

# The South African Seed Certification Scheme

## ANNEXURE 51

### REQUIREMENTS RELATING TO KIDNEY BEANS & DRY BEANS (*Phaseolus coccineus* L. & *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.