



Economic and Social Council

Distr.: General
30 December 2022

Original: English

Economic Commission for Europe

Steering Committee on Trade Capacity and Standards

Working Party on Agricultural Quality Standards

Specialized Section on Standardization of Seed Potatoes

Fiftieth session

Geneva, 16–17 March 2023

Item 3 of the provisional agenda

Revision of the Standard for Seed Potatoes

Preliminary proposals for revisions to the Standard for Seed Potatoes

Submitted by the rapporteur's group

Summary

Following revisions to annexes I and VII to the UNECE Standard S-1 concerning the marketing and commercial quality control of seed potatoes, at its 2022 session the Specialized Section decided to review the entire Standard. The review is being undertaken by a rapporteur's group consisting of Australia, Finland (rapporteur), France, Germany, the Netherlands, South Africa, Spain, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and Euroseeds.

Over the course of 2022 the rapporteur's group met in four half-day online meetings, facilitated by the secretariat. This document contains the preliminary proposed revisions to the Standard as per the status of discussions in the rapporteur's group at the end of November 2022.

The Specialized Section is invited to review the proposed changes and provide its views and additional suggestions to the continued work of the rapporteur's group, which is planned to be finalized during 2023, with the proposed revised Standard submitted to the 2024 session of the Specialized Section for its consideration.



Introduction

I. Goals and scope of the United Nations Economic Commission for Europe Standard for seed potatoes

The goal of the Standard is to act as a world reference intended to facilitate fair trade of seed potatoes by:

- defining harmonized quality requirements
- creating a harmonized commercial quality certification system
- promoting the adoption of the Standard into national or regional seed schemes.

To reach this goal the Standard covers the following requirements controlled by certification:

- Varietal identity and varietal purity
- Genealogy and traceability
- Pests, diseases and defects affecting commercial quality or yield
- External quality and physiology
- Sizing
- Labelling.

[As a consequence, the Standard considers issues falling under the World Trade Organization Technical Barriers to Trade (WTO-TBT) Agreement.]

[To add a definition of pest, in annex of definitions, e.g. ISPM 5 – Pest – any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products (FAO, 1990; revised FAO, 1995; IPPC, 1997).]

II. Application of the Standard

The UNECE Standard is intended for application on export and import of seed potatoes. This means for

Export: All seed potatoes certified and labelled for export by the Certifying Authority (CA) meet at least the requirements of the Standard.

Import: Seed potatoes certified and labelled according to the UNECE Standard are accepted as meeting national standards or technical regulations for seed potato quality. Where a country establishes more stringent quality requirements, these should be technically justified and the same requirements should be applied to domestic production.

The CA is responsible for ensuring that the provisions and conditions as specified in the Standard are applied. The CA is not responsible for the quality of the seed lot. The responsibility for the quality of the lot remains with the seed owner. [Include definition of seed owner in annex of definitions.]

The application of the Standard is without prejudice to any other legislation concerning plant health and the health of persons and animals, industrial or commercial property, including intellectual property rights. [To check with legal services.]

The UNECE secretariat will maintain a list of certifying authorities of seed potatoes.

III. Seed potato certification

Seed potato certification is an official quality control procedure concerning the commercial quality, traceability and marketing of seed potatoes. The process of certification includes various critical control points which are summarized in the table below. Additional minimum

requirements to achieve the certification of crops and tubers are listed throughout the Standard. The definition of terms applicable to the Standard are listed in Annex VII.

Summary of critical control points of seed potato certification

<i>Critical control point</i>	<i>Description</i>	<i>Relevant sections of the Standard</i>	<i>Supporting reference</i>
Initial stock*	Seed potatoes to be certified using initial stock must be originally derived from pathogen-free microplants that have a known variety identity.	Annex I: Minimum conditions to be satisfied in the production of Pre-basic Tissue Culture (TC) seed potatoes	UNECE Minituber Guide (in development)
Field inspection	All seed potato crops to be certified under the Standard must be inspected during the growth of the crop.	Annex II: Minimum conditions to be satisfied by the crop; field inspection procedures	UNECE Guide to Seed Potato Field Inspection: Recommended Practices UNECE Guide to Seed Potato Diseases, Pests and Defects
Tuber inspection	All seed potato lots to be certified under the Standard must be inspected before marketing.	Annex III: Minimum quality conditions for lots of seed potatoes	UNECE Guide to Seed Potato Lot Inspection: Recommended Practices UNECE Guide to Seed Potato Diseases, Pests and Defects Annex VIII: Assessment key for percentage tuber surface area coverage of blemish diseases [<u>to consider moving out of standard into a separate supporting document</u>]
Direct progeny/post-harvest evaluation procedures	The incidence of the virus and/or other pathogens in the direct progeny may be determined by inspection and/or testing of tubers or plants derived from a sample of tubers from the crop, i.e. post-harvest evaluation.	Annex IV: Minimum conditions to be satisfied by direct progeny of seed potatoes; post-harvest evaluation procedures	UNECE Guide to Seed Potato Diseases, Pests and Defects
Closing or sealing	Containers of seed potatoes shall be closed officially or under official control.	Section VI B Closing of containers	UNECE Guide on Operating a Seed Potato Certification Service UNECE Guide to Seed Potato Lot Inspection: Recommended Practices
Labelling	All seed that is determined to meet the Standard must be	Section VII Provisions concerning marking Annex V: Label	UNECE Guide on Operating a Seed Potato Certification Service

<i>Critical control point</i>	<i>Description</i>	<i>Relevant sections of the Standard</i>	<i>Supporting reference</i>
	labelled with an official certification label.		UNECE Guide to Seed Potato Lot Inspection: Recommended Practices

* Seed potato may also be derived from clonal selection.

IV. Standards and regulations adopted by other international and regional organizations

There are a range of other international standards and regulations that may apply to seed potatoes. Examples include:

- European Union (EU): EU legislation on the marketing of seed potatoes and plant health
- International Plant Protection Convention (IPPC): the International Standards for Phytosanitary Measures (ISPMs)
- European and Mediterranean Plant Protection Organization (EPPO): recommended certification scheme for seed potatoes
- North American Plant Protection Organization (NAPPO): NAPPO Regional Standard for Phytosanitary Measures (RSPM#3)

[The Standard considers issues falling under the WTO-TBT Agreement.]

United Nations Economic Commission for Europe Standard S-1 concerning the certification and commercial quality control of seed potatoes

I. Definition of produce

Produce is seed potatoes. Seed potatoes are tubers (including minitubers) and potato micropropagative material of cultivated tuber-forming *Solanum* spp. for planting¹ which are certified by the CA as meeting the specific requirements of this Standard.

This Standard does not apply to potatoes intended for planting for:

- Trials or scientific purposes
- Selection work.

These, however, may be covered by documentary confirmation of quality by the CA.

[True potato seeds + potato plantlets, consider for future]

II. Provisions concerning the variety

Varieties shall be accepted for certification under the Standard if an official description and a reference sample can be made available to the CA.

The variety should be distinct, uniform and stable according to the guidelines of the International Union for the Protection of New Varieties of Plants (UPOV) and have a denomination allowing its identification.

¹ As defined in International Standard for Phytosanitary Measures 33 (ISPM 33, 2010).

III. Provisions concerning quality

The purpose of the Standard is to define the quality requirements of seed potatoes after preparation/packaging and before marketing.

A. Minimum requirements

Seed potatoes shall be substantially free from injurious diseases and pests and from any defects likely to impair their quality as seed. They shall be substantially dry outside and, in general, of normal shape for the variety. [current text, to check to which degree these formulations can be changed as this part is similar to what is in other UNECE standards]

OR [draft new formulation]:

Seed potatoes shall be within the classification tolerances for diseases, pests and other defects likely to impair their quality as seed (annexes I–IV). The skin of seed potatoes shall be substantially dry and the tubers of normal shape for the variety.

Neither growing crops of seed potatoes nor seed potatoes shall be treated with sprout inhibitors.

B. Classification

Seed potatoes shall be classified by the CA according to the standards given below and the number of field generations (FG). Their classification shall be subject to official control in the producing country. Seed potatoes can be placed in classes within each of three categories as defined below:

Category 1: Pre-basic seed potatoes

These are seed potatoes of generations prior to Basic seed:

- (a) Pre-basic tissue culture (PBTC) class seed potatoes (FG0) shall be minitubers directly derived from initial stock, and shall be produced in accordance with the requirements specified in annexes I, II, III and IV. The certification of PBTC seed potatoes is restricted to one generation.
- (b) Pre-basic class seed potatoes shall be generations of seed, meeting the requirements specified in annexes II, III and IV. [to check text in Annex I and possibly include additional information for plant].

Plantlets for field planting

- (a) Plantlets for field planting class seed potatoes shall be directly derived from initial stock or true potato seed, shall be produced in accordance with the requirements specified in annexes I, II, III and IV.
- (b) Plantlets for field planting class seed potatoes shall be generations of seed, meeting the requirements specified in annexes II, III and IV.

Category 2: Basic seed

These are seed potatoes descended directly from Pre-basic or Basic category seed and are mainly intended for the production of certified seed potatoes.

Seed shall be classified as either Basic I or Basic II, according to the minimum requirements given in annexes II, III and IV.

Category 3: Certified seed

These are seed potatoes descended directly from Pre-basic, Basic or Certified category seed and are mainly intended for the production of potatoes other than seed potatoes.

Seed shall be classified as either Certified I or Certified II, according to the minimum requirements given in annexes II, III and IV.

Derogation from classification

Producing countries are, however, free to create within the categories and classes provided for in Section III B Classification, classes which are subject to specific requirements.

Field generation

Each class may be additionally classified according to the number of generations (FG1, FG2 etc.). The final designation of a class will therefore contain a class name and may contain a field generation record (e.g. Basic I FG3, Certified I FG3).

IV. Provisions concerning inspections

[Comparative trials? Draft text to be provided]

V. Provisions concerning sizing

Pre-basic TC are exempt from the minimum sizing requirements.

To determine compliance with tuber sizing, representative samples are collected during the lot inspection. The seed size should be assessed using the square gauge.

The lot shall conform to the distribution of tuber sizes of the harvested crop within the size specified on the label.

Unless the buyer and seller agree to deviate from the minimum size and/or maximum variation in size of tubers, the following will apply:

- The minimum size of tubers must be such that they do not pass through a square gauge of 25 mm; for varieties having, on average, a length of at least twice the greatest width, the square gauge must not be less than 25 mm.
- The maximum variation in size between tubers in a lot must be such that the difference between the dimensions of the two square gauges used does not exceed 25 mm.

Tolerances for sizing*

Minimum size tolerances in per cent by weight of tubers

10 %	With a maximum deviation of 5 mm from the minimum size indicated for lots with tubers having a length of at least twice their maximum width
3 %	For all other lots

Maximum size tolerances in per cent by weight of tubers

3 %	Larger than the maximum size indicated
-----	--

* [Note: table may need clearer headings.]

VI. Provisions concerning presentation

A. Condition of containers

Bags must be new; other containers may be reused provided that they are clean.

B. Closing of containers

Containers shall be closed officially or under official control in such a manner that they cannot be opened without damaging the official sealing device or without leaving evidence of tampering on the official label provided for in Section VII A Official label.

The official system of closing shall comprise either the incorporation into the system of the label mentioned above if it is without a string-hole, or, in all other cases, by the application of an official seal.

Re-closing shall be carried out only by the CA or under its control.

C. Nature of contents of containers

Each container shall contain tubers of the same variety, category, class, size and origin.

A lot should be sufficiently homogeneous which means that seed potatoes within different containers are as uniform as is practical and will not vary excessively in composition and appearance.

VII. Provisions concerning marking [to be revised]

A. Official label

Each container shall bear on the outside an official label in accordance with Annex V and which has not been previously used; the label shall be white with a diagonal purple line for Pre-basic seed, white for Basic seed, and blue for Certified seed. Reference to the UNECE Standard may be included on the label.

B. Official statement

Each container shall have on the inside an official statement of the same colour and showing at least the particulars 3, 5 and 7 as indicated in Annex V. The statement shall be so worded that any confusion with the official label referred to in Section VII A Official label shall be avoided.

This statement is not necessary when an adhesive label or a label of untearable material is used. The particulars given on the label may be indelibly printed on each container in substitution for the official statement provided for above.

C. Re-labelling

If a second check appears necessary, the authority which carried out the second check must be stated on the label, as well as the date of the re-closing. If a new label is necessary, this must show the particulars, which appeared on the old label, the date of the re-closing, and the authority concerned.

D. Supplier's label

Each container may be accompanied by a special label of the supplier.

E. Chemical treatment

The nature of the active substance of any chemical treatment of the seed potatoes shall be indicated on the outside of each container, on a tear-resistant or adhesive label being either

the official label or a label provided by the supplier, or printed on each container. This information may also appear inside each container.

VIII. Provisions concerning traceability

[Text to be added]

Adopted 1963, also as European Standard No. 19

Last revised 2021
