OECD Scheme for the Control of Forest Reproductive Material Moving in International Trade

Country: SLOVAKIA
Official publication no. 470-00744/2002 providing rules and directions for implementation of the OECD Scheme for the Control of Forest Reproductive Material Moving in International Trade in the Slovak Republic.

This material was accepted and published by the OECD:


Entrusted, funded and supervised by: the Ministry of Agriculture of the Slovak Republic, Forestry Section and the Foreign Relations Department

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OECD Scheme for the Control of Forest Reproductive Material Moving in International Trade

Country: Slovakia

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- Article 9 “Forest Seed and Planting Stock” of the Act of the Slovak National Council No. 100/1977 of the Legal Code on Management in Forests and State Forest Administration, as provided for in latter regulations
- Act of the National Council of the Slovak Republic No. 291/1996 of the Legal Code on Varieties and Seeds, as amended by the Act of the National Council of the Slovak Republic No. 470/2002 of the Legal Code (articles relevant to the forest reproductive material)
- Decree of the Ministry of Agriculture No. 64/2001 of the Legal Code on Forest Reproductive Material, its Production and Records
- Forest Regions and Regions of Provenance
- Certificate of Provenance and Clonal Identity
- Labels
- Territorial responsibility of inspectors for forest reproduction material
Introduction

The Organization for Economic Cooperation and Development (OECD) established the Scheme for the Control of Forest Reproductive Material Moving in International Trade\(^1\) (here called to “the OECD Scheme”) by a memorandum [C(67)45(Final)] on 30th May 1967. That document was amended by the Council’s Decision of 29th September, 1970 [C(70)136(Final)] and 7th March, 1974 [C(74)29(Final)].

The objective of the OECD Scheme is to encourage production and use of forest reproductive material including seeds, parts of plants and plants that have been collected, transported, processed raised and distributed in a manner that ensures their trueness to name. The rules established by the OECD Scheme constitute the minimum requirements. The OECD Scheme is implemented in the participating countries by the Designated Authorities.

The OECD Scheme is open, on a voluntary basis to the Member countries of the OECD, as well as to other states being member countries of the United Nations Organization or its specialized agencies. If a country participates in it, its rules must be strictly observed for all reproductive material carrying the OECD label, however.

As a member state, Slovakia was admitted to the OECD Scheme by the Decision of the Council [C(2000)238] of 14 December, 2000. The Ministry of Agriculture of the Slovak Republic committed the Forest Research Institute to create organizational and technical conditions for fulfillment of the OECD rules and directions for forest reproductive material. The Forest Research Institute restructured the field control and inspection of forest reproductive material and worked out the National List of Approved Basic Material. Present official publication is submitted to the OECD after a review by competent forestry institutions and Ministry of Agriculture of the Slovak Republic.

The purpose of this official publication is to provide directions and explain how the OECD Scheme for Forest Reproductive Material shall be implemented in the Slovak Republic.

Pursuant to the approval of the National List of Approved Basic Material, Certificates of Provenance and Clonal Identity, Labels, and present publication by the Secretariat of the OECD for Agricultural Schemes and Codes, the OECD Scheme shall be implemented in Slovakia from June 30, 2003, in full conformity. From that date, the forest reproductive material produced in Slovakia and destined for international trade shall correspond with the OECD directions.

Influenced physical and legal entities and professionals shall be informed about implementing of the OECD Scheme by Slovakia as follows:
- The present publication shall be published as an attachment to the official professional journal „Les“ with countrywide distribution;
- The present publication and the National List of Approved Basic Material shall be available on the official web site of the Ministry of Agriculture, and of the Forest Research Institute;
- Brief articles shall be published in another periodicals dealing with land management – „Rolnicke noviny“ [Agricultural Newspaper] and „Lesokruhy“;
- Official presentation shall be given at the national annual professional meeting „Production and Use of Forest Reproductive Material 2003”.

**Designated Authority**

The Ministry of Agriculture has nominated as the Designated Authority for the OECD Scheme for the Control of Forest Reproductive Material Moving in International Trade in the Slovak Republic:

Forest Research Institute - Lesnicky výskumný ústav  
*Dr. Roman Longauer (contact person)*  
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Tel. +421-45-5 314 327  
Fax: +421-45-5321 883  
[http://www.fris.sk](http://www.fris.sk)  
e-mail: <roman.longauer@fris.sk>

Its supervising state authority is: Ministry of Agriculture of the Slovak Republic,  
Dobrovičova 12,  
812 66 Bratislava  
Slovakia
Legislation

The certification of forest reproductive material was initially established in Slovakia by the Decree of the Ministry of Economies IX-54/7-1939 of August 8, 1939, on Selection of Forest Stand for Collection of Seed and Planting Stock. This decree established the central register of entities dealing with forest reproductive material, approval and registration of seed collection stands, and legally binding duties in seed collection, production and use of planting stock.

Current legal basis for implementing of the OECD Scheme is provided by the directions and rules for forest reproductive material set out in

- the Act of the Slovak National Council No. 100/1977 of the Legal Code on Forest Management and State Forest Authority, as promulgated in the Act No. 265/1995, Article 9 Forest Seed and Planting Stock (here called to “the Act on Forest Management and State Forest Authority”),

- the Act of the National Council of the Slovak Republic No. 291/1996 of the Legal Code on Varieties and Seeds, as amended by the Act No. 470/2002, Chapter 4 Special Rules for Forest Tree Species, Articles 23-27 (here called to “the Act on Varieties and Seeds”).

- the Decree of the Ministry of Agriculture No. 64/2001 of the Legal Code on Forest Reproductive Material, its Production and Records (here called to “the Decree on Forest Reproductive Material”) of January 17, 2001.

In order to provide detailed instructions for enforcement of the Decree on Forest Reproductive Material, the Guidelines of the Ministry of Agriculture on the Establishment, Management and Use of Forest Tree Seed Sources (here called to “the Implementation Guidelines”) were published in May 2002.

Only the forest reproductive materials registered by the Forest Research Institute can be marketed in Slovakia. The enforcement of the legally binding rules on forest reproductive material is controlled and inspected by the Service for Forest Reproductive Material of the Forest Research Institute (here called to “the Forestry Institute”).

The control of forest reproductive material concentrates on three steps of its production:
1) approval of basic material,
2) collection of seed and vegetative material,
3) production of plants.

English translation of the following legal texts is enclosed with the present document:

IA Article 9 “Forest Seed and Planting Stock” of the Act of the Slovak National Council No. 100/1977 of the Legal Code on Management in Forests and State Forest Administration, as provided for in latter regulations;

IB Act of the National Council of the Slovak Republic No. 291/1996 of the Legal Code on Seeds and Varieties, as amended by the Act of the National Council of the Slovak Republic No. 470/2002 of the Legal Code (articles related to the forest reproductive material);

IC Decree of the Ministry of Agriculture No. 64/2001 of the Legal Code on Forest Reproductive Material, its Production and Records.
Categories of Reproductive Material

Four categories of forest reproductive material are recognized by the OECD Scheme:

a) Source–identified,
b) Selected,
c) Untested Seed Orchards (Qualified),
d) Tested.

Source Identified Reproductive Material

The season-limited approvals for collection of the source-identified reproductive material are issued by the Forestry Institute. The approvals are issued on a request of eligible physical and legal entity. The reproductive material is certified in this category if:
- It was collected from the respective region of provenance;
- Coordinates and characteristics of source stand are recorded; and
- Seed was collected, processed and stored, and plants raised under the control of the Forestry Institute.

Selected Reproductive Material

Selected reproductive material is the main category at the national level. Reproductive material certified in this category is derived from Approved Seed Collection Stands or Reproductive Plantations.

The reproductive material is certified as Selected if it was
- Collected or produced from a basic material with a superior phenotypic quality, selected at the population level, approved, registered and controlled by the Forestry Institute, and
- Collected, processed and stored, and plants raised under the control of Forestry Institute.

The criteria concerning the origin, isolation, uniformity, volume production, phenotypic quality, health and resistance, age and minimum population size for the approval of the basic material for this category are set up in the Decree on Forest Reproductive Material and Implementation Guidelines to this Decree.

At present, the basic material for this category includes:
- 11,147 approved seed collection stands with a total area of 58,260 hectares,
- 36 generative reproductive plantations with a total area of 757 ha.

Qualified Reproductive Material

Reproductive material derived from Seed Orchards, Reproductive Plantations, Clones, Plus Trees and Clonal Mixtures can be certified in this category.

The reproductive material is certified as Qualified if it was:
- Collected or produced from a phenotypically superior basic material selected at individual tree level, approved, registered and controlled by the Forestry Institute, and
- Collected, processed and stored, and plants raised under the control of the Forestry Institute.

The requirements for the approval of basic material for this category concerning the origin, volume production, phenotypic quality, health and resistance, age, and also the minimum number of clones and isolation of seed orchards, are set out in the Decree on Forest Reproductive Material and its Implementation Guidelines.

The basic material for this category includes in Slovakia:
- 91 untested seed orchards of 15 tree species, with the total area of 206.2 ha. Pinus sylvestris and Larix decidua L. represent 78%. of this area.
- 3,811 registered plus trees and 4 recommended clones of poplars.
Tested Reproductive Material

The reproductive material certifiable in this category includes 11 “regionalized” poplar clones and 2 clones of willow entered in the Official List of Clones.

The reproductive material is certified as tested if
- Its genetic superiority has been proven by tests controlled, evaluated and documented by the Forestry Institute;
- The basic material and the place where the reproductive material was collected, were approved, registered and controlled by the Forestry Institute;
- Parts of plants were collected and stored, and plants raised under the control of the Forestry Institute.

The requirements on characters examined, documentation, designs of the tests and data analysis in compliance with the OECD Scheme are set out, and documentation of the tests is kept by the Forestry Institute.

Tree Species

The tree species and artificial hybrids covered by the national legislation on forest reproductive material and certifiable under the OECD Scheme:

<table>
<thead>
<tr>
<th>No.</th>
<th>Species Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Picea abies</td>
</tr>
<tr>
<td>02</td>
<td>Picea pungens</td>
</tr>
<tr>
<td>03</td>
<td>Abies alba</td>
</tr>
<tr>
<td>04</td>
<td>Abies grandis</td>
</tr>
<tr>
<td>05</td>
<td>Pinus sylvestris</td>
</tr>
<tr>
<td>06</td>
<td>Pinus nigra</td>
</tr>
<tr>
<td>07</td>
<td>Pinus uncinata</td>
</tr>
<tr>
<td>08</td>
<td>Pinus banksiana</td>
</tr>
<tr>
<td>09</td>
<td>Pinus strobus</td>
</tr>
<tr>
<td>10</td>
<td>Pseudotsuga menziesii</td>
</tr>
<tr>
<td>11</td>
<td>Pinus nigra</td>
</tr>
<tr>
<td>12</td>
<td>Pinus uncinata</td>
</tr>
<tr>
<td>13</td>
<td>Pinus banksiana</td>
</tr>
<tr>
<td>14</td>
<td>Pinus strobus</td>
</tr>
<tr>
<td>15</td>
<td>Taxus baccata</td>
</tr>
<tr>
<td>20</td>
<td>Quercus petraea</td>
</tr>
<tr>
<td>21</td>
<td>Quercus rubra</td>
</tr>
<tr>
<td>22</td>
<td>Quercus pubescens</td>
</tr>
<tr>
<td>23</td>
<td>Quercus palustris</td>
</tr>
<tr>
<td>24</td>
<td>Quercus robur, Q. robur, ssp. slavonica</td>
</tr>
<tr>
<td>25</td>
<td>Quercus cerris</td>
</tr>
<tr>
<td>26</td>
<td>Fagus sylvatica</td>
</tr>
<tr>
<td>27</td>
<td>Carpinus betulus</td>
</tr>
<tr>
<td>28</td>
<td>Acer pseudoplatanus</td>
</tr>
<tr>
<td>29</td>
<td>Acer platanoides</td>
</tr>
<tr>
<td>30</td>
<td>Acer campestre</td>
</tr>
<tr>
<td>31</td>
<td>Acer tataricum</td>
</tr>
<tr>
<td>32</td>
<td>Acer negundo</td>
</tr>
<tr>
<td>33</td>
<td>Fraxinus excelsior</td>
</tr>
<tr>
<td>34</td>
<td>Fraxinus americana</td>
</tr>
<tr>
<td>35</td>
<td>Fraxinus ornus</td>
</tr>
<tr>
<td>36</td>
<td>Ailanthus altissima</td>
</tr>
<tr>
<td>37</td>
<td>Ulmus montana, syn. U. glabra</td>
</tr>
<tr>
<td>38</td>
<td>Ulmus minor, syn. U. carpinifolia</td>
</tr>
<tr>
<td>39</td>
<td>Ulmus minor, syn. U. carpinifolia</td>
</tr>
<tr>
<td>40</td>
<td>Robinia pseudoacacia</td>
</tr>
<tr>
<td>41</td>
<td>Betula sp..</td>
</tr>
<tr>
<td>42</td>
<td>Alnus glutinosa</td>
</tr>
<tr>
<td>43</td>
<td>Alnus incana</td>
</tr>
<tr>
<td>44</td>
<td>Alnus viridis</td>
</tr>
<tr>
<td>45</td>
<td>Salix sp..</td>
</tr>
<tr>
<td>46</td>
<td>Salix sp..</td>
</tr>
<tr>
<td>47</td>
<td>Tilia sp..</td>
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<tr>
<td>48</td>
<td>Populus tremula</td>
</tr>
<tr>
<td>49</td>
<td>Populus x euroamericana</td>
</tr>
<tr>
<td>50</td>
<td>Populus alba, Populus nigra</td>
</tr>
<tr>
<td>51</td>
<td>Populus x euroamericana (I 214)</td>
</tr>
<tr>
<td>52</td>
<td>Populus x euroamericana (Robusta)</td>
</tr>
<tr>
<td>53</td>
<td>Prunus avium syn. Cerasus avium</td>
</tr>
<tr>
<td>54</td>
<td>Prunus mahaleb syn. Cerasus mahaleb</td>
</tr>
<tr>
<td>55</td>
<td>Sorbus aucuparia</td>
</tr>
<tr>
<td>56</td>
<td>Sorbus aria</td>
</tr>
<tr>
<td>57</td>
<td>Sorbus terminalis</td>
</tr>
<tr>
<td>58</td>
<td>Sorbus domestica</td>
</tr>
<tr>
<td>59</td>
<td>Juglans nigra</td>
</tr>
<tr>
<td>60</td>
<td>Juglans regia</td>
</tr>
<tr>
<td>61</td>
<td>Castanea sativa</td>
</tr>
<tr>
<td>62</td>
<td>Aesculus hippocastanum</td>
</tr>
<tr>
<td>63</td>
<td>Padus avium syn. Padus racemosa</td>
</tr>
<tr>
<td>64</td>
<td>Platanus sp.</td>
</tr>
<tr>
<td>65</td>
<td>Pyrus x pyraster</td>
</tr>
<tr>
<td>66</td>
<td>Malus x sylvestris</td>
</tr>
<tr>
<td>67</td>
<td>Carya sp.</td>
</tr>
</tbody>
</table>
Delimiting the Regions of Provenance

Regional Division of Forests

The forests in Slovakia are divided into 47 Forest Regions [1]. Their boundaries reflect - the geomorphology of Slovakia; - macroclimatic characteristics and forest climatic regions [2]; - soil types and their distribution in Slovakia [3]. In addition, the forest typology was taken into the account. The main characteristics of individual forest regions are provided in Appendix II.

Due to high altitudinal variation, which contributes to the diversity of site types and natural forest vegetation, 8 Forest Vegetation Zones are recognized in Slovakia following the geobotanical classification of ZLATNÍK [4]. These vegetation zones are defined according to the natural forest vegetation types and their differentiation due to the site quality and climate (see Appendix II).

Regions of Provenance

A region of provenance is understood to be the area with similar ecological characteristics, where the forest tree species, subspecies or populations show similar phenotypic and genetic traits. For each of the 7 main forest tree species of Slovakia, five to six specific Regions of Provenance are defined. The admixed forest tree species have 5 common regions of provenance. According to the altitudinal differences, seven 200-meter-wide altitudinal zones are delineated. As a result, there are 35 to 49 certification units for each forest tree species.

The maps of the provenance regions of individual species, including the lists of forest regions clustered into them, are provided in Appendix IC (Annexes 2-8 of the Decree on Forest Reproductive Material) and Appendix II.

Forest stands (compartments) are basic units for approval and collection of forest reproductive material. Each forest stand has boundaries marked in the field and fixed in the forestry maps. One approval unit may consist of several neighboring stands if they have a similar structure and belong to the same region of provenance and altitudinal zone.

Each forest stand can be identified in the forestry maps according to its unique identification number within each forest management district. Boundaries of each forest stand are stable in the long-term. In the forest management plans, each forest stand has a separate sheet providing information about its natural and technical characteristics, and forestry operations which have to be carried out.

National List of Approved Basic Material

The Forestry Institute has established and is updating the Central Database of Approved Basic Materials. The database is in the Slovak language. The data sets recorded for each approved unit are prescribed in the Annexes of the Decree on Forest Reproductive Material: Annex 10 for plus trees, Annex 12 for seed orchards, Annex 13 for reproductive plantations, Annex 16 for approved stands and Annex 17 for gene reserve forests. Detailed data about basic materials are available to the partner designated authorities on request.

The Slovak and English version of the National List of Approved Basic Material shall be published by the Ministry of Agriculture on July 1, 2003. The list shall be revised each 5 years.
Reference Code of Approved Basic Material

The Forest Research Institute assigns a unique reference code to each approved basic material, which consists of 10 symbols:

Positions 1 and 2  Code of a tree species (Decree on Forest Reproductive Material, Annex 1),
Position 3  Type of basic material (1 = seed orchard, 2 = plus tree, 3 = reproductive plantation, 4 = top quality approved stand of category A, 5 = high quality approved stand of category B, 6 = source identified, 7 = gene reserve forest).
Position 4  Provenance region (Decree on Forest Reproductive Material, Annexes 2 to 8),
Position 5  Altitudinal zone according to Article 3 of the Decree on Forest Reproductive Material (1 = up to 200 m, 2 = 201-400 m, 3 = 401-600 m, 4 = 601-800 m, 5 = 801-1000 m, 6 = 1001-1200 m, 7 = 1201-1400 m, 8 = 1401+ m). If a basic material falls into two altitudinal zones, it is registered in the zone with the bigger area or higher number of components.

Positions 6 and 7  Abbreviation of the administrative district where the basic material belongs,
Positions 8 to 10  Registration number of an approved unit in the respective category of basic material and tree species. The number is assigned by the Forestry Institute.

Example: 26534BB-021 is the reference code providing the following information: 26 = common beech, 5 = approved stand of phenotypic category B, 3 = region of provenance Central Slovakia, 4 = fourth altitudinal zone 601-800 m, BB = administrative district Banská Bystrica, 021 = registration number of the approved unit.

For the reproductive material certified under the OECD Scheme, the year of ripening of the seed, seed units or collection of parts of plants shall be added at the end of a reference code (Positions 11 and 12).

Approval of Basic Material

The following partners are involved in the approval of basic material: forest owners or holders represented by the chartered foresters, Forest Research Institute, and the state authorities in charge of forest management:

1) Chartered Foresters propose basic material for approval, or cooperate with the Forest Research Institute in its selection and establishment;
2) Forestry Institute evaluates the quality of all basic materials, prepares their registration forms, assigns registration codes, keeps central records and inspects their management;
3) The State District Authority confirms registration forms of approved basic materials.
4) The Regional State Authority may decide about revision of a forest management plan pursuant to the approval of a basic material.

In principle, requirements of the OECD Scheme on approval of basic material are covered by:

- The Act on Forest Management and State Forest Administration, Article 9,
- The Act on Seeds and Varieties:
  - Article 23 “Registration of Clones and Multiclonal Varieties of Forest Trees”;
  - Article 24 “Control of Clones and Multiclonal Varieties after Registration”.
- The Decree on Forest Reproductive Material:
  - Article 6 “Plus Trees”;
  - Article 7 “Seed Orchards and Reproductive Plantations”;
  - Article 8 “Approved Stands”.
The descriptors of each plus tree, seed orchard, reproductive plantation, and approved stand are prescribed by the Annexes 10, 12, 13 and 16 of the Decree on Forest Reproductive Material. In addition to the national legislation, the OECD Scheme recognizes also "indigenous" and "non-indigenous" origin of forest reproductive material. A forest stand is considered indigenous if it has been continuously regenerated by natural regeneration, or raised artificially from seed collected in indigenous stands of the same region of provenance.

Data about approved basic materials are recorded in the Central Database of Approved Basic Material. Full information about each approved unit is available from the Forestry Institute shall be made available on an eligible request by a holder of the certificate of professional qualification.

Requirements on Approved Stands, Plus Trees, Seed Orchards and Reproductive Plantations

**Origin of selected stands and plus trees:** Indigenous stands are selected primarily, but non-indigenous stands adapted to the prevalent growth conditions are also accepted if they show particular growth superiority and quality (phenotypic quality category A and B).

**Isolation:** The minimum distance from stands having inferior characteristics is established in the projects of seed orchards according to local conditions. If inferior, pollen producing stands are present in the vicinity of selected stands, their removal is demanded through the forest management planning procedures.

**Uniformity:** The stands and components of a seed orchard or reproductive plantation must be representative of local forest tree populations with regard to the presence and distribution of essential morphological characteristics and adaptive traits. Minimum standards for approval are set out in the Decree on Forest Reproductive Material and its Implementation Guidelines.

**Volume Production, Form, Growth Habit and Wood Quality:** These traits belong to the basic input parameters for phenotypic classification. Particularly the volume production is required to be markedly above the comparable local average. Concerning the phenotypic quality, straightness and fullness of stems without forks and spiral grains, length of stems without knots, fine branching and good natural pruning are assessed in stands and on single trees.

**Health, Resistance and Adaptability:** Insufficient sanitary state including ruptures, symptoms of fungal diseases and/or the presence of parasites disqualify candidate stands or plus trees from approval. On extreme sites, attention is paid to the vitality and resistance against unfavorable climatic conditions and/or air pollution.

**Size of the Units:** The minimum area of a unit has not been fixed but, as a rule, their size exceeds 1 hectare. For admixed, less abundant tree species, the minimum limit for approval is 40 adult, seed bearing individuals.

**Age, Development Stage:** Approval is given when the seed-bearing age has been reached. The age limits are set for individual forest tree species in the Implementation Guidelines to the Decree on Forest Reproductive Material.

**Seed Orchards** are approved if the component clones are from the same region of provenance and, preferentially, the same altitudinal zone. Each orchard must be established according to the project approved by the Forestry Institute. Such a project must provide information about the purpose, location, isolation and management of an orchard, about origin and number of the component clones, and the graphical design showing identity and distribution of ramets.
Reproductive Plantations are approved, if the planted progenies are derived from approved seed stand(s) from the same region of provenance and, preferentially, the same altitudinal zone. Each reproductive plantation must be established according to the project approved by the Forest Research Institute. The project provides information about the purpose, location and management, origin, number and distribution of components (progenies) of a reproductive plantation.

Minimum requirements on approval of stands for seed collection and plus trees, concerning their phenotypic quality, volume production, health condition, origin, isolation, uniformity, and minimum population sizes, are set up in the Implementation Guidelines to the Regulation on Forest Reproductive Material.

Tested Reproductive Material

Legal directions for approval of a basic material for the OECD category „Tested“ are provided in Articles 23 to 25 of the Act on Varieties and Seeds (see Annex IB). The State Clonal Tests are obligatory. The Forestry Institute carries out these tests in its own premises pursuant to written application of a notifier. The Ministry decides on registration of a clone or multiclonal variety, if such tests proved attainment of required production and ecological parameters of clones. If the Ministry decides to register a clone or multiclonal variety, the Forestry Institute includes it in the State Clone Register. Only registered clones and multiclonal varieties are considered tested for commercial purposes. During the tests, the Forestry Institute follows minimum requirements set up in Appendix II of the OECD Scheme on Forest Reproduction Material.

A clone or multiclonal variety is registered for the period of 20 years. The Forestry Institute controls tested clones and multiclonal varieties also after registration. The maintainer of a clone or multiclonal variety is obliged to keep records about the propagation methods and quantity of produced plants during the registration period, and provide these records to the Forestry Institute on request.

Collection, Production and Supply of Forest Reproductive Material

Registration of Collectors, Producers, Suppliers, and their Facilities

In accordance with Article 9 of the Act on Forest Management and State Forest Administration, the physical and legal entities dealing with the forest reproductive materials for commercial purposes, must hold the certificate of professional qualification issued by the Ministry. Related activities of legal entities are carried out through their employees holding of the certificate of professional competence.

Only the seeds, cuttings, and plants derived from approved seed sources, if registered by the Forestry Institute, can be used for artificial regeneration and afforestation on forest lands in Slovakia (Article 9 of the Act on Forest Management and State Forest Administration, Article 11 of the Decree on Forest Reproductive Material).

According to the Act on Varieties and Seeds, the Forestry Institute controls and inspects:

- Seeds and plants derived from approved basic materials;
- Collection of seed and seed units, their processing and storage;
- Production of plants;
- Management of approved basic material;
- Use of forest reproduction material;
- Clones and multiclonal varieties.
Referring to the above mentioned acts, the Forest Research Institute keeps the national register of nurseries and facilities used for processing, packaging and storing of forest reproductive material.

Only the reproductive materials, processed, stored and raised in the registered facilities can be certified according the OECD Scheme.

**Collection of Seeds and Parts of Plants for Vegetative Propagation**

The collector intending to collect seed units or parts of plants for vegetative propagation, shall inform the Forestry Institute about the proposed collection at least 15 days before the date on which the collection is to commence, stating:
- Time and place of collection depicted in the reference code of a basic material;
- Owners of approved material;
- A place of temporary storage of collected seed, seed units and parts of plants.

The Forest Research Institute shall inspect the collection of seed units and parts of plants by random checking.

When collection of seed and seed units is finished, the owners of basic material fills in the certificate of origin of a forest reproductive material. He/she keeps one copy of it, one copy is sent to the Forestry Institute, and one copy is provided to the owner of the seed or body processing seed units and storing seed.

**Registration of Seeds**

The Forestry Institute registers collected seeds up to 15 days after their collection or processing of seed units. Seeds are registered, if they originate from approved seed sources, and their collection was carried out in compliance with the Decree on Forest Reproductive Material.

**Registration of Plants**

Plants are registered by the Forestry Institute on a request of their producer submitted by September 15 of a current year. Plants are registered if they were:
- Produced of a registered seed of parts of plants;
- Cultivated separately and their records were kept in accordance with the Decree on Forest Reproductive Material;
- Plants are of marketable quality.

**Records of Origin of Reproductive Material**

The primary records of forest reproductive materials are kept by the entities processing, raising and marketing forest reproductive material. They include the following documents:
- Certificate of the Origin of Seed and Seed Units issued by the owner of basic material;
- Certificate of Acquisition of Seed or Seed Units issued by the Forestry Institute;
- Registration Certificate of Plants issued by the Forestry Institute;
- Nursery Documentation with graphical records, registration codes and quantities of plants in nursery beds.

Owners of basic material, processors and storers of seeds keep the certificates A) and B). Producers of plants keep the certificate A) and record D). Suppliers of forest reproductive material keep the certificates B) and C).
Separation and Identification of Forest Reproductive Material

During their collection, processing, storage and transport, the seed units and parts of plants for vegetative propagation are kept separated according to their seed sources. Their designation contains:

a) Common and scientific name of a tree species;
b) Registration code;
c) Type of basic material;
d) Year of ripening of seed;
e) Weight;
f) Coordinates of the owner of a seed unit.

Mixing of genetically and physiologically equivalent seed lots is allowed on a written request of their owner. It shall be carried out if the seed lots:

a) Originate from several seed sources belonging to the same region of provenance, altitudinal zone and category;
b) Were collected from the same seed source in several years.

The Forestry Institute controls the mixture of seed lots. The total amount of seed derived from each individual lot must be recorded in the Certificate of Origin of a Seed Mixture.

During their production, storage and transport, cuttings or plants are kept separately according to their seed sources. Their designation contains:

a) Common and scientific name of a tree species;
b) Registration code;
c) Source of seed or cuttings;
d) Year of collection;
e) Quantity;
f) Coordinates of the owner of cuttings or plants.

Packaging and Sealing

The reproductive material can be marketed only in packages excluding misidentification or a lost of identity. The packages must be sealed and labeled in a way guaranteeing the trueness to name and allowing to control authenticity of the contents (Article 1, Article 20 “Labeling and Packaging” and Article 27 of the Act on Varieties and Seeds).

Chartered foresters record all the planting stock used for forest regeneration and afforestation in a Card of a Forest Stand (Article 15 of the Decree on Forest Reproductive Material).

Imports and Exports

Permits for the use of imported reproductive material for reforestation on forest lands are issued by the Forestry Institute (Article 9 of the Act on Forest Management and State Forest Administration, Article 17 of the Decree on Forest Reproductive Material).

Forest reproductive material for artificial forest regeneration and afforestation on forest lands, can be imported to Slovakia if:

- It is accompanied by an official certificate of provenance identity and phytosanitary certificate issued by the competent authority of a respective state.
- Information provided in the certificate of provenance identity is compliant with legal regulations and standards of the Slovak Republic
  a) as to the species/variety/clone and technical quality of imported reproductive material with the Act on Varieties and Seeds,
b) as to the origin, type and quality of the basic material with the Decree on Forest Reproductive Material.

- As to the suitability of imported reproductive materials for local forestry, attention shall be paid to its geographic origin, results of the research and practical experience.
- The certificate of origin, phytosanitary certificate and import license are submitted by the importer or consignee to the customs officer at the time of import.

The Forestry Institute shall not permit the use of imported forest reproductive material that is documented as dangerous to human health or may have a detrimental effect on the genetic diversity and integrity of native forest tree populations, stability of forest ecosystems, or it is considered dangerous by the human health, phytosanitary and nature protection regulations.

**Exports**

The Certificates of Provenance Identity in accordance with the OECD Scheme are issued by the Forestry Institute on a written request of exporter.

Only registered reproductive materials obtained, produced, packed, sealed and transported in compliance with the national regulations and standards can be certified according to the OECD Scheme and national regulations.

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**Inspection and Control**

**Inspection of Basic Material**

The regional inspectors of the Forestry Institute inspect each approved seed collection stand at least once in 10 years, each seed orchard once in 3 years, reproductive plantation and gene reserve forest once in 5 years. The tested reproductive material is inspected and controlled on an individual basis. The results of these inspections are considered a reference for prolongation of the approval of basic material by the Forestry Institute.

**Inspection of Forest Reproductive Material**

Article 11 of the Act of the National Council of the Slovak Republic No. 10/1996 on the Control by State Authorities, Act on Forest Management and State Forest Administration, and Articles 31 to 36 of the Act on Varieties and Seeds, compel the Forestry Institute to inspect the enforcement of regulations and standards concerning the forest reproductive material. The activities subject to inspection include:

1) Collection of seeds, seed units and parts of plant for propagation;
2) Production of plants;
3) Labeling, processing, storage, packaging and transportation of reproductive material;
4) Management of basic material;
5) Records, supply and end-use of forest reproductive material.

**Inspection Duties and Competence**

The Forestry Institute represented by its inspector is authorized to:

- Enter to the premises and transportation facilities of the inspected entities,
- Inspect documents directly related with the forest reproductive material as defined by the legal regulations, examine their authenticity and make copies of them.

The inspector of the Forestry Institute:

1) Informs inspected entities about the purpose and subject of inspection. If advance information interferes with the purpose of inspection, commences inspection without announcement;
2) Requires the presence and guidance of responsible holder of the certificate of professional competence during inspection;
3) Takes samples from the reproductive material without compensation;
4) Works out the Inspection Records according to Article 13 of the Act No. 10/1996;
5) Informs the inspected entity about findings of inspection and contents of the inspection record prior to its official presentation. Asks the inspected entity for a written statement to the inspection record;
6) Works out the acceptance record and imposes a duty on the inspected entity to submit written report about undertaken corrective measures;
7) Informs the Ministry and respective state authorities about inconsistencies with legal regulations revealed during inspection;
8) Informs eligible legal authorities about possible criminal offences revealed by inspection.

Sanctions

In a case of non-compliance with legally binding regulations and standards, the Protocol on Inspection is worked out and sanctions proposed according to the Article 35 “Penalties” and 36 “Other Measures” of the Act on Seeds and Varieties. The Forestry Institute hands over the Protocol to the Ministry of Agriculture and competent district authority.

Pursuant to the disclosure of non-compliance with legal regulations and standards by an inspected entity, the Forestry Institute is authorized by the Article 36 of the Act on Seeds and Varieties:
- Halt the supply of reproductive material until corrective actions are implemented;
- Forbid collection of seed, seed units and parts of plants;
- Forbid the supply of forest reproductive material;
- Order to destroy seed and reproductive material of uncertified origin.

The Forestry Institute also proposes to the state authorities to:
- Impose a fine and/or
- Derogate or require to pay back the subsidy, and/or
- Rise a case of non-compliance with legal reforestation duties, and/or
- Order to destroy unsuitable plants or your growths planted in forest stands.

Appeals for cancellation of imposed sanctions are to be addressed, according to Article 36 of the Act on Seeds and Varieties, to the Ministry of Agriculture.

LITERATURE: