[DA ADMINISTRATIVE ORDER NO. 29, S. 2001, OCTOBER 25, 2001, February 07, 2002]

GUIDELINES ON POTATO SEED CERTIFICATION

Pursuant to the provisions of the Implementing Rules & Regulations of R.A. 7308, otherwise known as the Seed Industry Development Act of 1992, Chapter III Article II Section 3, and upon approval of the National Seed Industry Council, the following guidelines on potato seed certification are to be adopted to ensure the high quality of potato seeds.

1. Objective

The objective of the potato seed certification is to assure that high quality planting materials of superior varieties, of known genetic identity and varietal purity including freedom from known systemic pests and diseases are produced.

2. Eligibility for Certification

Only varieties that are duly approved and registered by the National Seed Industry Council (NSIC) are eligible for certification.

3. Application for Certification

Only accredited seed potato growers are eligible to apply for certification. Certification forms are available at the nearest Seed Quality Control Services Office.

4. Definition of Terms

4.1 Seed Certifying Agency — The National Seed Quality Control Services (NSQCS) under the Bureau of Plant Industry, Department of Agriculture is sanctioned as the Seed Certifying Agency in the country under R.A. 7308 known as the Seed Industry Development Act of 1992.

4.2 Seed — refers to the vegetatively propagated tuber used for reproduction of the potato rather than the true seed that is specially produced from the potato flowers.

4.3 Field Lot — refers to a field intended for seed production, multiplication and certification.

4.4 Seed Lot — refers to a specific quantity of potatoes harvested from a certified field lot.

4.5 Seed Grower — an accredited seed potato producer, may be an individual, a cooperative or a corporation, who has satisfied all the requirements set under

Administrative Order No. 36, Series of 2000.

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4.6 Seed Inspector — A qualified person authorized by the Seed Certifying Agency as being capable of conducting field inspection and other certification services to accredited seed potato grower.

4.7 Basic seed (Go) — Seed potatoes harvested from greenhouse production directly controlled by originating/sponsoring institution or individual.

4.8 Foundation Seed (F1) — progeny of Go harvested from seed multiplication field so handled to maintain genetic purity and disease free plant.

4.9 Certified Seed (C1) — progeny of F1 harvested from seed production area so handled to maintain genetic purity and identity and certified by NSQCS.

4.10 CII — progeny of Certified I or earlier generation.

4.11 CIII — progeny of Certified II or earlier generation.

4.12 Roguing — means the removal and destruction of all diseased or undesirable plants of tubers/potatoes produced thereon.

5. Field requirements

5.1 The minimum area for seed production should be at least 0.5 hectare.

5.2 Field for seed production must be in accordance with A.O. No. 36 Series of 2000, Section 5, which is as follows:

The suitability of the area is determined by:

5.2.1 The field should be free from potato cyst nematode (PCN) or root knot nematode (RKN) and with a maximum of 10 colony forming unit (10 cfu) per seed lot of bacterial wilt organism. Certificate of soil analysis for potato cyst nematode and bacterial wilt organism from authorized disease Indexing Laboratories should be attached together with the application for accreditation.

5.2.2 The field for seed production must have been rotated, preferably with corn or other cereal crops or other non-solanaceous vegetables for at least two (2) cropping seasons.

5.2.3 The field should be accessible to seed storage facilities.

5.2.4 The agro-climatic conditions for growing the crop should be appropriate. Elevation should be at least 900 meters above sea level in Mindanao and 1800 meters in the Cordillera Administrative Region (CAR).

5.3 A seed grower shall plant only one potato variety for seed purposes on the same

field at any one time.

5.4 A seed grower shall produce certified seed potatoes only if he adopts the rules and regulations for seed production are adapted and the grower is a member of the Seed Potato Growers' Association or as an individual grower who operates in accordance with the instructions and under supervision of the authorized representative of Seed Certifying Agency.

5.5 Should a part of a field does not meet the standards for field inspection, the other parts of the field may be considered for certification provided that such part conform with the prescribed requirements.

6. Seed Potato Requirements

6.1 Seed potatoes of the same variety and class for multiplication should be planted in the same field.

6.2 Seed potato classes and quality standards are based on the results of field inspections and laboratory analysis.

6.3 All seed potatoes imported by private or government entities for seed multiplication in the Philippines must be accompanied by proper quarantine documents and are subject to post-entry quarantine.

7. Crop Inspection

7.1 Seed potato crops in the fields require proper marking (labels) that are easy to be recognized by seed inspectors. The label must contain the following information:

a.) Grower: _____

b.) Variety: _____

c.) Origin (Place): _____

d.) Seed Class Planted: _____

e.) Date of Planning : _____

f.) Area (ha.): _____

7.2 Isolation Requirement:

Seed production fields should meet the following isolation requirements:

a. Basic-to-foundation — 2 meters between fields

b. Foundation-Certified Seed (C1) — 20 meters between fields

c. Certified Seed (CII)-Certified Seed (CIII) — 50 meters between fields

7.3 Officially designated seed inspectors should inspect the field at least three times

during the crop season.

The Field Inspection Schedule is as follows:

1st Within 20-30 days after planting

Roguing has to be carried out by the farmer continuously as early as disease symptoms appear and continues until vines close on the rows in order to maintain the quality of the seed stocks. All diseased plants and off-types should be removed and destroyed.

2nd Within 40-50 days after planting

All diseased plants and off-types should be removed and destroyed.

3rd Within 60-75 days after planting

Random fork testing of stunted plants should be undertaken to determine for the presence of Potato Cyst Nematode (PCN) and/or root knot nematode (RKN) should be undertaken.

7.4 Additional field inspections shall be done to follow-up roguing requirements and disease occurrence. The seed inspector should prepare the preliminary field inspection reports and submit to the concerned NSQCS.

7.5 Tuber samples for laboratory analysis including disease indexing shall be collected and submitted by the seed inspector only when the seed crop passed field standards.

7.6 Sampling procedures:

Sample Size

Go not less than tubers per seed lot

F1 not less than 100 tubers per seed lot

CI-CIII not less than 200 pieces of seed tubers per seed lot (Based on 95% level of significance)

Sampling Procedures

Go The Go seed tubers should be collected at random from each seed rack/bed, comprising to the required sample size of 1% of the population or not less than 50 tubers per seed lot.

F1 All tubers from the field planting should be collected at a random in a field following a quadrant sampling scheme. In each quadrant of the seed lot, a minimum of 25 tubers per quadrant shall be collected passing through a Z-pattern, comprising to meet the required sample size of 100 pieces seed tubers.

CI to CIII All tubers from the field planting should be collected at random in a field

following a quadrant sampling scheme. In each quadrant of the seed lot, a minimum of 50 tubers per quadrant shall be collected passing through a Z-pattern, comprising to meet the required sample size of 200 pieces seed tubers.

Table 1. Field standards for potato seed certification

Maximum Permitted in each class/inspection in percent

FACTORS

GO

F1

C1

1st

2nd

3rd

1st

2nd

3rd