

## **Endorsement of categories of seed potato, and procedures for accreditation of laboratories producing seed potatoes, and packaging, marketing and importation of seed potatoes**

Regulation of the Minister of Agriculture of 20 April 1999 No 14

On the basis of subsections 2 (3), 12 (5), 14 (7), 18 (3) and (6), 20 (5) and 22 (9) of the Seed and Plant Propagating Material Act (RT I 1998, 52/53, 771), and taking into account the provisions of the Council Directive 66/403/EEC (OJ L 125, 11.07.66):

1. I endorse “Categories of seed potato, and procedures for accreditation of laboratories producing seed potatoes, and packaging, marketing and importation of seed potatoes” (attached).
2. This Regulation does not apply to lots of seed potato produced in Estonia in 1998.
3. Seed potatoes of varieties listed in Official Variety List but not sufficiently uniform and stable on the basis of the results of registration and value testing (indicated as \*\*) can be marketed on the territory of the Republic of Estonia.
4. Seed potato of varieties bred in Estonia and listed in the Official Variety List not resistant to potato cyst eelworm can be marketed until 2005.

**Minister Ivari PADAR**

**Secretary General Ilmar TUPITS**

Endorsed

by the Regulation of the Minister of  
Agriculture of 20 April 1999 No 14

### **CATEGORIES OF SEED POTATO, PROCEDURES FOR ACCREDITATION OF LABORATORIES PRODUCING SEED POTATO, AND PACKAGING, MARKETING AND IMPORTATION OF SEED POTATO**

#### **I. CATEGORIES OF SEED POTATO**

1. Pre-basic seed potato (SE) is seed potato:

1. which has been produced according to accepted practices for the maintenance of the variety and of health;
2. which is intended mainly for the production of basic seed potatoes;
3. which satisfy the minimum conditions laid down in Annexes 1 and 2 for pre-basic seed potatoes ;
4. which has been certified by the Plant Production Inspectorate.

2. Basic seed potato (E) is seed potato:

1. which has been produced according to accepted practices for the maintenance of the variety and of health;
2. which is intended mainly for the production of certified seed potatoes;
3. which satisfy the minimum conditions laid down in Annexes 1 and 2 for basic seed potatoes ;
4. which has been certified by the Plant Production Inspectorate.

There are two grades of basic seed potato: basic seed potato of first progeny (E1) and basic seed potato of second progeny (E2).

**3.** Certified seed potato (A) is seed potato:

1. which is of direct descent from basic seed potato;
2. which is intended for production of consumer potato;
3. which satisfy the minimum conditions laid down in Annexes 1 and 2 for certified seed potato;
4. which has been certified by the Plant Production Inspectorate.

**4.** The Plant Production Inspectorate organises the certification of seed potato according to internationally accepted rules. Legal acts concerning certification are published in the Journal of the Plant Production Inspectorate (*Taimetoodangu Inspektsiooni Teataja*).

## II. ACCREDITATION OF LABORATORIES PRODUCING PROPAGATING MATERIAL OF GENERATIONS PRIOR TO PRE-BASIC SEED POTATO AND SEED POTATO, USING MICRO-PROPAGATION (MERISTEM) METHODS

**5.** Only laboratory accredited according to the procedure in force can produce propagating material of generations prior to the pre-basic seed potato and seed potato, using micro-propagation methods. The laboratory is obliged to follow internationally accepted methodology.

**6.** The laboratory:

1) collects and maintains documents on the origin of original material of propagation, data on purchasers of the said basic material and on the variety and amounts sold;

2) has concluded contracts for production of generations prior to the pre-basic propagating material or possesses production system of its own;

3) obliges to ensure the maintenance of the variety and plant health of the basic material produced.

**7.** The laboratory must have concluded contract with the owner, representative or maintainer of the variety for the production of generations prior to the pre-basic propagating material. The copies of the contracts must be submitted to the Plant Production Inspectorate.

**8.** If the accredited laboratory is the maintainer of the variety, the seed potato of generations prior to the basic seed category can only be produced using basic material controlled, and proved to be of the original variety by the Plant Production Inspectorate.

**9.** The generations of tubers of seed potato produced out of meristem material proved to be of the original variety shall be indicated as follows:

1. first generation prior to the pre-basic seed potato SS;
2. second generation prior to the pre-basic seed potato S;
3. pre-basic seed potato SE.

**10.** The accredited laboratory is responsible for the trueness to and purity of the variety, and plant health, of tuber generations of seed potato of SS, S and SE. The Plant Production Inspectorate may run random checks.

**11.** The Plant Production Inspectorate may certify as basic seed the seed potato of generations listed in clause 9 produced in other countries out of basic material which was derived using the micro-propagation method, if the requirements laid down for basic seed potato are met.

