod stage thereof; and
- 6 Physical requirements
  - Seed shall -
    - 6.1 have a germination percentage of at least 70;
    - 6.2 have at least 98,0 percent pure seed; and
    - 6.3 not contain more than -
      - 6.3.1 0,05 percent other seed; and
      - 6.3.2 2,0 percent other material.
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.
  - 6.4 Not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

## ANNEXURE 15

### REQUIREMENTS RELATING TO PAPRIKA, PEPPER & CHILLI (*Capsicum* spp.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any *Capsicum* spp. have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular pepper variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
  - 1.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 100 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed, is at least 10 metres wide.
  - 3.2 Such isolation area shall be free from plants of any *Capsicum* spp.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

- 4.2 A unit on which plants of a sweet pepper variety are established shall be free from plants of hot pepper varieties, and *vice versa*.
- 4.3 The number of plants on a unit contaminated with the pathogen *Corynebacterium michiganense* Smith, Jensen, shall -
- 4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 2,0 percent; and
- 4.3.2 in the case of the intended production of certified seed, not exceed 5,0 percent.
- 4.4 The number of plants on a unit infected with tobacco mosaic virus shall -
- 4.4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and
- 4.4.2 in the case of the intended production of certified seed, not exceed 10,0 percent.
- 4.5 The number of plants on a unit infected with the pathogen *Xanthomonas vesicatoria* (Doidge) Dow, shall -
- 4.5.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and
- 4.5.2 in the case of the intended production of certified seed, not exceed 10,0 percent.
- 5 Inspection requirements
- 5.1 Plants which are established on a unit shall be inspected
- 5.1.1 during the seedling stage thereof;
- 5.1.2 during the flowering stage of the plants thereof; and
- 5.1.3 during the full ripe stage of the fruit thereof.
- 5.2 No fruit may be harvested before the inspection referred to in paragraph 5.1 has been carried out.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 75;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed; and
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 16

### REQUIREMENTS RELATING TO BLUE BUFFALO GRASS (*Cenchrus ciliaris* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
- 1.1.1 no plants of any species of *Cenchrus* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
- 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed, basic seed or certified seed, as the case may be.
- 1.2 A field which is intended for the production of basic seed or certified seed of a particular blue buffalo grass variety may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
- 2.1 Seeds may be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.

3.2 Such isolation area shall be free from plants of any buffalo grass variety.

4 Requirements for plants

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof; and

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination or viability percentage of at least 20;

6.2 in the case of coated seed, have a germination percentage of at least 20;

6.3 have at least 98,0 percent pure seed; and

6.4 not contain more than -

6.4.1 0,1 percent other seed; and

6.4.2 2,0 percent other material.

6.4.3 Notwithstanding the provisions of paragraph 6.4.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 17

### REQUIREMENTS RELATING TO RHODES GRASS (*Chloris gayana* Kunth.)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Chloris* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular Rhodes grass variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

### 3 Isolation requirements

#### 3.1 A unit shall be surrounded by an isolation area which -

##### 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and

##### 3.1.2 in the case of the intended production of certified seed -

3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

3.1.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.

#### 3.2 Such isolation area shall be free from plants of any Rhodes grass variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

### 4 Requirements for plants

#### 4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

4.2 Plants established on a unit registered for the production of basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.3 After the use of plants on a unit for the production of basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

#### 4.4 Plants established on a unit for the intended production of certified seed -

4.4.1 may be used for this purpose for a period of not more than four years; and

4.4.2 may, with the written approval from the Authority, be used for that purpose for a further period of two years.

### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

### 6 Physical requirements

Seed shall -

6.1 have a germination or a viability percentage of at least 20, or in the case where the weighted replicate method of analysis is being used, have a germination of at least 800,000 normal seedlings per weight (kg); and

6.2 in the case of coated seed, a germination or a viability percentage of at least 20 percent;

6.3 have at least 90,0 percent pure seed; and

6.4 not contain more than -

6.4.1 0,5 percent other seed;

6.4.2 10,0 percent other material; and in the case of coated seeds, 2,0 percent other material; and

6.4.3 0,2 percent seed of deviating plants.

6.4.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 18****REQUIREMENTS RELATING TO WATERMELON [*Citrullus lanatus* (Thunb.) Matsumura. et Nakai]****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Citrullus* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular watermelon variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

**3 Isolation requirements**

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 2 000 metres wide; and

3.1.2 in the case of the intended production of certified seed, is at least 1 000 metres wide.

3.2 Such isolation area shall be free from plants of any watermelon variety or species of *Citrullus* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

**4 Requirements for plants**

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 The number of disease-infected plants on a unit shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent.

4.3 For the purposes of paragraph 4.2 "disease-infected plants" shall mean plants showing virus symptoms visually.

**5 Inspection requirements**

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 during the green fruit stage thereof; and

5.2.2 during the full ripe stage of the fruit thereof.

5.3 No fruit may be harvested before the inspection referred to in paragraph 5.2.2 has been carried out.

**6 Physical requirements**

Seed shall -

6.1 have a germination percentage of at least 75;

6.2 have at least 98,0 percent pure seed; and



- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed;
- 6.3.2 0,1 percent seed of deviating plants or fruit; and
- 6.3.3 2,0 percent other material.
- 6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 19

### REQUIREMENTS RELATING TO CORIANDER (*Coriandrum sativum* L.)

#### 1 Field requirements

A field may be registered as a unit with a view to the production of certified pre-basic seed, basic seed or certified seed only if no plants of any coriander variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

#### 2 Planting requirements

- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
- 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
- 2.3.2 rows containing plants of the pollen parent shall be clearly marked.

#### 3 Isolation requirements

- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic and basic seed of -
- 3.1.1.1 an open-pollinated variety, is at least 2 000 metres wide; and
- 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
- 3.1.2 in the case of the intended production of certified seed -
- 3.1.2.1 of an open-pollinated variety, is at least 1 000 metres wide; and
- 3.1.2.2 of a hybrid variety, is at least 1 500 metres wide.
- 3.2 Such isolation area shall be free from plants of any carrot variety which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
- 3.3.1 a common pollen parent is used; and
- 3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
- 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent;

4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

## 5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 during the flowering stage thereof;

5.2.2 during the full seed stage thereof; and

5.2.3 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.

5.3 If plants of a hybrid variety have been established on a unit -

5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.3.1.1 the plants of the seed parent are expected to start flowering; and

5.3.1.2 the seed heads of the pollen parent are to be removed; and

5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.3 has been carried out.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 75;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed;

6.3.2 1,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 20

### REQUIREMENTS RELATING TO SWEET MELON (*Cucumis melo* L.)

#### 1 Field Requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Cucumis* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular sweet melon variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 2 000 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed, is at least 1 000 metres wide.
  - 3.2 Such isolation area shall be free from plants of any sweet melon variety or species of *Cucumis* which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
    - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
  - The number of deviating plants on a unit shall -
    - 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 5 Inspection requirements
  - 5.1 Seedlings shall be inspected before they are established on a unit.
  - 5.2 Plants which are established on a unit from such seedlings shall be inspected -
    - 5.2.1 during the green fruit stage thereof; and
    - 5.2.2 during the full ripe stage of the fruit thereof;
  - 5.3 No fruit may be harvested before the inspection referred to in paragraph 5.2.2 has been carried out.
- 6 Physical requirements
  - Seed shall -
    - 6.1 have a germination percentage of at least 75;
    - 6.2 have at least 98,0 percent pure seed; and
    - 6.3 not contain more than -
      - 6.3.1 0,1 percent other seed; and
      - 6.3.2 2,0 percent other material.
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 21

### REQUIREMENTS RELATING TO CUCUMBER (*Cucumis sativus* L.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Cucumis* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular cucumber variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 2 000 metres wide; and

3.1.2 the case of the intended production of certified seed, is at least 1 000 metres wide.

3.2 Such isolation area shall be free from plants of any cucumber variety or species of *Cucumis* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

4 Requirements for plants

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 during the green fruit stage thereof; and

5.2.2 during the full ripe stage of the fruit thereof;

5.3 No fruit may be harvested before the inspection referred to in paragraph 5.2.2 has been carried out.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 75;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 22

### REQUIREMENTS RELATING TO PUMPKIN & SQUASH [*Cucurbita maxima* Duchesne, *C. moshata* (Duchesne) Duchesne ex Poir & *C. pepo* L.]

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Cucurbita* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular pumpkin or squash variety may also be registered as a unit, if -

- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

## 2 Planting requirements

Plants shall be established in rows on a unit.

## 3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1.1 an open-pollinated variety, is at least 2 000 metres wide; and

3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 of an open-pollinated variety, is at least 1 000 metres wide; and

3.1.2.2 of a hybrid variety, is at least 2 000 metres wide.

3.2 Such isolation area shall be free from plants of any pumpkin or squash variety or species of *Cucurbita* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

3.4 In the case of the production of certified seed of all generations of *Cucurbita maxima* and *C. pepo* an isolation distance of 5 metre must be maintained between varieties and species.

## 4 Requirements for plants

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 in the case of the intended production of certified seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent;

4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent.

- 5 Inspection requirements
  - 5.1 Seedlings shall be inspected before they are established on a unit.
  - 5.2 Plants which are established on a unit from such seedlings shall be inspected -
    - 5.2.1 during the green fruit stage thereof; and
    - 5.2.2 during the full ripe stage of the fruit thereof;
    - 5.2.3 in the case of a hybrid variety, after the fruit of the plants of the pollen parent have been removed.
  - 5.3 If plants of a hybrid variety have been established on a unit -
    - 5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
      - 5.3.1.1 the plants of the seed parent are expected to start flowering; and
      - 5.3.1.2 the fruit of the pollen parent are to be removed; and
    - 5.3.2 the fruit of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.3 has been carried out.
- 6 Physical requirements
  - Seed shall -
    - 6.1 have a germination percentage of at least 75;
    - 6.2 have at least 98,0 percent pure seed; and
    - 6.3 not contain more than -
      - 6.3.1 0,1 percent other seed; and
      - 6.3.2 2,0 percent other material.
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 23

### REQUIREMENTS RELATING TO COCKSFOOT (*Dactylis glomerata* L.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Dactylis* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular cocksfoot variety may also be registered as a unit if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season
- 2 Planting requirements
  - 2.1 Seed shall be sown or be established in rows on a unit.
  - 2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area, which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
      - 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.1.2 is at least 100 metres wide where the area of the unit concerned exceeds two hectares; and
    - 3.1.2 in the case of the intended production of certified seed -
      - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and



- 3.1.2.2 is at least 50 metres wide where the area of the unit concerned exceeds two hectares.
- 3.2 Such isolation area shall be free from plants of any cocksfoot variety which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
- 4.1 Plants which are established on a unit may annually be grazed after the removal of the seed crop until October 15 of the following growing season.
- 4.2 The number of deviating plants on a unit shall -
- 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
- 4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.
- 5 Inspection requirements
- Plants which are established on a unit shall be inspected -
- 5.1 before the flowering stage thereof; and
- 5.2 during the flowering stage thereof; and
- 5.3 during the full seed stage thereof.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 70;
- 6.2 have at least 95,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed;
- 6.3.2 5,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 24

### REQUIREMENTS RELATING TO CARROT (*Daucus carota* L.)

- 1 Field requirements
- A field may be registered as a unit with a view to the production of certified pre-basic seed, basic seed or certified seed only if no plants of any carrot variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 2 Planting requirements
- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
- 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
- 2.3.2 rows containing plants of the pollen parent shall be clearly marked.
- 3 Isolation requirements
- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed of -
- 3.1.1.1 an open-pollinated variety, is at least 2 000 metres wide; and



- 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
- 3.1.2 in the case of the intended production of certified seed of -
  - 3.1.2.1 an open-pollinated variety, is at least 1 000 metres wide; and
  - 3.1.2.2 a hybrid variety, is at least 1 500 metres wide.
- 3.2 Such isolation area shall be free from plants of any carrot variety which flower at the same time as the plants on the unit concerned, unless -
  - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
  - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
  - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
  - 3.3.1 a common pollen parent is used; and
  - 3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
    - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and
    - 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.
  - 4.2.2 the number of deviating plants of the seed parent on a unit shall -
    - 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
    - 4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and
  - 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
    - 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
    - 4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

#### 5 Inspection requirements

- 5.1 Sticklings (immature carrots) shall be inspected before they are established on a unit.
- 5.2 Plants which are established on a unit from such carrots shall be inspected -
  - 5.2.1 during the flowering stage thereof;
  - 5.2.2 during the full seed stage thereof; and
  - 5.2.3 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.
- 5.3 If plants of a hybrid variety have been established on a unit -
  - 5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
    - 5.3.1.1 the plants of the seed parent are expected to start flowering; and
    - 5.3.1.2 the seed heads of the pollen parent are to be removed; and
  - 5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.2.3 has been carried out.

#### 6 Physical requirements

- Seed shall -
  - 6.1 have a germination percentage of at least 75;
  - 6.2 have at least 98,0 percent pure seed; and

- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed;
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 25

### REQUIREMENTS RELATING TO SMUTS FINGER GRASS (*Digitaria eriantha* Steud.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Digitaria* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular Smuts Finger grass variety may also be registered as a unit if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed shall be sown or be established in rows on a unit.
  - 2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
      - 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.1.2 is at least 100 metres wide where the area of the unit concerned exceeds two hectares; and
    - 3.1.2 in the case of the intended production of certified seed -
      - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.2.2 is at least 50 metres wide where the area of the unit concerned exceeds two hectares.
  - 3.2 Such isolation area shall be free from plants of any Smuts Finger grass variety which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
    - 3.2.3 in the case of the intended production of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.
  - 4.2 Plants established on a unit registered for the production of certified pre-basic seed or basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.3 After the use of plants on a unit for the production of certified pre-basic seed or basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

4.4 Plants established on a unit for the production of certified seed -

4.4.1 may be used for this purpose for a period of not more than four years; and

4.4.2 may, with the written approval from the Authority, be used for that purpose for a further period of two years.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof; and

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 15;

6.2 in the case of coated seed, have a germination percentage of at least 20;

6.2 have at least 94,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed;

6.3.2 6,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 26

### REQUIREMENTS RELATING TO JAPANESE MILLET [*Echinochloa crus-galli* (L.) P. Beauv.]

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Echinochloa* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular Japanese Millet variety may also be registered as a unit, if

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

2.3 In the case of the intended production of seed of a hybrid variety -

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked.

3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1.1 an open-pollinated variety, is at least 400 metres wide; and

3.1.1.2 a hybrid variety, is at least 500 metres wide; and

- 3.1.2 in the case of the intended production of certified seed -
  - 3.1.2.1 of an open-pollinated variety, is at least 350 metres wide; and
  - 3.1.2.2 of a hybrid variety, is at least 500 metres wide.
- 3.2 Such isolation area shall be free from plants of any Japanese Millet variety or species of *Echinochloa* which flower at the same time as the plants on the unit concerned, unless -
  - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
  - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
  - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
  - 3.3.1 a common pollen parent is used; and
  - 3.3.2 a distance of a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
    - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and
    - 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.
  - 4.2.2 the number of deviating plants of the seed parent on a unit shall -
    - 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and
    - 4.2.2.2 in the case of the intended production of certified seed, not exceed 0,3 percent of the plants of the seed parent; and
  - 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
    - 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 20,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,5 percent of the plants of the seed parent; and
    - 4.2.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent at the stage at which 30,0 percent or more of the plants of the seed parent has pollen-susceptible flowers.

#### 5 Inspection requirements

- 5.1 Plants which are established on a unit shall be inspected -
  - 5.1.1 before the flowering stage thereof;
  - 5.1.2 during the flowering stage thereof;
  - 5.1.3 during the full seed stage thereof; and
  - 5.1.4 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.
- 5.2 If plants of a hybrid variety have been established on a unit -
  - 5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
    - 5.2.1.1 the plants of the seed parent are expected to start flowering; and
    - 5.2.1.2 the seed heads of the pollen parent are to be removed; and
  - 5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.

- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 80;
  - 6.2 have at least 96,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed; and
    - 6.3.2 4,0 percent other material.
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 27

### REQUIREMENTS RELATING TO FINGER MILLET [*Eleusine corocana* L. Gaertn.]]

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Eleusine* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular finger millet variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.
  - 3.2 Such isolation area shall be free from plants of any finger millet variety or species of *Eleusine* which flower at the same time as the plants on the unit concerned.
- 4 Requirements for plants
  - 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 5 Inspection requirements
  - 5.1 Plants which are established on a unit shall be inspected -
    - 5.1.1 before the flowering stage thereof;
    - 5.1.2 during the flowering stage thereof; and
    - 5.1.3 during the full seed stage thereof.
- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 80;
  - 6.2 have at least 97,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed; and
    - 6.3.2 3,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 28

### REQUIREMENTS RELATING TO WEEPING LOVE GRASS [*Eragrostis curvula* (Schr.) Nees]

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Eragrostis* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular weeping love grass variety may also be registered as a unit if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

#### 2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

#### 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.

3.2 Such isolation area shall be free from plants of any weeping love grass variety.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

4.2 Plants established on a unit registered for the production of certified pre-basic seed or basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.3 After the use of plants on a unit for the production of certified pre-basic seed or basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

4.4 Plants established on a unit for the production of certified seed -

4.4.1 may be used for this purpose for a period of not more than four years; and

4.4.2 may, with the written approval from the Authority, be used for that purpose for a further period of two years.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof; and

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall -



- 6.1 have a germination percentage of at least 70;
- 6.2 have at least 97,0 percent pure seed; and
- 6.3 not contain more than -
  - 6.3.1 0,5 percent other seed, of which maximum of 0,3 percent may be weed seed;
  - 6.3.2 0,2 percent nematode galls; and
  - 6.3.3 3,0 percent other material.
- 6.4 Notwithstanding the provisions of paragraph 6.3.1 -
  - 6.4.1 the percentage seed of *Eragrostis tef* (Zucc.) Trotter in seed shall -
    - 6.4.1.1 in the case of certified pre-basic seed or basic seed, not exceed 0,1 percent; and
    - 6.4.1.2 in the case of certified seed, not exceed 0,2 percent; and
  - 6.4.2 the percentage seed of *E. plana* Nees in seed of all generations not exceed 0,1 percent; and
  - 6.4.3 not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 29

### REQUIREMENTS RELATING TO TEFF [*Eragrostis tef* (Zuccagni) Trotter]

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Eragrostis* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of seed of a *Eragrostis tef* variety may -
    - 1.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not be registered as a unit for more than two consecutive growing seasons if certified breeder seed or certified pre-basic seed, whichever the case may be, of the same variety is annually established thereon; and
    - 1.2.2 in the case of the intended production of certified seed, not be registered as a unit for more than four consecutive growing seasons if basic seed of the same variety is annually established thereon: Provided that such field may also be registered as a unit if certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed may be sown or be established in rows on a unit.
  - 2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.
  - 3.2 Such isolation area shall be free from plants of any *Eragrostis tef* variety.
- 4 Requirements for plants
  - The number of deviating plants on a unit shall -
    - 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
    - 4.2 in the case of the intended production of certified seed, not exceed one plant per 15 square metres.
- 5 Inspection requirements
  - Plants which are established on a unit shall be inspected -
    - 5.1 before the flowering stage thereof;
    - 5.2 during the flowering stage thereof; and
    - 5.3 during the full seed stage thereof.



- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 70.
  - 6.2 have at least 97,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,5 percent other seed, of which not more than 0,3 percent may be weed seed;
    - 6.3.2 3,0 percent other material; and
    - 6.3.3 0,2 percent nematode galls.
  - 6.4 Notwithstanding the provisions of paragraph 6.3.1 -
    - 6.4.1 the percentage seed of *Eragrostis curvula* (Schröd.) Nees in seed shall -
      - 6.4.1.1 in the case of certified pre-basic or basic seed, not exceed 0,1 percent; and
      - 6.4.1.2 in the case of certified seed, not exceed 0,2 percent; and
    - 6.4.2 the percentage seed of *E. plana* Nees in seed of all generations not exceed 0,1 percent; and
    - 6.4.3 not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 30

### REQUIREMENTS RELATING TO BUCKWHEAT (*Fagopyrum esculentum* Moench)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any specie of *Fagopyrum* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular buckwheat variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed shall be sown or be established in rows on a unit.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed is at least 500 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed is at least 300 metres wide.
  - 3.2 Such isolation area shall be free from plants of any buckwheat variety which flower at the same time as the plants on the unit concerned.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,3 percent.
  - 4.2 Methods for the determination of deviating plants shall be as determined by the Authority.
- 5 Inspection requirements
  - Plants which are established on a unit shall be inspected -
    - 5.1 during the stooling stage thereof;
    - 5.2 during the flowering stage thereof; and
    - 5.3 during the full seed stage thereof.

- 6 Physical requirements
  - Seed shall -
  - 6.1 have a germination percentage of at least 75;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,5 percent other seed, but not more than 0,2 percent weed seed; and
    - 6.3.2 2,0 percent other material.
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 31

### REQUIREMENTS RELATING TO TALL FESCUE & FESTULOLIUM (*Festuca arundinacea* Schreb. & *xFestulolium* Asch. & Graebn.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Lolium*, *Festuca* and *xFestulolium* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular tall fescue or of *Festulolium* variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed may be sown or be established in rows on a unit.
  - 2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
      - 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and
    - 3.1.2 in the case of the intended production of certified seed -
      - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.
  - 3.2 Such isolation area shall be free from plants of any *Festuca*, *Lolium* and *xFestulolium* variety which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.
    - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

- 4 Requirements for plants
  - 4.1 Plants which are established on a unit may annually be grazed after the removal of the seed crop until October 15 of the following growing season.
  - 4.2 The number of deviating plants on a unit shall –
    - 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
    - 4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.
- 5 Inspection requirements
  - Plants which are established on a unit shall be inspected –
    - 5.1 before the flowering stage thereof;
    - 5.2 during the flowering stage thereof; and
    - 5.3 during the full seed stage thereof.
- 6 Physical requirements
  - Seed shall –
    - 6.1 have a germination percentage of at least 75;
    - 6.2 have at least 96,0 percent pure seed; and
    - 6.3 not contain more than –
      - 6.3.1 0,5 percent other seed, but not more than 0,2 percent weed seed; and
      - 6.3.2 4,0 percent other material.
      - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 32

### REQUIREMENTS RELATING TO FENNEL (*Foeniculum vulgare* Mill.)

- 1 Field requirements
  - A field may be registered as a unit with a view to the production of certified pre-basic seed, basic seed or certified seed only if no plants of any fennel variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
  - 2.3 In the case of the intended production of seed of a hybrid variety –
    - 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
    - 2.3.2 rows containing plants of the pollen parent shall be clearly marked.
- 3 Isolation requirements
  - 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which –
    - 3.1.1 in the case of the intended production of certified pre-basic seed and basic seed of –
      - 3.1.1.1 an open-pollinated variety, is at least 2 000 metres wide; and
      - 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed –
      - 3.1.2.1 of an open-pollinated variety, is at least 1 000 metres wide; and
      - 3.1.2.2 of a hybrid variety, is at least 1 500 metres wide.
  - 3.2 Such isolation area shall be free from plants of any fennel variety which flower at the same time as the plants on the unit concerned, unless –
    - 3.2.1 in the case of the intended production of certified basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent;

4.2.3.2 in the case of the intended production of certified seed, not exceed 2,0 percent of the plants of the seed parent.

#### 5 Inspection requirements

5.1 Seedlings shall be inspected before they are established on a unit.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 during the flowering stage thereof;

5.2.2 during the full seed stage thereof; and

5.2.3 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.

5.3 If plants of a hybrid variety have been established on a unit -

5.3.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.3.1.1 the plants of the seed parent are expected to start flowering; and

5.3.1.2 the seed heads of the pollen parent are to be removed; and

5.3.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.3.1 has been carried out.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 75;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed;

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 33****REQUIREMENTS RELATING TO SOYA BEAN [*Glycine max* (L.) Merrill]**

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any soya bean variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular soya bean variety may also be registered as a unit if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season
- 2 Planting requirements
  - 2.1 Seed shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which is at least five metres wide
  - 3.2 Such isolation area shall be free from plants of any soya bean variety.
- 4 Requirements for plants

The number of deviating plants on a unit shall -

  - 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 5 Inspection requirements

Plants which are established on a unit shall be inspected -

  - 5.1 before the flowering stage thereof; and
  - 5.2 during the flowering stage thereof; and
  - 5.3 during the full seed stage thereof.
- 6 Physical requirements

Seed shall -

  - 6.1 have a germination percentage of at least 70;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed;
    - 6.3.2 0,2 percent seed of deviating plants;
    - 6.3.3 2,0 percent other material;
    - 6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and
  - 6.4 not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

**ANNEXURE 34****REQUIREMENTS RELATING TO COTTON****(*Gossypium hirsutum* L.) & (*G. hirsutum* x *G. barbadense*)**

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

- 1.1.1 no plants of any cotton variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 A field which is intended for the production of basic seed or certified seed of an open-pollinated cotton variety may also be registered as a unit if -
  - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
  - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
  - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

## 2 Planting requirements

- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
  - 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
  - 2.3.2 rows containing plants of the pollen parent shall be clearly marked.

## 3 Isolation requirements

- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
  - 3.1.1 in the case of the intended production of a pre-basic and basic seed of -
    - 3.1.1.1 *G. hirsutum* is at least 100 metres wide;
    - 3.1.1.2 *G. barbadense* is at least 200 metres wide;
    - 3.1.1.3 *G. hirsutum* x *G. barbadense* is at least 200 metres wide;
  - 3.1.2.3 a hybrid when a CMS is used which is intended for the use as a parent for the production of a hybrid, is at least 800 metres wide;
  - 3.1.2 in the case of the intended production of certified seed of -
    - 3.1.2.1 an open-pollinated variety, is at least 100 metres wide; and
    - 3.1.2.2 a hybrid variety where a cytoplasmic male sterile (CMS) line is not used; -
      - 3.1.2.2.1 *G. hirsutum* is at least 100 metres wide;
      - 3.1.2.2.2 *G. barbadense* and *G. hirsutum* x *G. barbadense* is at least 150 metres wide;
    - 3.1.2.3 a hybrid when a CMS is used, is at least 800 metres wide;
- 3.2 Such isolation area shall be free from plants of any cotton variety or species of *Gossypium* which flower at the same time as the plants on the unit concerned, unless -
  - 3.2.1 in the case of the intended production of basic seed of an open-pollinated variety, they have been established from certified pre-basic seed of the same variety; and
  - 3.2.2 in the case of the intended production of certified seed of an open-pollinated variety, they have been established from certified pre-basic seed or basic seed of the same variety; and
  - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
  - 3.3.1 a common pollen parent is used; and
  - 3.3.2 a distance of a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

## 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
    - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and
    - 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.



- 4.2.2 the number of deviating plants of the seed parent on a unit shall -
- 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,01 percent of the plants of the seed parent; and
- 4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
- 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent at the stage at which 20,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,2 percent of the plants of the seed parent; and
- 4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 30,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,75 percent of the plants of the seed parent.
- 5 Inspection requirements
- 5.1 Plants which are established on a unit shall be inspected -
- 5.1.1 before the flowering stage thereof;
- 5.1.2 during the flowering stage thereof;
- 5.1.3 after the first bolls thereof are open; and
- 5.1.4 in the case of a hybrid variety, after the plants of the pollen parent have been removed.
- 5.2 If plants of a hybrid variety have been established on a unit -
- 5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
- 5.2.1.1 the plants of the seed parent are expected to start flowering; and
- 5.2.1.2 the plants of the pollen parent are to be removed; and
- 5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.
- 6 Physical requirements
- Seed shall be delinted and -
- 6.1 have a germination percentage of at least 75;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed; and
- 6.3.2 2,0 percent other material;
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.
- 6.4 Seed shall be treated against seed-borne diseases with a chemical remedy, which is registered for this purpose.

## ANNEXURE 35

### REQUIREMENTS RELATING TO SUNFLOWER (*Helianthus annuus* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
- 1.1.1 no plants of any species of *Helianthus* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 In the case of an open-pollinated sunflower variety only: A field which is intended for the production of basic seed or certified seed of a particular sunflower variety may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and



- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season

## 2 Planting requirements

- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap-filling in rows shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
  - 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
  - 2.3.2 rows containing plants of the pollen parent shall be clearly marked.

## 3 Isolation requirements

- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
  - 3.1.1 in the case of the intended production of certified pre-basic and basic seed of -
    - 3.1.1.1 an open-pollinated variety, is at least 1 500 metres wide; and
    - 3.1.1.2 a hybrid variety, is at least 3 000 metres wide; and
  - 3.1.2 in the case of the intended production of certified seed -
    - 3.1.2.1 of an open-pollinated variety, is at least 500 metres wide; and
    - 3.1.2.2 of a hybrid variety, is at least 1 000 metres wide.
- 3.2 Such isolation area shall be free from plants of any sunflower variety or species of *Helianthus* which flower at the same time as the plants on the unit concerned, unless -
  - 3.2.1 in the case of the intended production of certified basic seed of an open-pollinated variety, they have been established from certified pre-basic seed of the same variety; and
  - 3.2.2 in the case of the intended production of certified seed of an open-pollinated variety, they have been established from certified pre-basic seed or basic seed of the same variety; and
  - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
  - 3.3.1 a common pollen parent is used; and
  - 3.3.2 a distance of at least five metres wide, which is free from plants of the seed parent concerned, is maintained between the units concerned.

## 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
  - 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
    - 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which 2,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and
    - 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.
  - 4.2.2 the number of deviating plants of the seed parent on a unit shall -
    - 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent; and
    - 4.2.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent; and
  - 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
    - 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent at the stage at which 2,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,2 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of pollen-shedding flowers found during inspections shall not for the three inspections showing the highest incidence of such plants, exceed 0,5 percent of the plants of the seed parent.

4.3 The number of disease-infected plants on a unit shall -

4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 1,0 percent; and

4.3.2 in the case of the intended production of certified seed, not exceed 3,0 percent.

4.4 For the purposes of paragraph 4.3 "disease-infected plants" shall mean plants which are not visually free from *Verticillium* wilt disease.

## 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof;

5.1.3 during the full seed stage thereof; and

5.1.4 in the case of a hybrid variety, after the seed heads of plants of the pollen parent have been removed.

5.2 If plants of a hybrid variety have been established on a unit-

5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.2.1.1 the plants of the seed parent are expected to start flowering; and

5.2.1.2 the seed heads of the pollen parent are to be removed; and

5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 80;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material; and

6.3.3 0,2 percent seed of deviating plants; and

6.3.4 1,0 percent seed without a seed coat.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and

6.4 not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

## ANNEXURE 36

### REQUIREMENTS RELATING TO BARLEY (*Hordeum vulgare* L. subsp. *vulgare*)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Hordeum* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular barley variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

- 2 Planting requirements  
Seed may be sown or be established in rows on a unit.
- 3 Isolation requirements
  - 3.1 The isolation area surrounding a unit shall be at least 5 meters wide.
  - 3.2 Such isolation area shall be free from plants of any barley species.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 Methods for determination of deviating plants shall be as determined by the Authority.
- 5 Inspection requirements  
Plants which are established on a unit shall be inspected -
  - 5.1 before the booting stage thereof;
  - 5.2 during the flowering stage thereof; and
  - 5.3 during the ripening thereof.
- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 80.
  - 6.2 have at least 99,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,3 percent other seed, of which not more than 0,02 percent weed seed; and
    - 6.3.2 1,0 percent other material.
  - 6.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of wild oats may occur in a 400 g seed sample, and not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 37

### REQUIREMENTS RELATING TO COMMON & CHINESE LESPEDEZA [(*Kummerowia striata* (Thunb.) Schindl. [syn. *Lespedeza striata* (Thunb.) Hook. & Arn.] & [*Lespedeza cuneata* (Dum. Cours.) G. Don]

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Kummerowia* or *Lespedeza* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of seed of a particular *Kummerowia* or *Lespedeza* variety may -
    - 1.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not be registered as a unit for more than three consecutive growing seasons; and
    - 1.2.2 in the case of the intended production of certified seed, may also be registered for a further three seasons as a unit.
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
  - 1.3 Any further registrations will only be considered with written approval from the Authority.
- 2 Planting requirements
  - 2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.

### 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 at least 100 metres wide where the area of the unit concerned exceeds two hectares; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

3.1.2.2 is at least 50 metres wide where the area of the unit concerned exceeds two hectares.

3.2 Such isolation area shall be free from plants of any *Lespedeza* variety or species of *Lespedeza* or *Kummerowia* or which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

### 4 Requirements for plants

4.1 Plants which are established on a unit may -

4.1.1 if such unit is registered for the production of basic seed, be used for such purpose for a period of not more than two years after the year of establishment thereof, and may thereafter for a further period of not more than three years be used for the production of certified seed if the unit concerned is registered for this purpose;

4.1.2 if such a unit is registered for the production of certified seed, be used for such purpose for a period of not more than three years after the year of establishment thereof;

4.2 The number of deviating plants on a unit shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.3 No plants of dodder (*Cuscuta* spp.) may occur on a unit.

4.4 Methods for determination of deviating plants on a unit shall be as determined by the Authority.

### 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof; and

5.1.3 during the full seed stage thereof.

5.2 A seed grower shall notify the authorised person at least 14 days prior to the date on which plants are expected to start flowering.

### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70; of which a maximum of 50 percent hard seeds may be counted as germinated seeds;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,2 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the species being tested

**ANNEXURE 38****REQUIREMENTS RELATING TO LETTUCE (*Lactuca sativa* L.)**

- 1 Field requirements  
Any field may be registered as a unit if no lettuce-related plants were cultivated there during the preceding two growing seasons.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 100 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed, is at least 50 metres wide.
  - 3.2 Such isolation area shall be free from plants of any lettuce variety which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
    - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 A unit shall be free from infected plants which are not visually free from the pathogen Lettuce Mosaic Virus.
- 5 Inspection requirements
  - 5.1 Seedlings shall be inspected before they are planted;
  - 5.2 Plants which are established on a unit from such seedlings shall be inspected –
    - 5.2.1 during the 50 percent marketable stage thereof;
    - 5.2.2 during the full marketable stage thereof; and
    - 5.2.3 during the full seed stage thereof.
- 6 Physical requirements  
Seed shall -
  - 6.1 have a germination percentage of at least 70;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed; and
    - 6.3.2 2,0 percent other material; and
    - 6.3.3 0,2 percent seed of deviating plants,
    - 6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 39****REQUIREMENTS RELATING TO ITALIAN AND WESTERWOLDS RYEGRASS & RIGID ANNUAL RYEGRASS (*Lolium multiflorum* Lam. & *Lolium rigidum* Gaudin)****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any rye grass variety -

1.1.1 in the case of the intended production of certified pre-basic seed or basic seed, the three growing seasons; and

1.1.2 in the case of the intended production of certified seed, the two growing seasons, preceding the registration thereof and have been established thereon for seed production or otherwise.

1.2 A field which is intended for the production of seed of a rye grass variety may -

1.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not be registered as a unit for more than two consecutive growing seasons if breeder seed of the same variety is annually established thereon; and

1.2.2 in the case of the intended production of certified seed, not be registered as a unit for more than four consecutive growing seasons if basic seed of the same variety is annually established thereon: Provided that such field may also be registered as a unit if basic seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

2.1 Seeds shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

2.3 The breeder shall, with regard to quality and production, determine the planting date, the production areas where the seed shall be planted and the date on which grazing shall be withdrawn.

**3 Isolation requirements**

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 between units of a diploid ryegrass variety and a tetraploid ryegrass variety is at least five metres wide; and

3.1.1.2 between varieties of another *Lolium* specie, different varieties of diploid ryegrass and different varieties of tetraploid ryegrass respectively -

3.1.1.2.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2.2 is at least 100 metres wide where the area of the unit concerned exceeds two hectares; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 between units of a diploid ryegrass variety and a tetraploid ryegrass variety is at least five metres wide; and

3.1.2.2 between varieties of another *Lolium* specie, different varieties of diploid ryegrass-varieties and different varieties of tetraploid ryegrass-varieties respectively, -

3.1.2.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

3.1.2.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares;

3.2 Such isolation area shall be free from plants of any rye grass variety or species of *Lolium* which flower at the same time as the plants on the unit concerned, unless-

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

**4 Requirements for plants**

4.1 Plants which are established on a unit shall not be grazed after October 15, of the growing season during which seed is to be produced or as determined by the breeder of the particular variety.

4.2 The number of deviating plants on a unit shall -



4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 50 square metres; and

4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination or a viability percentage of at least 70;

6.2 have at least 96,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,5 percent other seed, of which no more than 0,2 percent may be weed seed;

6.3.2 4,0 percent other material; and

6.3.3 0,2 percent seed of deviating plants.

6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 40

### REQUIREMENTS RELATING TO PERENNIAL RYEGRASS & HYBRID RYEGRASS

(*Lolium perenne* L. & *Lolium ×hybridum* Hausskn.)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Lolium* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular rye grass variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 between units of a diploid ryegrass variety and a tetraploid ryegrass variety is at least five metres wide; and

3.1.1.2 between different varieties of diploid ryegrass varieties and different varieties of tetraploid ryegrass varieties respectively -

3.1.1.2.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and



- 3.1.1.2.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and
- 3.1.2 in the case of the intended production of certified seed -
- 3.1.2.1 between units of a diploid ryegrass variety and a tetraploid ryegrass variety is at least five metres wide; and
- 3.1.2.2 between different varieties of diploid ryegrass-varieties and different varieties of tetraploid ryegrass-varieties respectively, -
- 3.1.2.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
- 3.1.2.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.
- 3.2 Such isolation area shall be free from plants of any rye grass variety or species of *Lolium* which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
- The number of deviating plants on a unit shall -
- 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
- 4.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.
- 5 Inspection requirements
- Plants which are established on a unit shall be inspected -
- 5.1 before the flowering stage thereof;
- 5.2 during the flowering stage thereof; and
- 5.3 during the full seed stage thereof.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination or a viability percentage of at least 75.
- 6.2 have at least 96,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,5 percent other seed, of which no more than 0,2 percent may be weed seed; and
- 6.3.2 4,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 41

### REQUIREMENTS RELATING TO LUPIN (WHITE LUPIN - *Lupinus albus* L.; NARROW LEAF LUPIN - *Lupinus angustifolius* L. & YELLOW LUPIN *Lupinus luteus* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
- 1.1.1 no plants of any lupin variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 in the case of the intended production of certified pre-basic seed or basic seed, the three growing seasons; and
- 1.2.1 in the case of the intended production of certified seed, the two growing seasons, preceding the registration thereof and have been established thereon for seed production or otherwise.
- 1.3 A field which is intended for the production of basic seed or certified seed of a particular lupin variety may also be registered as a unit, if -

- 1.3.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.3.2 certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
- 1.3.3 in the case of certified seed, in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 1.4 Subject to the provisions of paragraph 1.2, a field may be registered as a unit for the production of disease-free seed only if no plants of any lupin variety or species of *Lupinus* –
  - 1.4.1 in the case of the intended production of pre-basic seed and basic seed, during the two years; and
  - 1.4.2 in the case of the intended production of certified seed, has been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.5 A field which is intended for the production of disease-free certified seed of a particular lupin variety may also be registered as a unit if disease-free basic seed of the same variety has been produced thereon during the preceding growing season.
- 1.6 Should the pathogen *Colletotrichum* spp., occur on a unit, no *Lupinus* may be cultivated for the following three years on the field concerned.

## 2 Planting requirements

Seed shall be sown or be established in rows on a unit.

## 3 Isolation requirements

- 3.1 A unit shall be surrounded by an isolation area which –
  - 3.1.1 in the case of the intended production of disease-free seed, is at least 500 metres wide;
  - 3.2.1 otherwise, in the case of the intended production of certified pre-basic seed or basic seed of –
    - 3.2.1.1 white lupin, is at least 200 metres wide where the area of the unit concerned is two hectares or less, and at least 100 metres wide where the area of the unit concerned is more than two hectares; and
    - 3.2.1.2 narrow leaf lupin and yellow lupin, is at least five metres wide; and
    - 3.2.1 in the case of the intended production of certified seed of –
      - 3.2.2.1 white lupins, is at least 100 metres wide where the area of the unit concerned is two hectares or less, and at least 50 metres wide where the area of the unit concerned is more than two hectares; and
      - 3.2.2.2 narrow leaf lupins and yellow lupins, at least five metres wide.
- 3.3 Such isolation area shall–
  - 3.3.1 in the case of the intended production of disease-free seed, be free from plants of any lupin variety or species of *Lupinus*, irrespective of the stage of development thereof, unless they are also intended for the production of such disease-free seed; and
  - 3.3.2 otherwise be free from plants of any lupin variety or species of *Lupinus* which flower at the same time as the plants on the unit concerned, unless –
    - 3.3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
    - 3.3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

## 4 Requirements for plants

- 4.1 The number of deviating plants on a unit shall –
  - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
  - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 Methods for determination of deviating plants shall be as determined by the Authority.
- 4.3 A unit, which is intended for the production of disease-free seed, shall be free from disease-infected plants.
- 4.4 For the purpose of paragraph 4.3 “disease-infected plants” shall mean plants which are not visually free from the pathogens *Colletotrichum* spp., or Cucumber Mosaic Virus (CMV).

## 5 Inspection requirements

Plants which are established on a unit shall be inspected –

- 5.1 before the flowering stage thereof;
  - 5.2 during the flowering stage thereof; and
  - 5.3 during the full seed stage thereof.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 75;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,1 percent other seed;
    - 6.3.2 2,0 percent other material.
  - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and
  - 6.4 In the case of sweet *Lupinus albus*, *Lupinus angustifolius* and *Lupinus luteus*, not contain more than 2,0 percent bitter seeds.
  - 6.5 In the case of disease-free seed, according to a laboratory examination, be free from seed that is infected with a pathogen as specified in paragraph 4.4.

## ANNEXURE 42

### REQUIREMENTS RELATING TO MEDICS

[*Medicago littoralis* Rohde ex Loisel; *M. polymorpha* L. var. *brevispina* (Benth.) Heyn.; *M. rugosa* Desr.; *M. scutellata* (L.) Miller; & *M. truncatula* Gaertn.]

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Medicago* -
    - 1.1.1 in the case of the intended production of certified pre-basic seed or basic seed, during the four growing seasons; and
    - 1.1.2 in the case of the intended production of certified seed, the three growing seasons, preceding the registration thereof and have been established thereon for seed production or otherwise.
  - 1.2 A field which is intended for the production of seed of a particular *Medicago* variety may -
    - 1.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not be registered as a unit for more than three consecutive growing seasons if breeder seed of the same variety is annually established thereon; and
    - 1.2.2 in the case of the intended production of certified seed, may also be registered for a further three seasons as a unit if certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
  - 1.3 Any further registrations will only be considered with written approval from the Authority.
- 2 Planting requirements
- 2.1 Seeds shall be sown or be established in rows on a unit.
  - 2.2 If established in rows on a unit, the area between such rows shall for a period of one year after the plants were established on a unit, be kept free from any plants.
  - 2.3 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.
  - 3.2 Such isolation area shall be free from plants of any *Medicago* spp., unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

4 Requirements for plants

4.1 Plants which are established on a unit may only be grazed after consideration of a written request by the seed grower concerned.

4.2 The number of deviating plants on a unit shall –

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 2,0 percent.

4.3 Methods for the determination of deviating plants are as determined by the Authority.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70, including hard seeds;

6.2 have at least 97,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,5 percent other seed, of which no more than 0,2 percent may be weed seed;

6.3.2 3,0 percent other material; and

6.3.3 0,5 percent seed of deviating plants.

6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 43

### REQUIREMENTS RELATING TO LUCERNE (*Medicago sativa* L.)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Medicago* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular lucerne variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 If established in rows on a unit, the area between such rows shall for a period of one year after the plants were established on a unit, be kept free from any plants.

2.3 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.

### 3 Isolation requirements

#### 3.1 A unit shall be surrounded by an isolation area which -

##### 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

###### 3.1.1.1 at least 200 metres wide where the area of the unit concerned is two hectares or less; and

###### 3.1.1.2 at least 100 metres wide where the area of the unit concerned exceeds two hectares; and

##### 3.1.2 in the case of the intended production of certified seed -

###### 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

###### 3.1.2.2 is at least 50 metres wide where the area of the unit concerned exceeds two hectares.

#### 3.2 Such isolation area shall be free from plants of any lucerne variety or species of *Medicago* which flower at the same time as the plants on the unit concerned, unless -

##### 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

##### 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

##### 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

### 4 Requirements for plants

#### 4.1 Plants which are established on a unit may -

##### 4.1.1 if such unit is registered for the production of basic seed, be used for such purpose for a period of not more than two years after the year of establishment thereof, and may thereafter for a further period of not more than three years be used for the production of certified seed if the unit concerned is registered for this purpose;

##### 4.1.2 if such a unit is registered for the production of certified seed, be used for such purpose for a period of not more than three years after the year of establishment thereof; and

##### 4.1.3 annually be grazed from the time after the removal of the seed crop until October 15 of the following growing season.

#### 4.2 The number of deviating plants on a unit shall -

##### 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

##### 4.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

#### 4.3 No plants of dodder (*Cuscuta* spp.) may occur on a unit.

#### 4.4 Methods for determination of deviating plants shall be as determined by the Authority.

### 5 Inspection requirements

#### 5.1 Plants which are established on a unit shall be inspected -

##### 5.1.1 before the flowering stage thereof;

##### 5.1.2 during the flowering stage thereof; and

##### 5.1.3 during the full seed stage thereof.

#### 5.2 A seed grower shall notify the authorised person at least 14 days prior to the date on which plants are expected to start flowering.

### 6 Physical requirements

#### Seed shall -

##### 6.1 have a germination percentage of at least 80; of which a maximum of 40 percent hard seeds may be counted as germinated seeds;

##### 6.2 have at least 98,0 percent pure seed; and

##### 6.3 not contain more than -

###### 6.3.1 0,2 percent other seed; and

###### 6.3.2 2,0 percent other material.

##### 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

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**ANNEXURE 44****REQUIREMENTS RELATING TO WHITE BUFFALO GRASS & SMALL BUFFALO GRASS  
[*Megathyrsus maximus* (Jacq.) B.K.Simon & S.W.L.Jacobs (Synonym *Panicum maximum* Jacq.) & *Panicum coloratum* L.]****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Panicum* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular white buffalo grass variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

**3 Isolation requirements**

3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.

3.2 Such isolation area shall be free from plants of any white buffalo grass or small buffalo grass variety, as the case may be.

**4 Requirements for plants**

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

4.3 Plants established on a unit registered for the production of basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.4 After the use of plants on a unit for the production of basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

4.5 Plants established on a unit for the production of certified seed -

4.5.1 may be used for this purpose for a period of not more than four years; and

4.5.2 may, with the written approval from the Authority, be used for that purpose for a further period of two years.

**5 Inspection requirements**

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

**6 Physical requirements**

Seed shall -

6.1 have a germination percentage of at least 10 or a viability percentage of at least 20;

6.2 in the case of coated seed, have a germination percentage of at least 20 percent or a viability percentage of at least 40;

- 6.3 have at least 98,0 percent pure seed; and
- 6.4 not contain more than -
  - 6.4.1 0,5 percent other seed; and
  - 6.4.2 2,0 percent other material.
  - 6.4.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 45

### REQUIREMENTS RELATING TO WHITE SWEET-CLOVER (*Melilotus albus* Medik.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
    - 1.1.1 no plants of any species of *Melilotus* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or
    - 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular white sweet-clover variety, may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Seed shall be sown or be established in rows on a unit.
  - 2.2 If established in rows on a unit, the area between such rows shall for a period of one year after the plants were established on a unit, be kept free from any plants.
  - 2.3 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
      - 3.1.1.1 at least 200 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.1.2 at least 100 metres wide where the area of the unit concerned exceeds two hectares; and
    - 3.1.2 in the case of the intended production of certified seed -
      - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
      - 3.1.2.2 is at least 50 metres wide where the area of the unit concerned exceeds two hectares.
  - 3.2 Such isolation area shall be free from plants of any white sweet clover variety or species of *Melilotus* which flower at the same time as the plants on the unit concerned, unless -
    - 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
    - 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
    - 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
  - 4.1 Plants which are established on a unit may -
    - 4.1.1 if such unit is registered for the production of basic seed, be used for such purpose for a period of not more than two years after the year of establishment thereof, and may thereafter for a further period of not more than three years be used for the production of certified seed if the unit concerned is registered for this purpose;

- 4.1.2 if such a unit is registered for the production of certified seed, be used for such purpose for a period of not more than three years after the year of establishment thereof; and
- 4.1.3 annually be grazed from the time after the removal of the seed crop until October 15 of the following growing season.
- 4.2 The number of deviating plants on a unit shall -
- 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.2.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.3 No plants of dodder (*Cuscuta* spp.) may occur on a unit.
- 4.4 Methods for determination of deviating plants shall be as determined by the Authority.
- 5 Inspection requirements
- 5.1 Plants which are established on a unit shall be inspected -
- 5.1.1 before the flowering stage thereof;
- 5.1.2 during the flowering stage thereof; and
- 5.1.3 during the full seed stage thereof.
- 5.2 A seed grower shall notify the authorised person at least 14 days prior to the date on which plants are expected to start flowering.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 80; of which a maximum of 40 percent hard seeds may be counted as germinated seeds;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,2 percent other seed; and
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 46

### REQUIREMENTS RELATING TO TOBACCO (*Nicotiana tabacum* L.)

- 1 Field requirements
- Any field may be registered as a unit
- 2 Planting requirements
- 2.1 Plants shall be established in rows on a unit.
- 2.2 Gap filling shall not be permissible.
- 2.3 In the case of the intended production of seed of a hybrid variety -
- 2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and
- 2.3.2 rows containing plants of the pollen parent shall be clearly marked.
- 3 Isolation requirements
- 3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed of an open-pollinated variety, is at least 400 metres wide;
- 3.1.2 notwithstanding the provisions of paragraph 3.1.1, a unit may be established within any commercial crop of the same variety; with the condition that the florescence or flowers of the seed parents are covered in such a way that contamination by unwanted pollen is prevented; and
- 3.1.3 in the case of the intended production of certified seed of an open-pollinated variety, is at least 400 meters wide;

- 3.2 notwithstanding the provisions of paragraph 3.1, a unit may be established within a commercial crop of the same variety established from certified seed, or within any commercial crop in which male sterility occurs in the variety.
- 3.3 In the case of the intended production of a hybrid variety, the plants may be established within any commercial crop in which male sterility occurs in the variety.
- 3.3.1 The production of the seed and pollen parents of a hybrid crop in which male sterility occurs can be multiplied on the same unit if a two-metre strip is kept clean between the multiplications.
- 3.4 During the production of certified pre- basic, basic or certified seed of both open-pollinated or hybrid varieties within commercial crops, a five metre strip should be maintained at all times between the seed and commercial crop.
- 3.5 Such isolation area shall be free from plants of any tobacco variety which flower at the same time as the plants on the unit concerned, unless -
- 3.5.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety;
- 3.5.2 notwithstanding the provisions of paragraph 3.1.1, a unit may be established within any commercial crop of the same variety; with the condition that the florescence or flowers of the seed parents are covered in such a way that contamination by unwanted pollen is prevented; and
- 3.5.3 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.
- 3.6 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
- 3.6.1 a common pollen parent is used; and
- 3.6.2 a distance of at least five metres wide, which is free from plants of the seed parent concerned, is maintained between the units concerned.

#### 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
- 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the pollen parent at the stage at which the pollen is being collected; and
- 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the pollen parent at the stage at which the pollen is being collected;
- 4.2.2 the number of deviating plants of the seed parent on a unit shall -
- 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent; and
- 4.2.2.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
- 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and
- 4.2.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent.

#### 5 Inspection requirements

- 5.1 Seedlings shall be inspected before they are established on a unit.
- 5.2 Plants which are established on a unit from such tobacco shall be inspected -
- 5.2.1 two weeks before the flowering stage thereof; and
- 5.2.2 two weeks before harvesting of the seed.
- 5.3 If plants of a hybrid variety have been established on a unit -
- 5.3.1 the seed grower concerned shall notify the authorised person at least 21 days prior to the date on which -
- 5.3.1.1 the plants of the seed parent is expected to start flowering; and
- 5.3.1.2 the plants or florescence of the pollen parent are to be removed; and
- 5.3.2 The seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.3.1.2 has been carried out.

- 5.4 In the case where the unit has been established within a commercial planting, no more than 0,1% plants or suckers with flowers will be allowed within the commercial planting during the seed production process.
- 5.5 All senesced and diseased leaves should be removed before harvesting.
- 5.6 Florescence of plants infected with the following pathogens must be removed before harvesting of the seed commences:
- Viruses
  - *Colletotrichum destructivum*
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 80;
- 6.2 have at least 99,9 percent pure seed; and
- 6.3 be free from any other seed; and
- 6.4 not contain more than 0,1 percent other material.

## ANNEXURE 47

### REQUIREMENTS RELATING TO YELLOW SERRADELLA & FRENCH SERRADELLA [(*Ornithopus compressus* L.) & (*Ornithopus sativus* Brot.)]

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
- 1.1.1 no plants of any species of *Ornithopus* have been established thereon for seed production or otherwise during the three growing seasons preceding the registration thereof; or
- 1.1.2 the plants which are already established thereon, have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
- 1.2 A field which is intended for the production of basic seed or certified seed of a particular serradella variety may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
- 2.1 Seed may be sown or be established in rows on a unit.
- 2.2 Gap filling shall not be permissible.
- 2.3 In the case of hard-seeded varieties an uncultivated strip of three meters wide must be maintained during the first year of production.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed is at least 200 metres wide; and
- 3.1.2 in the case of the intended production of certified seed is at least 100 metres wide.
- 3.2 Such isolation area shall be free from plants related to serradella.
- 4 Requirements for plants
- 4.1 The number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and
- 4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.
- 4.2 Methods for the determination of deviating plants shall be as determined by the Authority.

4.3 Plants established on a unit registered for the production of certified pre-basic seed or basic seed, may after the establishment thereof, be used for such purpose for a period of not more than two years.

4.4 After the use of plants on a unit for the production of certified pre-basic seed or basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

4.5 Plants established on a unit for the production of certified seed -

4.5.1 may be used for this purpose for a period of not more than four years; and

4.5.2 may, with the written approval from the Authority, be used for the purpose for a further period of two years.

## 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof; and

5.1.3 during the full seed stage thereof.

5.2 The seed grower concerned shall notify the authorised person at least 10 days prior to the date on which the plants are expected to start flowering.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70, hard seeds included;

6.2 have at least 98,0 percent pure seed; and

6.3. not contain more than -

6.3.1 0,5 percent other seed, of which no more than 0,2 percent may be weed seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 48

### REQUIREMENTS RELATING TO RICE (*Oryza sativa* L.)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of a rice variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or

1.2 A field which is intended for the production of basic seed or certified seed of a particular rice variety, may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

Seed may be sown or be established in rows on a unit.

#### 3 Isolation requirements

3.1 The isolation area around a unit shall be at least five metres wide.

3.2 Such isolation area shall be free from plants of any rice variety.

#### 4 Requirements for plants

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and



4.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

- 5.1 before the flowering stage thereof;
- 5.2 during the flowering stage thereof; and
- 5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

- 6.1 have a germination percentage of at least 80;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
  - 6.3.1 0,1 percent other seed; and
  - 6.3.2 2,0 percent other material; and
  - 6.3.3 one red rice seed per 2,5 kg sample.
  - 6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 49

### REQUIREMENTS RELATING TO PASPALUM

(*Paspalum dilatatum* Poir. & *Paspalum notatum* Flügge)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

- 1.1.1 no plants of any species of *Paspalum* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or
- 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular *Paspalum* variety, may also be registered as a unit, if -

- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

- 2.1 Seed may be sown or be established in rows on a unit.
- 2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.
- 2.3 The breeder shall, with regards to quality and production, determine the planting date, the production areas where the seed shall be planted and the date on which grazing shall cease.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
  - 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
  - 3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and
- 3.1.2 in the case of the intended production of certified seed -
  - 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
  - 3.1.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.



3.2 Such isolation area shall be free from plants of any *Paspalum* variety or species of *Paspalum* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

#### 4 Requirements for plants

The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 40;

6.2 have at least 65,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,2 percent other seed; and

6.3.2 35,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 50

### REQUIREMENTS RELATING TO PEARL MILLET

[*Pennisetum glaucum* (L.) R. Br. (syn *Cenchrus americanus* (L.) Morrone)]

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Pennisetum* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular pearl millet variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

2.3 In the case of the intended production of seed of a hybrid variety -

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked.

### 3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1.1 an open-pollinated variety, is at least 400 metres wide; and

3.1.1.2 a hybrid variety, is at least 800 metres wide; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 of an open-pollinated variety, is at least 350 metres wide; and

3.1.2.2 of a hybrid variety, is at least 800 metres wide.

3.2 Such isolation area shall be free from plants of any pearl millet variety or species of *Pennisetum* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

### 4 Requirements for plants

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 0,3 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 20,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent at the stage at which 30,0 percent or more of the plants of the seed parent has pollen-susceptible flowers.

### 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof;

5.1.3 during the full seed stage thereof; and

5.1.4 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.

5.2 If plants of a hybrid variety have been established on a unit -

- 5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -
- 5.2.1.1 the plants of the seed parent are expected to start flowering; and
- 5.2.1.2 the seed heads of the pollen parent are to be removed; and
- 5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 80;
- 6.2 have at least 96,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed; and
- 6.3.2 4,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 51

### REQUIREMENTS RELATING TO DRY BEAN

(KIDNEY BEAN - *Phaseolus coccineus* L. & DRY BEAN - *Phaseolus vulgaris* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any dry bean variety or species of *Phaseolus* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.
- 1.1.1 in the case of the intended production of certified pre-basic seed or basic seed, during the two years; and
- 1.1.2 in the case of the intended production of certified seed, during the year preceding the registration thereof.
- 1.2 A field which is intended for the production of disease-free seed, may also be registered as a unit if disease-free seed has been produced thereon during the preceding growing season.
- 1.3 Any field may be registered as a unit for the production of seed other than disease-free seed.
- 2 Planting requirements
- Plants shall be established in rows on a unit.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which -
- 3.1.1 subject to the provisions of paragraphs 3.1.2.1 and 3.1.3.1, in the case of the intended production of disease-free seed, is at least 100 metres wide; and
- 3.1.2 in the case of the intended production of certified pre-basic seed or basic seed of -
- 3.1.2.1 kidney beans, at least 400 metres wide; and
- 3.1.2.2 other dry beans, at least 10 metres wide; and
- 3.1.3 in the case of the intended production of certified seed of -
- 3.1.3.1 kidney beans, at least 200 metres wide; and
- 3.1.3.2 other dry beans, at least five metres wide.
- 3.2 Such isolation area shall -
- 3.2.1 in the case of the intended production of disease-free seed, be free from -
- 3.2.1.1 plants of any dry bean variety or species of *Phaseolus*, irrespective of the stage of development thereof, unless they are also intended for the production of such disease-free seed; and
- 3.2.1.2 plants of any *Glycine* spp., *Pisum* spp. or *Vigna* spp., irrespective of the stage of development thereof; and
- 3.2.2 otherwise be free from plants of any dry bean variety or species of *Phaseolus* which flower at the same time as the plants on the unit concerned, unless -
- 3.2.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall –

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 A unit which is intended for the production of disease-free seed shall be visually free from disease-infected plants.

4.3 On a unit other than a unit referred to in paragraph 4.2 –

4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, no disease-infected plants shall occur; and

4.3.2 in the case of the intended production of certified seed, a maximum of 8,0 percent disease-infected plants may occur.

4.4 For the purposes of paragraphs 4.2 and 4.3 "disease-infected plants" shall mean plants which are not visually free from the pathogens Bean Common Mosaic virus (BCMV), *Colletotrichum lindemuthianum* Sacc. et Magn., *Elsinoe phaseoli*, *Pseudomonas phaseolicola*, *P. syringae*, *Xanthomonas phaseoli* or *X. phaseoli* var. *fuscans*.

4.5 Plants that are not visually free from the pathogens mentioned in paragraph 4.4, may also be analysed by an acknowledged plant pathologist for confirmation of the pathogen.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected –

5.1 before the flowering to the pod stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall –

6.1 have a germination percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than –

6.3.1 0,05 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and

6.4 not contain more than 0,2 percent seed of deviating plants; and

6.5 not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample; and

6.6 in the case of disease-free seed, according to a laboratory examination be free from seed that is infected with a pathogen, excluding Bean Common Mosaic Virus (BCMV) and *Elsinoe phaseoli*, specified in paragraph 4.4.

## ANNEXURE 52

### REQUIREMENTS RELATING TO GARDEN BEAN (DWARF & RUNNER) (*Phaseolus vulgaris* L.)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any garden bean variety or species of *Phaseolus* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.

1.1.1 in the case of the intended production of certified pre-basic seed or basic seed, during the two years; and

- 1.1.2 in the case of the intended production of certified seed, during the year preceding the registration thereof.
- 1.2 A field which is intended for the production of disease-free seed, may also be registered as a unit if disease-free seed has been produced thereon during the preceding growing season.
- 1.3 Any field may be registered as a unit for the production of seed other than disease-free seed.
- 2 Planting requirements
- 2.1 Plants shall be established in rows on a unit.
- 2.2 All plants on a unit which is intended for the production of certified pre-basic seed or basic seed of a runner bean variety shall be trellised.
- 2.3 At least 10,0 percent of the plants on a unit which is intended for the production of certified seed of a runner bean variety shall be trellised by means of a recognised method.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of disease-free seed, is at least 100 metres wide;
- 3.1.2 in the case of the intended production of certified pre-basic seed or basic seed, is at least 10 metres wide; and
- 3.1.3 in the case of the intended production of certified seed, is at least 5 metres wide.
- 3.2 Such isolation area shall -
- 3.2.1 in the case of the intended production of disease-free seed, be free from -
- 3.2.1.1 plants of any garden bean variety or species of *Phaseolus*, irrespective of the stage of development thereof, unless they are also intended for the production of such disease-free seed; and
- 3.2.1.2 plant of any *Glycine* spp., *Pisum* spp. or *Vigna* spp., irrespective of the stage of development thereof; and
- 3.2.2 otherwise be free from plants of any garden bean variety or species of *Phaseolus*.
- 4 Requirements for plants
- 4.1 Subject to the provisions of paragraphs 4.2 and 4.3, the number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 The number of plants with stringed pods on a unit on which plants of a stringless variety have been established shall -
- 4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 1,0 percent; and
- 4.2.2 in the case of the intended production of certified seed, not exceed 2,0 percent.
- 4.3 The number of plants with flat to oval stringless pods on a unit on which plants of a round stringless variety have been established shall -
- 4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 2,0 percent; and
- 4.3.2 in the case of the intended production of certified seed, not exceed 5,0 percent.
- 4.4 A unit which is intended for the production of disease-free seed shall be free from disease-infected plants.
- 4.5 On a unit other than a unit referred to in paragraph 4.4 -
- 4.5.1 in the case of the intended production of certified pre-basic seed or basic seed, no disease-infected plants shall occur; and
- 4.5.2 in the case of the intended production of certified seed, a maximum of 5,0 percent disease-infected plants shall occur.
- 4.6 For the purposes of paragraphs 4.4 and 4.5 "disease-infected plants" shall mean plants which are not visually free from the pathogens Bean Common Mosaic virus (BCMV), *Colletotrichum lindemuthianum* Sacc. et Magn., *Elsinoe phaseoli*, *Pseudomonas phaseolicola*, *P. syringae*, *Xanthomonas phaseoli* or *X. phaseoli* var. *fuscans*.
- 4.7 Plants that are not visually free from the pathogens mentioned in paragraph 4.6, may also be analysed by an acknowledged plant pathologist for confirmation of the pathogen.
- 5 Inspection requirements
- Plants which are established on a unit shall be inspected -
- 5.1 before the flowering stage thereof;

- 5.2 during the flowering to the pod stage thereof; and
- 5.3 during the full seed stage thereof.
- 6 Physical requirements
  - Seed shall -
  - 6.1 have a germination percentage of at least 70;
  - 6.2 have at least 98,0 percent pure seed; and
  - 6.3 not contain more than -
    - 6.3.1 0,05 percent other seed;
    - 6.3.2 2,0 percent other material;
    - 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and
  - 6.4 not contain more than 0,2 percent seed of deviating plants; and
  - 6.5 not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample; and
  - 6.6 in the case of disease-free seed, according to a laboratory examination be free from seed that is infected with a pathogen, excluding Bean Common Mosaic Virus (BCMV) and *Elsinoe phaseoli*, specified in paragraph 4.4.

## ANNEXURE 53

### REQUIREMENTS RELATING TO PEAS (DRY PEA & GARDEN PEA - *Pisum sativum* L. *sensu lato*)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any pea variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular pea variety may also be registered as a unit if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
  - 1.3 Subject to the provisions of paragraph 1.4, a field may be registered as a unit for the production of disease-free seed only if no plants of a pea variety or species of *Pisum* -
    - 1.3.1 In the case of an intended production of pre-basic and basic seed during the two years; and
    - 1.3.2 in the case of the intended production of certified seed, during the growing season that preceded the registration, have been established thereon for seed production or otherwise.
- 2 Planting requirements
  - Plants may be sown or be established in rows on a unit.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which is at least 5 metres wide.
  - 3.2 Such isolation area shall be free from plants of any pea variety.
- 4 Requirements for plants
  - Subject to the provisions of paragraphs 4.2 and 4.3, the number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 A unit on which plants of a pea variety with white flowers have been established, shall not contain any plants with red flowers.



- 4.3 The number of plants on a unit which shows "rabbit ear" characteristics, shall not exceed 1,0 percent.
- 4.4 A unit shall be visually free from plants of which the pods are infected with the pathogen *Pseudomonas pisi* Sackett.
- 5 Inspection requirements
- Plants which are established on a unit shall be inspected -
- 5.1 before the flowering stage thereof;
- 5.2 during the flowering to pod stage thereof; and
- 5.3 during the full seed stage thereof.
- 6 Physical requirements
- Seed shall -
- 6.1 have a germination percentage of at least 70;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,05 percent other seed; and
- 6.3.2 2,0 percent other material;
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and
- 6.4 not contain more than 0,2 percent seed of deviating plants; and
- 6.5 be visually free from sclerotia of *Sclerotinia sclerotiorum*; or be treated with a chemical remedy registered for this purpose.

## ANNEXURE 54

### REQUIREMENTS RELATING TO FODDER & GARDEN RADISH (*Raphanus sativus* L.)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of the Brassicaceae family have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 A field which is intended for the production of basic seed or certified seed of a particular radish variety, may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
- Plants may be sown or be established in rows on a unit.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, is at least 800 metres wide; and
- 3.1.2 in the case of the intended production of certified seed, is at least 400 metres wide.
- 3.2 Subject to the provisions of paragraph 3.3, such isolation area shall be free from plants of a species of *Raphanus* or any radish variety which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.



3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants not complying with the requirements set out in paragraph 3.2.1 and 3.2.2, may occur within the isolation area around a unit if -

3.3.1 those plants occur on a single field which contain no more than 150 of the plants concerned.

3.3.2 in the case of the intended production of certified pre-basic seed or basic seed, not more than 40 of the plants concerned occur within a distance of 100 metres around the unit concerned; and

3.3.3 in the case of the intended production of certified seed, not more than 40 of the plants concerned occur within a distance of 50 metres around the unit concerned.

#### 4 Requirements for plants

The number of deviating plants on a unit shall –

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 75;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material;

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and

6.4 Not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

## ANNEXURE 55

### REQUIREMENTS RELATING TO RYE (*Secale cereale* L.)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any specie of *Secale* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular rye variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 The breeder shall, with regard to quality and production, determine the planting date, the production areas where the seed shall be planted and the date on which grazing shall cease.

- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed is at least 500 metres wide; and
    - 3.1.2 in the case of the intended production of certified seed is at least 300 metres wide.
  - 3.2 Such isolation area shall be free from plants of any rye variety which flower at the same time as the plants on the unit concerned.
- 4 Requirements for plants
  - 4.1 The number of deviating plants on a unit shall -
    - 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
    - 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
  - 4.2 Methods for the determination of deviating plants shall be as determined by the Authority.
- 5 Inspection requirements
  - Plants which are established on a unit shall be inspected -
    - 5.1 during the stooling stage thereof;
    - 5.2 during the flowering stage thereof; and
    - 5.3 during the full seed stage thereof.
- 6 Physical requirements
  - Seed shall -
    - 6.1 have a germination percentage of at least 80;
    - 6.2 have at least 98,0 percent pure seed; and
    - 6.3 not contain more than -
      - 6.3.1 0,5 percent other seed, but not more than 0,2 percent weed seed; and
      - 6.3.2 2,0 percent other material.
    - 6.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of wild oats may occur in 400 g of seed, and not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 56

### REQUIREMENTS RELATING TO TOMATO (*Solanum lycopersicum* L.)

- 1 Field requirements
  - 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any tomato variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
  - 1.2 A field which is intended for the production of basic seed or certified seed of a particular tomato variety may also be registered as a unit, if -
    - 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
    - 1.2.3 in the case of certified seed, in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
  - 2.1 Plants shall be established in rows on a unit.
  - 2.2 Gap-filling in rows shall not be permissible.
- 3 Isolation requirements
  - 3.1 A unit shall be surrounded by an isolation area which -
    - 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed, shall be at least 10 metres wide; and

3.1.2 in the case of the intended production of certified seed, shall be at least 5 metres wide.  
3.2 such isolation area shall be free from plants of any tomato variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; or

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 The number of plants on a unit which are infected with the pathogen *Corynebacterium michiganense* Smith, Jensen shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 2,0 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 5,0 percent.

4.3 The number of plants on a unit which are infected with tobacco mosaic virus shall -

4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and

4.3.2 in the case of the intended production of certified seed, not exceed 10,0 percent.

4.4 The number of plants on a unit which are infected with the pathogen *Xanthomonas vesicatoria* (Doidge) Dow, shall -

4.4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and

4.4.2 in the case of the intended production of certified seed, not exceed 10,0 percent

#### 5 Inspection requirements

5.1 Seedlings shall be inspected before planting.

5.2 Plants which are established on a unit from such seedlings shall be inspected -

5.2.1 during the green fruit stage thereof;

5.2.2 during the full ripe stage of the fruit thereof; and

5.2.3 at the end of the growing season before all the ripe fruit has been harvested.

5.3 No fruit may be harvested before the inspection referred to in paragraph 5.2 has been carried out.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 57

### REQUIREMENTS RELATING TO EGGPLANT (*Solanum melongena* L.)

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Solanum* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular eggplant variety may also be registered as a unit, if -

- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

## 2 Planting requirements

- 2.1 Plants shall be established in rows on a unit
- 2.2 Gap-filling in rows shall not be permissible.

## 3 Isolation requirements

- 3.1 A unit shall be surrounded by an isolation area which is at least 20 metres wide.
- 3.2 Such isolation area shall be free from plants of any eggplant variety or species of *Solanum*.

## 4 Requirements for plants

- The number of deviating plants on a unit shall -
- 4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

## 5 Inspection requirements

- 5.1 Seedlings shall be inspected before planting.
- 5.2 Plants which are established on a unit from such seedlings shall be inspected -
- 5.2.1 before flowering stage thereof;
- 5.2.2 during the early ripening stage of the fruit thereof; and
- 5.2.3 at the end of the growing season before all the ripe fruit thereof has been harvested.
- 5.3 No fruit may be harvested before the inspection referred to in paragraph 5.2.3 has been carried out.

## 6 Physical requirements

- Seed shall -
- 6.1 have a germination percentage of at least 70;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,1 percent other seed; and
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 58

### REQUIREMENTS RELATING TO COLUMBUS GRASS & SUDAN GRASS

[*Sorghum almum* Parodi & *Sorghum bicolor* (L.) Moench subsp. *drummondii* (Steud.) de Wet ex Davidse (synonym *Sorghum sudanense* (Piper) Stapf)]

## 1 Field requirements

- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -
- 1.1.1 no plants of any species of *Sorghum* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or
- 1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.
- 1.2 A field which is intended for the production of basic seed or certified seed of a particular Columbus or Sudan grass variety, may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

## 2 Planting requirements

Plants shall be established in rows on a unit.

## 3 Isolation requirements

### 3.1 A unit shall be surrounded by an isolation area which -

#### 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 is at least 400 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 200 metres wide where the area of the unit concerned is more than two hectares; and

#### 3.1.2 in the case of the intended production of certified seed -

3.1.2.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.2.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares.

### 3.2 Such isolation area shall be free from plants of any Columbus or Sudan grass variety or species of Sorghum which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

## 4 Requirements for plants

### 4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

4.2 Plants established on a unit registered for the production of basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.3 After the use of plants on a unit for the production of basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

### 4.4 Plants established on a unit for the production of certified seed -

4.4.1 may be used for this purpose for a period of not more than four years; and

4.4.2 may, with the written approval from the authority, be used for that purpose for a further period of two years.

## 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

## 6 Physical requirements

Seed shall -

6.1 have a germination or a viability percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 59****REQUIREMENTS RELATING TO GRAIN SORGHUM****[*Sorghum bicolor* (L.) Moench subsp. *bicolor* & *Sorghum vulgare* Pers.]****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Sorghum* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.

1.2 Only in the case of an open-pollinated variety, may a field which is intended for the production of basic seed or certified seed of a particular grain sorghum variety be registered as a unit, if –

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

2.3 In the case of the intended production of seed of a hybrid variety –

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked.

**3 Isolation requirements**

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which –

3.1.1 in the case of the intended production of certified pre-basic and basic seed of –

3.1.1.1 an open-pollinated variety, at least 500 metres wide; and

3.1.1.2 a hybrid variety, at least 800 metres wide; and

3.1.2 in the case of the intended production of certified seed –

3.1.2.1 of an open-pollinated variety, is at least 400 metres wide; and

3.1.2.2 of a hybrid variety, is at least 500 metres wide.

3.2 Such isolation area shall be free from plants of any sorghum variety or species of *Sorghum* which flower at the same time as the plants on the unit concerned, unless –

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if –

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parent concerned, is maintained between the units concerned.

**4 Requirements for plants**

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall –

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety –

4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall –

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and



4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 0,3 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 20,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent at the stage at which 30,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of pollen-shedding flowers found during inspections shall not for the three inspections showing the highest incidence of such plants, exceed 1,0 percent of the plants of the seed parent.

4.3 If the percentages referred to in paragraphs 4.2.3.1 and 4.2.3.2, are exceeded in respect of a unit, seed of a hybrid variety shall not be considered for certification if it has been harvested from plants which were established within a distance calculated at the rate of 10 meters for each 1,0 percent or portion thereof, but with a maximum of 500 metres, by which the applicable percentage referred to in paragraphs 4.2.3.1 or 4.2.3.2 is exceeded from the unit concerned.

## 5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof;

5.1.3 during the full seed stage thereof; and

5.1.4 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.

5.2 If plants of a hybrid variety have been established on a unit -

5.2.1 the seed grower concerned shall notify the authorised person authority at least 10 days prior to the date on which -

5.2.1.1 the plants of the seed parent are expected to start flowering; and

5.2.1.2 the seed heads of the pollen parent are to be removed; and

5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 80;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.



**ANNEXURE 60****REQUIREMENTS RELATING TO ANNUAL FORAGE SORGHUM HYBRIDS (*Sorghum* spp.)****1 Field requirements**

Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Sorghum* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

2.3 In the case of the intended production of seed of a hybrid variety -

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked.

**3 Isolation requirements**

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1.1 an open-pollinated variety, at least 500 metres wide; and

3.1.1.2 a hybrid variety, at least 800 metres wide; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 of an open-pollinated variety, is at least 400 metres wide; and

3.1.2.2 of a hybrid variety, is at least 500 metres wide.

3.2 Such isolation area shall be free from plants of any sorghum variety or species of *Sorghum* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

**4 Requirements for plants**

4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 If male sterility is used in the seed parent of a hybrid variety -

4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -

4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and

4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.

4.2.2 the number of deviating plants of the seed parent on a unit shall -

4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and

4.2.2.2 in the case of the intended production of certified seed, not exceed 0,3 percent of the plants of the seed parent; and

4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -

4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 20,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,5 percent of the plants of the seed parent; and

4.2.3.2 in the case of the intended production of certified seed, not exceed 1,0 percent of the plants of the seed parent at the stage at which 30,0 percent or more of the plants of the seed parent has pollen-susceptible flowers.

5 Inspection requirements

5.1 Plants which are established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 during the flowering stage thereof;

5.1.3 during the full seed stage thereof; and

5.1.4 in the case of a hybrid variety, after the seed heads of the plants of the pollen parent have been removed.

5.2 If plants of a hybrid variety have been established on a unit -

5.2.1 the seed grower concerned shall notify the authorised person at least 10 days prior to the date on which -

5.2.1.1 the plants of the seed parent are expected to start flowering; and

5.2.1.2 the seed heads of the pollen parent are to be removed; and

5.2.2 the seed of the plants of the seed parent may not be harvested before the inspection referred to in paragraph 5.1.4 has been carried out.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70; or a viability percentage of at least 80.

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 61

### REQUIREMENTS RELATING TO PERENNIAL INTERSPECIFIC FORAGE SORGHUM (*Sorghum* spp.)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Sorghum* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof.

1.1.1 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular perennial forage sorghum variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed is at least 500 metres wide; and

3.1.2 in the case of the intended production of certified seed is at least 400 metres wide.

3.2 Such isolation area shall be free from plants of any *Sorghum* variety which flower at the same time as the plants on the unit concerned.

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

4 Requirements for plants

4.1 Plants established on a unit may -

4.1.1 if such unit is registered for the production of certified pre-basic seed or basic seed, be used for such purpose for not more than two seed crops after the year of establishment thereof, and may thereafter for not more than a further two seed crops be used for the production of certified seed, if the unit concerned is registered for this purpose; or

4.1.2 if such unit is registered for the production of certified seed, be used for such purpose for not more than three seed crops after the year of establishment thereof.

4.2 Plants which are established on a unit, may annually be grazed after the seed crop has been removed. If grazing is allowed, the plants on the unit shall be mowed after grazing has ceased to ensure even re-growth.

4.3 The number of deviating plants on a unit shall -

4.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70; or a viability percentage of at least 80.

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,1 percent other seed;

6.3.2 2,0 percent other material; and

6.3.3 0,2 percent seed of deviating plants.

6.3.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 62

### REQUIREMENTS RELATING TO DROP SEED GRASS [*Sporobolus fimbriatus* (Trin.) Nees]

1 Field requirements

1.1 Subject to the provisions in paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Sporobolus* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, or as the case may be.

1.2 A field which is intended for the production of basic seed or certified seed of a particular drop seed grass variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

## 2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short from the full seed stage thereof until seed has been harvested from the plants on the unit concerned.

## 3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which is at least five metres wide.

3.2 Such isolation area shall be free from plants of any drop seed grass variety.

## 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.1.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

4.2 Plants established on a unit registered for the production of certified pre-basic seed or basic seed, may, after the establishment thereof, be used for such purpose for a period of not more than two years.

4.3 After the use of plants on a unit for the production of certified pre-basic seed or basic seed, these plants can be used for the production of certified seed provided the unit has been registered for the production of certified seed.

4.4 Plants established on a unit for the production of certified seed -

4.4.1 may be used for this purpose for a period of not more than four years; and

4.4.2 may, with the written approval from the Authority, be used for that purpose for a further period of two years.

## 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof; and

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

## 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 97,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,5 percent other seed of which no more than 0,3 percent may be weed seed; and

6.3.2 0,2 percent nematode galls.

6.4 Notwithstanding the provisions of paragraph 6.3.1, -

6.4.1 the percentage seed of *Eragrostis tef* (Zucc.) Trotter and *Eragrostis curvula* (Schrad.) Nees in seed shall -

6.4.1.1 in the case of certified pre-basic seed or basic seed, not exceed 0,1 percent; and

6.4.1.2 in the case of certified seed, not exceed 0,2 percent; and

6.4.2 *E. plana* Nees in seed of all generation, not exceed 0,1 percent; and

6.4.3 not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 63****REQUIREMENTS RELATING TO WHITE CLOVER (*Trifolium repens* L.)****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if -

1.1.1 no plants of any species of *Trifolium* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.1.2 the plants which are already established thereon have also during the preceding growing season been used for the production of certified pre-basic seed or basic seed or certified seed, as the case may be.

1.2 A field which is intended for the production of seed of a particular white clover variety may -

1.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not be registered as a unit for more than two consecutive growing seasons if breeder seed or certified pre-basic seed of the same variety is annually established thereon; and

1.2.2 in the case of the intended production of certified seed, not be registered as a unit for more than three consecutive growing seasons if certified pre-basic seed or basic seed of the same variety is annually established thereon: Provided that such field may also be registered as a unit if certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.

**3 Isolation requirements**

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -

3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and

3.1.1.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.

3.2 Such isolation area shall be free from plants of any white clover variety which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

**4 Requirements for plants**

4.1 Plants which are established on a unit may annually be grazed from after the removal of the seed crop until 15 October of the following growing season.

4.2 The number of deviating plants on a unit shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

**5 Inspection requirements**

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

- 5.3 during the full seed stage thereof.
- 6 Physical requirements  
Seed shall -
- 6.1 have a germination or a viability percentage of at least 70;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,2 percent other seed; and
- 6.3.2 2,0 percent other material.
- 6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 64

### REQUIREMENTS RELATING TO ARROW LEAF CLOVER (*Trifolium vesiculosum* Savi)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Trifolium* have been established thereon for seed production or otherwise during the growing season preceding the registration thereof; or
- 1.2 A field which is intended for the production of basic seed or certified seed of a particular tall arrow leaf clover variety may also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.
- 1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.
- 2 Planting requirements
- 2.1 Plants shall be established in rows on a unit.
- 2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.
- 3 Isolation requirements
- 3.1 A unit shall be surrounded by an isolation area which -
- 3.1.1 in the case of the intended production of certified pre-basic seed or basic seed -
- 3.1.1.1 is at least 200 metres wide where the area of the unit concerned is two hectares or less; and
- 3.1.1.2 is at least 100 metres wide where the area of the unit concerned is more than two hectares; and
- 3.1.2 in the case of the intended production of certified seed -
- 3.1.2.1 is at least 100 metres wide where the area of the unit concerned is two hectares or less; and
- 3.1.2.2 is at least 50 metres wide where the area of the unit concerned is more than two hectares.
- 3.2 Such isolation area shall be free from plants of any arrow leaf clover variety which flower at the same time as the plants on the unit concerned, unless -
- 3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and
- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety.
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 4 Requirements for plants
- 4.1 Plants which are established on a unit may annually be grazed after the removal of the seed crop therefrom until October 15 of the following growing season.
- 4.2 The number of deviating plants on a unit shall -



4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed one plant per 30 square metres; and

4.2.2 in the case of the intended production of certified seed, not exceed one plant per 10 square metres.

5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,2 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 65

### REQUIREMENTS RELATING TO TRITICALE (*xTriticosecale* Wittm. ex A. Camus)

1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Triticosecale* or *Secale cereale* have been established thereon for seed production or otherwise during the two growing seasons preceding the registration thereof; or

1.2 Only in the case of an open-pollinated variety, may a field which is intended for the production of basic seed or certified seed of a particular triticale variety also be registered as a unit, if-

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Seed shall be sown or be established in rows on a unit.

2.2 All vegetation within a distance of three metres around a unit shall be kept short until seed has been harvested from the plants on the unit concerned.

3 Isolation requirements

3.1 Subject to the provisions of paragraph 3.3, a unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic and basic seed of -

3.1.1.1 an open-pollinated variety, is at least 500 metres wide; and

3.1.1.2 a hybrid variety, is at least 750 metres wide; and

3.1.2 in the case of the intended production of certified seed -

3.1.2.1 an open-pollinated variety, is at least 5 metres wide; and

3.1.2.2 of a hybrid variety, is at least 500 metres wide.

3.2 Such isolation area shall be free from plants of any triticale variety or species of *Triticosecale* or *Secale* which flower at the same time as the plants on the unit concerned, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and



- 3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and
- 3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.
- 3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -
- 3.3.1 a common pollen parent is used; and
- 3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

#### 4 Requirements for plants

- 4.1 Subject to the provisions of paragraph 4.2, the number of deviating plants on a unit shall -
- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If male sterility is used in the seed parent of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent on a unit shall -
- 4.2.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers; and
- 4.2.1.2 in the case of the intended production of certified seed, not exceed 0,1 percent of the plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent have pollen-susceptible flowers.
- 4.2.2 the number of deviating plants of the seed parent on a unit shall -
- 4.2.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent of the plants of the seed parent; and
- 4.2.2.2 in the case of the intended production of certified seed, not exceed 0,3 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent on a unit shall -
- 4.2.3.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent of the plants of the seed parent at the stage at which 5,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate number of plants with pollen-shedding flowers found during consecutive inspections shall not exceed 0,3 percent of the plants of the seed parent; and
- 4.2.3.2 in the case of the intended production of certified seed, not exceed 0,5 percent of the plants of the seed parent at the stage at which 10,0 percent or more of the plants of the seed parent has pollen-susceptible flowers: Provided that the aggregate of the number of plants with pollen-shedding flowers found during inspections shall not for the three inspections showing the highest incidence of such plants, exceed 1,0 percent of the plants of the seed parent.
- 4.3 If the percentages referred to in paragraphs 4.2.3.1 and 4.2.3.2, are exceeded in respect of a unit, seed of a hybrid variety shall not be considered for certification if it has been harvested from plants which were established within a distance calculated at the rate of 20 meters for each 1,0 percent or portion thereof, but with a maximum of 500 meters, by which the applicable percentage referred to in paragraphs 4.2.3.1 or 4.2.3.2 is exceeded from the unit concerned.

#### 5 Inspection requirements

- Plants which are established on a unit shall be inspected -
- 5.1 before the flowering stage thereof;
- 5.2 during the flowering stage thereof; and
- 5.3 during the full seed stage thereof.

#### 6 Physical requirements

- Seed shall -
- 6.1 have a germination percentage of at least 80;
- 6.2 have at least 98,0 percent pure seed; and
- 6.3 not contain more than -
- 6.3.1 0,5 percent other seed, but not more than 0,2 percent weed seed; and
- 6.3.2 2,0 percent other material.
- 6.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of wild oats may occur in 400 g of seed and not more than one seed of any of the restricted weed seed species may

occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 66

### REQUIREMENTS RELATING TO WHEAT & DURUM WHEAT (*Triticum aestivum* L. subsp. *aestivum*) & *Triticum turgidum* L. subsp. *durum* (Desf.) van Slangeren

#### 1 Field requirements

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any *Triticum* species have been established thereon for seed production or otherwise during the year preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a wheat variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

#### 2 Planting requirements

Seed may be sown or be established in rows on a unit.

#### 3 Isolation requirements

3.1 The isolation area surrounding a unit shall be at least 5 meters wide.

3.2 Such isolation area shall be free from plants of any wheat specie or species of *Triticum*.

#### 4 Requirements for plants

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,3 percent.

4.2 Methods for determination of deviating plants shall be as determined by the authority.

#### 5 Inspection requirements

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering stage thereof; and

5.3 during the full seed stage thereof.

#### 6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 85.

6.2 have at least 99,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,3 percent other seed, but not more than 0,05 percent weed seed; and

6.3.2 1,0 percent other material; and

6.4 Notwithstanding the provisions of paragraph 6.4.1, not more than one seed of wild oats may occur in a 400 g seed sample and not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 67****REQUIREMENTS RELATING TO BROAD BEAN (*Vicia faba* L.)****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any broad bean variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular broad bean variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season;

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season;

and  
1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

Plants shall be established in rows on a unit.

**3 Isolation requirements**

3.1 A unit shall be surrounded by an isolation area which is at least 15 metres wide.

3.2 Such isolation area shall be free from plants of any broad bean variety.

**4 Requirements for plants**

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

**5 Inspection requirements**

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering to pod stage thereof; and

5.3 during the full seed stage thereof.

**6 Physical requirements**

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 99,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,05 percent other seed; and

6.3.2 1,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

**ANNEXURE 68****REQUIREMENTS RELATING TO COWPEA, DOLICHOS & LAB-LAB BEAN [*Vigna unguiculata* (L.) Walpers]; *Dolichos biflorus* L. & *Lablab purpureus* (L.) Sweet]****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any cowpea, dolichos or lab-lab bean variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 A field which is intended for the production of basic seed or certified seed of a particular cowpea, dolichos or lab-lab bean variety may also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

Plants shall be established in rows on a unit.

**3 Isolation requirement**

3.1 A unit shall be surrounded by an isolation area which is at least 20 metres wide.

3.2 Such isolation area shall be free from plants of any cowpea, dolichos or lab-lab bean variety as the case may be.

**4 Requirements for plants**

4.1 The number of deviating plants on a unit shall -

4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,2 percent; and

4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.

4.2 The number of disease-infected plants on a unit shall -

4.2.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 5,0 percent; and

4.2.2 in the case of the intended production of certified seed, not exceed 8,0 percent.

4.3 For the purposes of paragraph 4.2 "disease-infected plants" shall mean plants which are not visually free from the pathogens *Pseudomonas syringae* or *Xanthomonas vignicola* Barkholder.

**5 Inspection requirements**

Plants which are established on a unit shall be inspected -

5.1 before the flowering stage thereof;

5.2 during the flowering to pod stage thereof; and

5.3 during the full seed stage thereof.

**6 Physical requirements**

Seed shall -

6.1 have a germination percentage of at least 70;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,05 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested; and

6.4 not contain more than 0,2 percent sclerotia of *Sclerotinia sclerotiorum* in a 1000 gram sample.

**ANNEXURE 69****REQUIREMENTS RELATING TO MAIZE (*Zea mays* L.)****1 Field requirements**

1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any *Zea* variety have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.

1.2 Only in the case of an open-pollinated variety, may a field which is intended for the production of basic seed or certified seed of a particular maize variety also be registered as a unit, if -

1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and

1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season.

1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

**2 Planting requirements**

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

2.3 In the case of the intended production of seed of a hybrid variety -

2.3.1 the plants of the seed parent and those of the pollen parent shall be established in separate rows; and

2.3.2 rows containing plants of the pollen parent shall be clearly marked., unless the authorised person determines otherwise in writing in a particular case after consideration of a written request by the seed grower concerned.

**3 Isolation requirements**

3.1 Subject to the provisions of paragraph 3.3, 3.4 and 3.5, a unit shall be surrounded by an isolation area which shall be at least 350 metres wide; and

3.1.1 in the case of the intended production of certified seed of an open pollinated variety, a unit shall be surrounded by an isolation area which shall be at least 200 metres wide.

3.2 Such isolation area shall be free from plants of any maize variety or species of *Zea* which shed pollen at the stage at which the plants on the unit concerned show pollen-susceptible silk, unless -

3.2.1 in the case of the intended production of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

3.3 Plants of different seed parents of a hybrid variety may be established on adjoining units if -

3.3.1 a common pollen parent is used; and

3.3.2 a distance of at least five metres wide, which is free from plants of the seed parents concerned, is maintained between the units concerned.

3.4 An area at least 400 metres wide around a unit which is intended for the production of certified pre-basic seed or basic seed shall be free from plants of any maize variety or species of *Zea* which shed pollen at the stage at which the plants on the unit concerned show pollen-susceptible silk.

3.5 Plants of a yellow kernel variety may be established on a field adjoining a unit which is intended for the production of certified seed of a white kernel variety if -

3.5.1 such adjoining field is not intended for the production of certified pre-basic seed or basic seed or certified seed;

3.5.2 no plants with seed cobs containing white kernels occur on such adjoining field; and

3.5.3 a distance of at least five metres wide, which is free from any plants of a variety of a species of *Zea*, is maintained between the unit and field concerned.

**4 Requirements for plants**

4.1 Subject to the provisions of paragraphs 4.2, 4.3 and 4.4, the number of deviating plants on a unit shall -

- 4.1.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,1 percent; and
- 4.1.2 in the case of the intended production of certified seed, not exceed 0,5 percent.
- 4.2 If plants are established on a unit with a view to the production of certified pre-basic seed or basic seed of a hybrid variety -
- 4.2.1 the number of deviating pollen-shedding plants of the pollen parent at any stage after the plants of the seed parent show pollen-susceptible silk shall not exceed 0,1 percent of the plants of the pollen parent;
- 4.2.2 the number of deviating plants of the seed parent at the stage at which the plants of the seed parent no longer show pollen-susceptible silk shall not exceed 0,1 percent of the plants of the seed parent; and
- 4.2.3 the number of pollen-shedding plants of the seed parent at the stage at which 2 percent or more of those plants show pollen-susceptible silk -
- 4.2.3.1 during a particular inspection of that unit, not exceed 0,5 percent of the plants of the seed parent: Provided that the aggregate of the number of pollen-shedding plants of the seed parent found during consecutive inspections shall not exceed 1,0 percent of the plants of the seed parent; and
- 4.2.3.2 shall during a particular inspection of a single row or a portion thereof, or of two adjacent rows or portions thereof, not exceed 5,0 percent of the plants of the seed parent in that row or rows or portion or portions;
- 4.2.4 the number of ripe deviating seed cobs on or harvested from the plants of the seed parent shall not exceed 0,1 percent of the seed cobs on or harvested from the plants of the seed parent.
- 4.3 If plants are established on a unit with a view to the production of certified seed of a hybrid variety -
- 4.3.1 the number of deviating pollen-shedding plants of the pollen parent at the stage at which 5,0 percent or more of the plants of the seed parent show pollen-susceptible silk shall not exceed 0,2 percent of the plants of the pollen parent;
- 4.3.2 the number of deviating plants of the seed parent at the stage at which the plants of the seed parent no longer show pollen-susceptible silk shall not exceed 0,2 percent of the plants of the seed parent;
- 4.3.3 the number of pollen-shedding plants of the seed parent at the stage at which 5,0 percent or more of those plants show pollen-susceptible silk -
- 4.3.3.1 shall during a particular inspection of that unit, not exceed 1,0 percent of the plants of the seed parent : Provided that the aggregate of the number of pollen-shedding plants of the seed parent found during inspections shall not for the three inspections showing the highest incidence of such plants exceed 1,0 percent of the plants of the seed parent; and
- 4.3.3.2 shall during a particular inspection of a single row or a portion thereof, or of two adjacent rows or portions thereof, not exceed 5,0 percent of the plants of the seed parent in that row or rows or portion or portions; and
- 4.3.4 the number of ripe deviating seed cobs on or harvested from the plants of the seed parent shall not exceed 0,2 percent of the seed cobs on or harvested from the plants of the seed parent.
- 4.4 If the percentages referred to in paragraphs 4.2.3 and 4.3.3 are exceeded in respect of a unit, seed of a hybrid variety shall not be considered for certification if it has been harvested from plants which were established -
- 4.4.1 within a distance calculated at the rate of 10 metres for each 1,0 percent or portion thereof, but with a maximum of 350 metres, by which the applicable percentage referred to in paragraphs 4.2.3.1 and 4.3.3.1 is exceeded from the unit concerned; and
- 4.4.2 within a distance calculated at the rate of five metres plus one metre for each 1,0 percent or portion thereof, but with a maximum of 50 metres, by which the applicable percentage referred to in paragraphs 4.2.3.2 or 4.3.3.2 is exceeded from the row or rows or portion or portions thereof concerned.
- 5 Inspection requirements
- 5.1 Plants which are established on a unit shall be inspected -
- 5.1.1 before the flowering stage thereof;
- 5.1.2 during the flowering stage thereof; and
- 5.1.3 during the full seed stage thereof.
- 5.2 A seed grower shall notify the authorized person at least five days prior to the date on which the plants on a unit are expected to start flowering.
- 5.3 If plants have been established on a unit with a view to the production of certified pre-basic seed or basic seed of a hybrid variety -



- 5.3.1 the seed grower concerned shall pick and dehusk the seed cobs of the plants of the seed parent and thereafter remove it from the unit concerned with a view to thresh it;
- 5.3.2 those seed cobs shall be inspected after having been picked and dehusked; be inspected before being threshed; and
- 5.3.3 the seed grower concerned shall notify the authorised person at least five days prior to the date on which such seed cobs are expected to be threshed.
- 5.4 If plants have been established on a unit with a view to the production of certified seed of a hybrid variety-
- 5.4.1 the seed grower concerned shall either -
- 5.4.1.1 pick the seed cobs of the plants of the seed parent and remove it from the unit concerned before threshing those seed cobs; or
- 5.4.1.2 harvest or otherwise remove the seed cobs of the plants of the pollen parent before the seed of the plants of the seed parent is harvested by means of a combine harvester;
- 5.4.2 the seed cobs referred to in paragraph 5.4.1.1 or the plants of the seed parent referred to in paragraph 5.4.1.2, or as the case may be, shall respectively be inspected before being threshed or being harvested by means of a combine harvester; and
- 5.4.3 the seed grower concerned shall notify the authorised person at least five days prior to the date on which the seed of the plants concerned of the seed parent is expected to be harvested.
- 6 Physical requirements
- 6.1 Certified pre-basic seed or basic seed shall -
- 6.1.1 have a germination percentage of at least 70;
- 6.1.2 have at least 99,0 percent pure seed; and
- 6.1.3 not contain more than -
- 6.1.3.1 0,2 percent other seed;
- 6.1.3.2 1,0 percent other material;
- 6.1.3.3 0,1 percent seed of which the colour of the endosperm deviates from the colour of the endosperm of the variety concerned.
- 6.1.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.
- 6.2 Certified seed shall -
- 6.2.1 have a germination percentage of at least 90;
- 6.2.2 have at least 99,0 percent pure seed; and
- 6.2.3 not contain more than -
- 6.2.3.1 0,05 percent other seed;
- 6.2.3.2 1,0 percent other material; and
- 6.2.3.3 0,2 percent seed of which the colour of the endosperm differs from the colour of the endosperm of the variety concerned.
- 6.2.4 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.

## ANNEXURE 70

### REQUIREMENTS RELATING TO SWEET CORN (*Zea mays* L. var. *saccharata* Baily)

- 1 Field requirements
- 1.1 Subject to the provisions of paragraph 1.2, a field may be registered as a unit only if no plants of any species of *Zea* of have been established thereon for seed production or otherwise during the growing season preceding the registration thereof.
- 1.2 Only in the case of an open-pollinated variety, may a field which is intended for the production of basic seed or certified seed of a particular maize variety also be registered as a unit, if -
- 1.2.1 in the case of basic seed, certified pre-basic seed of the same variety has been produced thereon during the preceding growing season; and
- 1.2.2 in the case of certified seed, certified pre-basic seed or basic seed of the same variety has been produced thereon during the preceding growing season; and



1.2.3 in the case of 2nd generation certified seed, 1st generation certified seed of the same variety has been produced thereon during the preceding growing season.

2 Planting requirements

2.1 Plants shall be established in rows on a unit.

2.2 Gap-filling in rows shall not be permissible.

3 Isolation requirements

3.1 A unit shall be surrounded by an isolation area which -

3.1.1 in the case of the intended production of certified pre-basic seed or basic seed is at least 800 metres wide; and

3.1.2 in the case of the intended production of certified seed is at least 400 metres wide.

3.2 Such isolation area shall be free from plants of any sweet corn variety or species of *Zea* which shed pollen at the stage on which the plants on the unit concerned show pollen-susceptible silk, unless -

3.2.1 in the case of the intended production certified of basic seed, they have been established from certified pre-basic seed of the same variety; and

3.2.2 in the case of the intended production of certified seed, they have been established from certified pre-basic seed or basic seed of the same variety; and

3.2.3 in the case of the intended production of an open-pollinated variety of 2nd generation certified seed, they have been established from 1st generation certified seed of the same variety.

4 Requirements for plants

The number of deviating plants on a unit shall -

4.1 in the case of the intended production of certified pre-basic seed or basic seed, not exceed 0,5 percent; and

4.2 in the case of the intended production of certified seed, not exceed 1,0 percent.

5 Inspection requirements

5.1 Plants which have been established on a unit shall be inspected -

5.1.1 before the flowering stage thereof;

5.1.2 at the stage on which 5,0 percent or more thereof show pollen-susceptible silk; and

5.1.3 during the full seed stage thereof.

5.2 The ripe seed cobs of the plants, which have been established on a unit, shall be inspected prior to the harvesting thereof.

5.3 An inspection referred to in paragraph 5.2, shall only be done after the seed cobs concerned have been defoliated.

5.4 A seed grower shall notify the authorised person at least 10 days prior to the date on which seed cobs will be ready for inspection referred to in paragraph 5.2.

6 Physical requirements

Seed shall -

6.1 have a germination percentage of at least 80;

6.2 have at least 98,0 percent pure seed; and

6.3 not contain more than -

6.3.1 0,05 percent other seed; and

6.3.2 2,0 percent other material.

6.3.3 Notwithstanding the provisions of paragraph 6.3.1, not more than one seed of any of the restricted weed seed species may occur in an ISTA working sample for the determination of other seed by number of the specie being tested.