

## **SCHEDULE 1**

### **REQUIREMENTS WITH REGARD TO POME AND STONE FRUIT**

#### **PART 1: TYPES OF PLANT MATERIAL [section 1]**

1.1 The following types of plant material of pome and stone fruit may be certified:

- 1.1.1 Graft shoots
- 1.1.2 Bud shoots
- 1.1.3 Unrooted hardwood cuttings
- 1.1.4 Rooted rootstock cuttings
- 1.1.5 Seedlings
- 1.1.6 Apple layers
- 1.1.7 Foundation nursery plants
- 1.1.8 Nursery plants
- 1.1.9 Seed

## **PART 2: UNIT REQUIREMENTS [section 10]**

### **2.1 Nucleus units**

A unit on which nucleus plants are cultivated shall comply with the following requirements:

- 2.1.1 The unit shall be covered by an insect-proof greenhouse.
- 2.1.2 The plants on the unit shall be established in containers.
- 2.1.3 The floor area of the greenhouse shall be covered in such a way that the roots of plants kept in containers thereon cannot penetrate to the soil on which the greenhouse is erected.
- 2.1.4 Such greenhouse shall be surrounded by means of an isolation area of at least 2 metres wide.
- 2.1.5 No plants of any kind shall occur in such isolation area unless the authority has consented thereto in writing.

### **2.2 Foundation plant units**

A unit on which foundation plants are cultivated shall comply with the following requirements:

- 2.2.1 The unit shall be surrounded by an isolation area.
- 2.2.2 Such isolation area shall –
  - 2.2.2.1 in the case of a unit established in a greenhouse, be at least 2 metres wide; and
  - 2.2.2.2 otherwise be at least 3 metres wide.  
*[Subparagraph 2.2.2.2 substituted by R. 226 of 19 March 2021]*
- 2.2.3 No plants of any kind shall occur within such isolation area unless the authority has consented thereto in writing.

### **2.3 Foundation nursery units**

A unit on which foundation nursery plants are cultivated shall comply with the following requirements:

- 2.3.1 The unit shall be surrounded by an isolation area.
- 2.3.2 Such isolation area shall –

2.3.2.1 in the case of a unit established in a greenhouse, be at least 2 metres wide; and

2.3.2.2 otherwise at least 3 metres wide.

2.3.3 No plants of any kind shall occur within such isolation area unless the authority has consented thereto in writing.

## 2.4 **Mother units**

2.4.1 A unit in which mother plants are cultivated shall be surrounded by an isolation area of at least 3 metres wide.

2.4.2 No plants of any kind shall occur within such isolation area unless the authority has consented thereto in writing.

## 2.5 **Nursery units**

2.5.1 A unit in which nursery plants are cultivated shall be surrounded by an isolation area of at least 3 metres wide.

2.5.2 No plants of any kind shall occur within such isolation area unless the authority has consented thereto in writing.

## **PART 3: PHYTOSANITARY REQUIREMENTS [section 11.3, 12.1.2]**

### **3.1 Establishment requirements**

The plant material established on a unit and the plants obtained thereof shall at all times during the term of registration of such unit comply with the following requirements:

#### **3.1.1 Rootstocks and Scions**

3.1.1.1 Plant material and plants shall test free of the following viral diseases:

Prune dwarf virus (PDV)  
*Prunus* necrotic ringspot virus (PNRSV)  
Apple stem grooving virus (ASGV)  
Apple mosaic virus (ApMV)  
Apple stem pitting virus (ASPV)  
Apple chlorotic leafspot (ACLSV)  
*Platycarpa* scaly bark (SB)

3.1.1.2 Plant material and plants shall be visually free of the following pathogens:

*Pseudomonas syringae* pv. *syringae* (Bacterial canker)  
*Pseudomonas syringae* pv. *morsprunorum* (Bacterial canker)  
*Xanthomonas campestris* pv. *pruni* (Bacterial spot)  
*Agrobacterium tumefaciens* (Crown gall)  
*Agrobacterium rhizogenes* (Crown gall)  
*Chondrostereum purpureum* (Silver leaf)  
*Diaporthe* spp., *Diplodia seriata*, *Cytospora* spp., *Eutypa lata*, (Cankers)  
*Schizophyllum commune*, *Trametes versicolor* (Wood decay)  
*Armillaria*, *Cylindrocarpon*, *Dactylonectria* (Root and crown rot organisms)  
*Phytophthora*  
*Pythium*  
*Rhizoctonia*  
*Rosellinia*  
*Verticillium*  
Apple flat limb  
Apple leaf pucker  
Apple rubbery wood  
Pear necrotic spot  
Pear vein yellows

3.1.1.3 Plant material and plants shall be visually free of the following insects:

*Diaspidiotus africanus* (Grey scale)  
*Aonidiella aurantii* (Red scale)  
*Chrysomphalus dictyospermi* (Spanish red scale)  
*Pseudaulacaspis pentagona* (White peach scale)  
*Quadraspidiotus perniciosus* (Pernicious scale)  
*Pseudococcus* spp. (Mealy bug)  
*Panonychus ulmi* (European red spider mite)  
*Meloidogyne* spp. (Root knot nematode)  
*Eriosoma lanigerum* (Woolly apple aphid)

3.1.1.4 The fruit obtained from plants of scion varieties shall be visually free of the following symptoms:

Apple green crinkle  
Apple green dimple  
Apple chat fruit  
Apple ring spot  
Apple russet ring  
Pear necrotic spot  
Pear stony pit

## 3.2 Certification requirements

The plant material obtained from the plants cultivated in a unit shall at the time of the presentation thereof for certification comply with the following requirements:

### 3.2.1 Rootstocks and Scions

Plant material shall –

- 3.2.1.1 test free of the viral diseases specified in paragraph 3.1.1.1 of this Part;
- 3.2.1.2 be visually free of the pathogens specified in paragraphs 3.1.1.2 of this Part; and
- 3.2.1.3 be visually free of the insects specified in paragraph 3.1.1.3 of this Part.

[Section 3 substituted by R. 226 of 19 March 2021]

## **PART 4: PHYSICAL REQUIREMENTS [section 12.1.3]**

### **4.1 General**

Plant material shall not show any signs of drying out or physiological, chemical, hail, cold, insect or pathogen damage or serious mechanical damage.

### **4.2 Graft and bud shoots**

4.2.1 Graft and bud shoots shall be well-matured.

4.2.2 The side shoots and spurs of such shoots shall be removed immediately after collection.

*[Subparagraph 4.2.2 substituted by R. 226 of 19 March 2021]*

4.2.3 The diameter of such shoots measured at the middle thereof shall be between 2 mm and 8 mm in the case of bud shoots, and between 4 mm and 12 mm in the case of graft shoots.

4.2.4 Graft shoots shall be at least 100 mm long.

### **4.3 Unrooted hardwood cuttings**

4.3.1 Unrooted hardwood cuttings shall originate from the growth of the previous growing season.

4.3.2 Such cuttings shall be at least 300 mm in length.

4.3.3 Such cuttings shall be matured over the entire length thereof.

4.3.4 The diameter of such cuttings, measured at the basis thereof, shall –

4.3.4.1 in the case of quinces and prunes, be at least 3 mm but not more than 15 mm;

4.3.4.2 in the case of peaches, be at least 5 mm but not more than 12 mm; and

4.3.4.3 otherwise be at least 5 mm but not more than 15 mm.

4.3.5 Such cuttings shall be straight enough to fit lengthwise between two parallel straight lines 30 mm apart.

*[Subparagraph 4.3.5 substituted by R. 226 of 19 March 2021]*

### **4.4 Rooted rootstock cuttings**

- 4.4.1 Rooted rootstock cuttings shall not be more than two years old.
- 4.4.2 The length of such shoots above the uppermost root shall be at least 300 mm.
- 4.4.3 The diameter of such shoots immediately above the uppermost root thereof shall be at least 8 mm.
- 4.4.4 Such shoots shall have at least two roots with a minimum length of 50 mm each.
- 4.4.5 The shoots shall be straight enough to fit lengthwise between two parallel straight lines 30 mm apart unless the cuttings have originated from foundation units.  
*[Subparagraph 4.4.5 substituted by R. 226 of 19 March 2021]*

#### 4.5 **Seedlings and apple layers**

- 4.5.1 Seedlings and apple layers shall not be more than one year.
- 4.5.2 The root system of the seedlings and layers shall have two roots with a minimum length of 50 mm each.
- 4.5.3 The diameter of such seedlings and layers 200 mm above the uppermost root shall not exceed 15 mm: Provided that seedlings and layers with diameter of less than 5 mm, between 5 mm and 8 mm, and more than 8 mm shall be kept in separate bundles.
- 4.5.4 Seedlings and apple layers shall be straight enough to fit lengthwise between two parallel straight lines 30 mm apart unless the seedlings and apple layers have originated from foundation units.  
*[Subparagraph 4.5.4 substituted by R. 226 of 19 March 2021]*

#### 4.6 **Foundation nursery plants and nursery plants**

- 4.6.1 The graft or bud union shall be completely callused.  
*[Subparagraph 4.6.1 substituted by R. 226 of 19 March 2021]*
- 4.6.2 The stems of foundation nursery plants and nursery plants shall be straight enough to fit lengthwise between two parallel straight lines 150 mm apart.  
*[Subparagraph 4.6.2 substituted by R. 226 of 19 March 2021]*
- 4.6.3 In the case of –
  - (a) one-year old plants, the diameter of the stem, 50 mm above the graft or bud union, shall be at least 7 mm;

- (b) two-year old plants, the diameter of the stem, 50 mm above the graft or bud union, shall be at least 8 mm; and
- (c) two-year old plants that have been cut back during the previous year, the diameter of the stem, 50 mm above the wound, shall be at least 8 mm.

*[Subparagraph 4.6.3 substituted by R. 226 of 19 March 2021]*

4.6.4 No side shoots shall occur below the graft or bud union of the plant.

4.6.5 The dead section of the rootstock tap shall be cut back smoothly above the graft or bud union and the pruning wound shall be sealed with a wound sealant.

*[Subparagraph 4.6.5 substituted by R. 226 of 19 March 2021]*

4.6.6 Plants shall not have dead or torn roots.

4.6.7 Plants shall have at least two well-developed roots with a length of 150 mm each and capillary roots shall be present.

4.6.8 The roots of plants in containers shall not be container-bound.

4.6.9 Plants shall not be kept in a container for longer than one year.

*[Subparagraph 4.6.9 substituted by R. 226 of 19 March 2021]*

#### 4.7 **Seed**

4.7.1 Seed used for the cultivation of rootstocks shall be derived from plants that have been established on a unit.

4.7.2 The germination potential of such seed shall be indicated by the supplier.

*[Subsection 4.7 substituted by R. 226 of 19 March 2021]*



**PART 5: BUNDLE REQUIREMENTS [section 16.1]**

- 5.1 Each bundle of plant material that is presented for certification shall be firmly fastened.
- 5.2 Uncovered metal wire shall not be used for the fastening of bundles.
- 5.3 Each such bundle shall –
- 5.3.1 in the case of rooted rootstock cuttings, consist of 50 cuttings; and
- 5.3.2 in the case of foundation nursery plants and nursery plants, consist of 20 plants.  
*[Subparagraph 5.3.2 substituted by R. 226 of 19 March 2021]*
- 5.4 Notwithstanding the provisions of paragraph 5.3 smaller or larger quantities may, depending on the size of the cutting or plants, be fastened in bundles, provided the actual quantity is indicated on the appropriate label referred to in section 17 of this Scheme.
- 5.5 Seed that is presented for certification shall be packed in unused containers.

## **PART 6: MARKING REQUIREMENTS [section 17.1]**

Foundation nursery plants and nursery plants shall be marked as follows before they are lifted from the soil on which they are grown:

- 6.1 Scions shall be marked with oil paint 5 cm above the graft union, and rootstock 5 cm below the graft union.
- 6.2 Such marks shall be of the applicable colour or colour combination specified by the authority and shall be applied by means of a suitable paint brush.
- 6.3 In the case of a colour combination, with regard to a particular variety –
  - 6.3.1 the different colours of paint shall be marked in the specified sequence with the first-mentioned colour nearest to the graft union;
  - 6.3.2 the different colours of paint shall be applied in the same field of vision;  
and
  - 6.3.3 a visible open space shall be left between the different colours.