### III. REQUIREMENTS FOR PACKAGING, SEALING AND LABELLING OF SELLING PACKAGES, OF SEED POTATO

**12.** Persons interested in production or packaging of market-oriented seed potato must submit a written application in the given format (Annex 3) to the Plant Production Inspectorate to obtain the respective permission.

**13.** Person possessing the permission must inform the Plant Production Inspectorate on the dates of commencement and finalisation of packaging of a lot of seed potato.

**14.** The application for field certification for the certification purposes must be submitted to the Plant Production Inspectorate by the owner, representative or maintainer of the variety.

**15.** The application for official sampling of tubers from the lot of seed potato shall be submitted to the Plant Production Inspectorate by the owner of the lot.

**16.** The official certifier or official sampler is:

1. the inspector of the Plant Production Inspectorate; or
2. a person authorised by the Director General or the Deputy Director General of the Plant Production Inspectorate on the condition that no personal interest of the said persons are concerned.

**17.** The closing point of selling package of seed potato must bear the adhesive security label or lead seal, or official label sewn-through on the closing point of the package, of the Plant Production Inspectorate. The package must be closed in such a manner that it cannot be opened without damaging the adhesive security label, lead seal or official label.

**18.** The official label meeting the requirements laid down in Annex 4 to this procedure is attached to the outer side of the selling package of seed potato by the official sampler or under his/her supervision. It is allowed to print the information required to be presented on the official label to the package under the supervision of the official sampler.

**19.** The package must bear information on chemical treatment of the seed potato and the name of substance used for treatment.

**20.** The package can be opened and resealed only under the supervision of the official sampler. The date of resealing of the package and words "Plant Production Inspectorate" must be indicated on the official label.

### IV. QUALITY REQUIREMENTS FOR MARKETING SEED POTATO

**21.** Only seed potato included in the Official Variety List, certified and packaged according to this procedure can be marketed. The selling package must be sealed and marked, and bearing official label, as established by the Seed and Plant Propagating Material Act and this procedure.

**22.** The certification upon marketing is not obligatory:

1. upon generations of seed potato prior to the pre-basic seed potato;
2. upon seed potato marketed for tests and scientific purposes;
3. upon seed potato marketed for selection work.

**23.** Quality requirements applying upon marketing of seed potato are laid down in Annex 2 to this procedure.

**24.** The Plant Production Inspectorate can certify and permit marketing of seed potato of generations prior to the pre-basic seed potato if the requirements laid down in Annex 2 to this procedure for pre-basic seed potato are met.

**25.** The presence of dangerous plant diseases and harmful organisms, and the trueness to the variety of the live plant are checked upon official field certification.

**26.** Upon field certification the official certifier of the Plant production Inspectorate checks the conformity of a live plant growing on the seed field to the requirements laid down in Annex 1. The field established for production of certified seed potato must be certified at least for once.

**27.** The live plant must be true to the variety and meet the purity requirements of the variety. The variety description approved by the Plant Production Inspectorate must form the basis upon checking the trueness to the variety.

**28.** The official sampler shall take official tuber sample from the lot of seed potato under certification, which has been sorted and brought to the selling condition, to check the conformity of the seed potato to the requirements laid down in Annex 2 to this procedure.

**29.** The official tuber samples are taken for testing for bacterial and virus diseases and assessing the quality of the seed potato. The tuber samples are analysed by the Plant Production Control Centre that will submit the results of tests to the Plant Production Inspectorate by deadlines previously agreed upon.

**30.** On the basis of results of field certification, checks for potato cyst eelworm, laboratory tests, analysis of tubers and post-control tests, the seed potato certificate and official labels for marking the selling containers are issued by the Plant Production Inspectorate per certified lots of seed potato. The document and labels issued are valid for three months from the date of taking the official tuber sample from the lot of the seed potato.

**31.** The owner of the lot has the right to re-sort the lot of seed potato not meeting the quality requirements laid down in Annex 2. The re-sorted lot of the seed potato is subject to the second certification according to the requirements of this procedure.

**32.** It is not permitted to market seed potato with sprouts longer than 5 mm or removed.

**33.** The Plant Production Inspectorate may prohibit the marketing of seed potato of whatever variety if the results of post-control tests of three successive years indicate the non-conformity of the lot of the pre-basic, basic or certified seed potato of the respective variety to the requirements laid down in Annexes 1 and 2 to this procedure.

**34.** The seed potatoes may not be placed on the market if they have been treated with sprout inhibitors.

**35.** If there is not sufficient supply of seed potato meeting the requirements in force, a single permit for marketing of seed potato of lower quality until the given deadline can be issued by the Plant Production Inspectorate. In such case the colour of the official label shall be dark yellow and shall always state that the seed potatoes in question are of a lower quality.

## V. CONDITIONS FOR IMPORTATION OF SEED POTATO

**36.** Only seed potato of varieties listed in the Official Variety List can be imported. If there is not sufficient supply of certified seed potato, a single permit for importing of seed potato of a variety listed in the respective official variety list of another country until the given deadline can be issued by the Plant Production Inspectorate.

**37.** The lot of imported seed potato must be certified, packaged according to this procedure, and accompanied by a document proving the certification of the seed potato issued by the competent authority responsible for official inspection in the exporting country, and the phytosanitary certificate. The packages must be marked according to the requirements laid down in this procedure.

**38.** On the basis of the Seed and Plant Propagating Material Act the Plant Production Inspectorate may prohibit the importation of seed potato of whatever variety if the results of post-control tests of three successive years indicate the non-conformity of the seed potato to the requirements laid down in Annexes 1 and 2 to this procedure.

Annex 1 to the  
«Categories of seed potato, and  
procedures for accreditation of  
laboratories producing seed potatoes,  
and packaging, marketing and  
importation of seed potatoes»

### **PLANT DISEASES AND HARMFUL ORGANISMS CONSIDERED TO BE DANGEROUS FOR SEED POTATOES AND TO BE CHECKED DURING THE VEGETATION PERIOD**

**1.** Plant diseases and harmful organisms not to be detected on the seed potato field:

- 1) Colorado beetle (*Lepinotarsa decemlineata*);
- 2) potato rot nematode (*Ditylenchus destructor*);
- 3) potato cyst eelworm (*Globodera* spp. sün. *Heterodera* spp.);
- 4) potato wart disease (*Synchytrium endobioticum*);
- 5) potato gangrene (*Phoma exigua* var. *foveata*);
- 6) *Pseudomonas solanacearum* (Smith) Smith in potatoes syn. *Ralstonia solanacearum* (Smith) Yabuuchi in potatoes;
- 7) potato ring rot (*Clavibacter michiganensis* subsp. *Sepedonicus*);
- 8) potato mop top virus (PMTV);

9) tobacco rattle virus in potatoes (*TRV*).

2. For detection of potato cyst eelworm 48 average soil samples are taken per ha by the official certifier or official sampler from the production field of seed potato. The samples are analysed by the Plant Production Control Centre and the results submitted to the Plant Production Inspectorate.

3. The following periods must have been passed from the production of other potatoes on the fields intended for production of seed potatoes:

1) 3 years in case of generations prior to pre-basic seed potato, pre-basic and basic seed potato;

2) 2 years in case of certified seed potato.

3. For the control of spread of diseases the minimal distance from production fields of seed potato of lower category and consumer potato must be as follows:

1) in case of generations prior to pre-basic seed potato, pre-basic seed potato and 1<sup>st</sup> generation of basic seed potato 100 m;

2) in case of 2<sup>nd</sup> generation of basic seed potato 50 m;

3) in case of certified seed potato 10 m.

4. Upon field certification the following conditions must be met by plants:

<b>Requirements (percentage)</b>	<b>SE</b>	<b>E 1</b>	<b>E 2</b>	<b>A</b>
Minimal purity of the variety	100.0	100.0	99.9	99.9
Maximal amount of plants with symptoms of serious virus diseases	0.0	0.0	0.2	1.0
Maximal total amount of plants with symptoms of virus diseases	0.2	0.2	0.5	2.0
Maximal amount of plants infected by blackleg disease	0.0	0.0	0.5	2.0

5. The plant must not be seriously damaged by *Phytophthora* blight (*Phytophthora infestans*).

6. The plant must be true to the variety. The plants of other varieties must be removed from the field during the vegetation period. The authorised certifier can reject the highly weed-grown fields as defective.

7. The control of aphides on the field of seed potato is obligatory.

Annex 2 to the  
«Categories of seed potato, and  
procedures for accreditation of  
laboratories producing seed potatoes,  
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importation of seed potatoes»

## QUALITY REQUIREMENTS FOR CATEGORIES OF SEED POTATO APPLYING UPON MARKETING

1. The official tuber sample for detection virus diseases contains 200 tubers, regardless the weight of the lot.
2. The official tuber sample for detection of potato ring rot and *Pseudomonas solanacearum* (Smith) Smith in potatoes syn. *Ralstonia solanacearum* (Smith) Yabuuchi et al. contains 100 tubers per each ha of arable land used for the production of the lot.
3. The official tuber sample for detection of quality contains 200 tubers. The number of samples depends on the size of the lot of the seed potato as follows:
  - 1) less than 20 tonnes 1;
  - 2) 21-60 tonnes 2;
  - 3) 61-100 tonnes 3;
  - 4) 101-150 tonnes 4;
  - 5) 151-200 tonnes 5.
4. The weight of soil and other additives must not exceed 2% of the weight of the sample.
5. The total amount of tubers with mechanical damages or physiological deviations, including irregular shape, must not exceed 3% of the weight.
6. The amount of tubers infected with rots other than harmful organisms listed in clause 8 of Annex 1 must not exceed 1% of the weight, including maximum of 0.2% of wet rots.
7. The amount of tubers damaged by scabs (more than 1/3 of the surface of the tuber infected) must not exceed 5% of the weight, including maximum of 3% of tubers infected with black scurf (*Thanatephorus cucumeris*), skin spot of potato (*Polyscytalum pustulans* syn. *Oospora pustulans*) and corky scab (*Spongospora subterranea* f. sp. *Subterranean*) (more than 1/10 of the surface of the tuber infected).
8. The total amount of tubers with symptoms laid down in clauses 6 and 7 must not exceed 6% of the weight.
9. The amount of tubers infected by virus diseases must not exceed (in %):

Virus	E 1	E 2	A
Y and A	2	5	1
X	0		
S	0		
M	0		
Potato leaf roll	0		

virus (PLRV)			
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**10.** The requirements applying on the size of seed potato:

1) the minimal diameter of seed tubers of varieties with round tuber shape must equal at least 28 mm. In case of varieties with oblong tuber shape where the length equals at least twice the width of the tuber, the minimal diameter of seed tubers must equal at least 25 mm;

2) the variation between the biggest and the smallest seed tubers in the same lot of the seed potato must not exceed 20 mm;

3) in case the average size of seed tubers exceeds 35 mm, the seed potato must be sorted and the difference between the biggest and the smallest fraction of the tubers must be dividable by 5;

4) the same lot of the seed potato must not contain more than 3% of tubers bigger and more than 3% of tubers smaller than permitted.

**11.** The lot of the seed potato under certification to be sampled must be of homogeneous quality, separated from other lots and marked by the owner as required.

Annex 3 to the  
«Categories of seed potato, and  
procedures for accreditation of  
laboratories producing seed potatoes,  
and packaging, marketing and  
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## APPLICATION

### FOR ACTIVITY LICENCE

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Applicant: Commercial registry/ID code:

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Address:

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Telephone: Fax: E-mail:

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Contact person:

First application Amendment of previous activity licence

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Description of production conditions:

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In the production unit there are processed and stored:

Only seed potato intended for certification

Seed potato for own production unit

Consumer potato

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Imported seed or consumer potato

List of activities:

Production Packaging Marketing Importation

of seed potato of seed potato of seed potato of seed potato

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Additional information:

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Date Signature

Annex 4 to the  
«Categories of seed potato, and  
procedures for accreditation of  
laboratories producing seed potatoes,  
and packaging, marketing and  
importation of seed potatoes»

## **REQUIREMENTS ON FORMAT AND CONTENTS OF OFFICIAL LABEL AND SEED POTATO CERTIFICATE**

1. The minimal size of official label is 110 x 67 mm.
2. The following data are required to be presented on the official label of the pre-basic, basic and certified seed potato:
  - 1) «Certified seed»;
  - 2) Plant Production Inspectorate, Estonia (certifying body and country);
  - 3) No of the producer;
  - 4) variety;
  - 5) country of origin;
  - 6) category and size of tuber of seed potato;

7) size of lot;

8) net weight declared;

9) year of the yield;

10) in case of seed potato packaged in Estonia, the number of packager.

3. The colour of the official label shall be white with violet diagonal stripe for pre-basic seed potatoes, white for basic seed potatoes and blue for certified seed potatoes.

4. The requirements on the contents and format of the seed potato certificate are laid down in Annex to these requirements.

Annex to the  
«Requirements on format and  
contents of official label and seed  
potato certificate»

PLANT PRODUCTION INSPECTORATE

**SEED POTATO CERTIFICATE NO**

Date

VARIETY CATEGORY

**OWNER OF THE LOT**

**No of packager**

**Address**

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**DATA ON FIELD CERTIFICATION**

No of field certification act Certifier

Purity of variety, %

Infected plants, in total, %

Incl. infected by viruses, %

Incl. infected by blackleg disease, %

Incl. infected by blight

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## **DATA ON TUBER ANALYSIS**

No of tuber sample act Sampler

No of tuber analysis act Analyzers

Weight of the seed lot, tonnes Number of the seed lot

Size of tubers, mm Bigger, % smaller, %

Soil and other additives Mechanical damages and

physiological deviations, %

Tuber diseases

Virus diseases Tuber rots, in total

Scabs including bacterial soft rots

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Remarks:

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Certificate valid until: Issuer of the certificate, signature: