

The South African Seed Certification Scheme

ANNEXURE 41

REQUIREMENTS RELATING TO LUPIN (WHITE LUPIN; NARROW LEAF LUPIN & YELLOW LUPIN) *Lupinus albus* L.; *Lupinus angustifolius* L; & *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;
 - 3.1.2 otherwise, in the case of the intended production of certified pre-basic seed or basic seed of -
 - 3.1.2.1 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
 - 3.1.2.2 narrow leaf lupin and yellow lupin, is at least five metres wide; and
 - 3.1.3 in the case of the intended production of certified seed of –
 - 3.1.3.1 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
 - 3.1.3.2 narrow leaf lupins and yellow lupins, 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 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
 - 3.2.2 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 -
 - 3.2.2.1 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
 - 3.2.2.3 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.