

CERTIFICATION OF SOURCE-IDENTIFIED
ALBERTA TREE SEED
UNDER THE O.E.C.D. SCHEME

NORTHERN FOREST RESEARCH CENTRE
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CANADIAN FORESTRY SERVICE
DEPARTMENT OF THE ENVIRONMENT
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ACKNOWLEDGEMENT

This report is an adaptation of "Certification of Source-Identified British Columbia Tree Seed under the O.E.C.D. Scheme" by R. F. Piesch and V. H. Phelps, Pacific Forest Research Centre, Canadian Forestry Service, Victoria, B.C. Information Report BC-X-60 July 1971.

Changes have been made in the text to make the system applicable to Alberta.

CERTIFICATION OF SOURCE-IDENTIFIED ALBERTA
TREE SEED UNDER THE O.E.C.D. SCHEME

INTRODUCTION

The council of the Organization for Economic Co-operation and Development (O.E.C.D.) adopted, on May 30, 1967, a memorandum¹ that established a scheme for the control of forest reproductive material moving in international trade.

The object is to encourage production and use of forest tree reproductive materials (seeds, parts of plants, plants) that have been collected, processed, raised and distributed in a manner that ensures their trueness to name.

Three categories of reproductive material are recognized and distinguished under the scheme:

- (a) Source-identified material, which represents a minimum standard. The two requirements are that (i) the zone of provenance where the material is collected and the nature of its origin (indigenous or non-indigenous) shall be defined and registered by a Designated Authority, and (ii) the material shall be collected, processed and stored, or plants raised, under the control of that Authority.

¹ Anon. 1967. Decision of the Council Establishing an O.E.C.D. Scheme for the Control of Forest Reproductive Material Moving in International Trade. O.E.C.D. Mimeo, C967 45 (Final) dated 10 Nov. 1967. 20 p.

- (b) Selected reproductive material: as for (a) above, but in addition, the material shall be derived from basic material (selected stands, untested seed orchards or selected clones) that conforms to requirements laid down by the O.E.C.D.
- (c) Certified reproductive material: as for (a) above, but in addition, (i) the genetic superiority of the material shall be proved by provenance or progeny tests meeting the minimum requirements prescribed, and (ii) the number of components of seed orchards and progeny test results shall be registered by the Designated Authority.

Participation by any country is voluntary but subject to strict adherence to the rules.

Canada, as a member of O.E.C.D., assisted in formulating the scheme. The governments of several European countries to which it applies, including a number that import forest tree seed in commercial quantities from Canada insisted that, as of 1970, forest reproductive materials could be imported only in compliance with the scheme.

The Government of Canada nominated the C.F.S. as the Designated Authority to implement the scheme. The C.F.S. delegated responsibility for the operation in respect of seed collected in Alberta to the Director, Northern Forest Research Centre, Edmonton, Alberta.

It was decided that:

- (a) Initially, only source identified seed would be certified.
- (b) The arrangements would apply to seed intended for export, and not to be collected for domestic use.

- (c) Certification would be required before the seed was exported from Canada.
- (d) Participation by seed exporters would be voluntary but subject to strict adherence to rules laid down by O.E.C.D. and the requirements of the C.F.S.
- (e) Initially, the C.F.S. would bear the cost of necessary inspection and certification arrangements; subsequently, other arrangements might be made.

These requirements and arrangements will continue to apply, at least in 1971/72.

Procedures for describing zones of provenance and origin, and rules embracing the ~~minimum~~ requirements of O.E.C.D., were prescribed for operation of the scheme in 1970. They are given in the following sections in the modified form that will apply in future and until further amended.

ZONES OF PROVENANCE AND ORIGIN

Zones of Provenance will be described by Forest Region and Section as defined by Rowe², supplemented by geographic co-ordinates and elevation.

² Rowe, J.S. 1959. Forest Regions of Canada. Dept. of Northern Affairs and Natural Resources. Forestry Branch Bull. 123. 71 p.

Forest Regions and Sections

Rowe's Regions are subdivided into Sections which are geographic areas with distinctive patterns of vegetation and physiography relative to other sections. The regions and sections applicable to Alberta are:

Boreal Forest Region

Aspen Grove Section	B.17
Mixedwood Section	B.18a
Hay River Section	B.18b
Lower Foothills Section	B.19a
Northern Foothills Section	B.19b
Upper Foothills Section	B.19c
Athabasca South Section	B.22d
Upper Mackenzie Section	B.23a

Montane Forest Region

Douglas Fir and Lodgepole Pine Section	M.5
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Supalpine Forest Region

East Slope Rockies Section	SA.1
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The boundaries of the forest sections are shown on the accompanying map. For the purposes of this report, the boundaries are meant only to indicate general limits for the zones of provenance. In certain detailed instances therefore, ecological conditions as described by Rowe may not correspond with forest zones and sections as mapped. Seed suppliers, with the help of C.F.S. personnel, will normally describe ecological conditions in collection areas as they actually exist. Consequently, the zones of provenance as stated on

certification documents might not always correspond to the regions and sections as determined by geographic co-ordinates on the map. Requests for clarification of particular cases may be made to the C.F.S.

Rowe's bulletin lists climatic data for representative stations within the sections.

Geographic Co-ordinates and Elevation

The Forest Sections are often large, and encompass a variety of environmental conditions. Additional information is needed to stratify them and thus relate seed source to possible geographic or climatic adaptation. Therefore, the location of seed source will be further described in terms of latitude, longitude and elevation.

For collection areas less than two miles square, latitude and longitude will be recorded to the nearest minute. For larger collection areas, the extremities of the ranges of latitude and longitude will also be recorded to the nearest minute.

Elevation will be recorded to the nearest 500 feet, unless the range exceeds 500 feet, in which case the upper and lower limits of elevation will be given to the nearest 100 feet.

In no case may the range of a seed source exceed one-quarter of a degree square or 1000 feet in elevation.

Origin

The origin of seed will be identified as either

- a) indigenous - collected from a stand of trees which has been continuously regenerated by natural regeneration, or one raised artificially from seed collected in an

- indigenous stand of the same region of provenance, or
- b) non-indigenous - collected from a stand which grew from seeds or plants that are introduced.

RULES

Rules and regulations under which the scheme was implemented in 1970 have been revised to provide greater assurance that the seeds have been collected, processed and distributed in a manner that ensures their trueness to name.

1. The C.F.S., as the Designated Authority, will issue Certificates of Provenance and labels in the forms shown in Appendices B and C, respectively, provided that it is satisfied as to the purity of the material, accuracy of the source information given, and the exporter's compliance with these rules. Assurance of the C.F.S. concerning these matters will be based on information provided by exporters, and inspections and audits of their operations and records.
2. The locations of the extraction plants and seed stores and the mailing and telephone addresses of the persons in charge must be registered with the C.F.S.
3. Collection must be so organized as to ensure trueness of source information. This requires that cones be picked by organized crews directly supervised at all times by a company representative. Cones not picked under continuous supervision of a representative of the company will not be certified.
4. Cones must be collected in locations and at times designated by the company representative. The number of collection sites will be

limited to enable supervision of cone collecting by the company representative at all times throughout the collection period.

5. The number of collections that can be certified will depend on the time that is available for field inspection by C.F.S. inspectors. Companies should therefore indicate their intended collection sites in order of priority. The C.F.S. will then state which collection operations it can inspect.
6. At least three weeks before collection is to begin, the C.F.S. must be given the following information:
 - (a) Plans for the collection of seed for export, including
 - i. Names, addresses and telephone numbers of company field representatives.
 - ii. Location of each collection site, including local or place name.
 - iii. Alternative locations for areas listed in "ii".
 - iv. Order or priority of collection sites for inspection under the scheme.
 - v. Species, and proposed quantity of cones to be collected, by species.
 - vi. Approximate starting and completion dates for cone collection for each species.
 - vii. Procedures to be followed by cone collection crews and supervisors to ensure trueness of source information.
 - (b) Arrangements for storage of cones at field depots and transportation to processing plants.

- (c) Location of processing plants to be used and proposed dates of extraction, cleaning, packaging and storage of the seed.
 - (d) Location of the seed stores to be used.
 - (e) Measures that will be used to ensure the maintenance of the identity of the seed at all stages.
 - (f) The system of records to be used.
7. When definite dates are determined for cone collection, the C.F.S. inspector must be advised.
 8. The C.F.S. must be notified immediately of any changes in the aforementioned plans, procedures or dates.
 9. A register must be maintained by the company to show for each seed lot all information required to complete the certificate, name of company field representative, location of processing plant and seed store used, quantities of cones collected, amounts of seed extracted and stored, dates and quantities of seed shipped, and names and addresses of consignees.
 10. Company records concerning seed collection, processing, storage and shipment must be made available to the C.F.S. and its inspectors upon request.
 11. Before Certificates of Provenance and labels can be issued, the exporter must make written application to the C.F.S. in the form shown in Appendix D. In this application, the exporter must declare that the seed is described and that it was collected and processed in compliance with the zones of provenance and rules that apply.
 12. When there is more than one request for certification of seed from a

single source, suffix letters will be used with the certificate reference number, e.g. CDN-0010-71 and CDN-0010(a)-71.

13. A separate Certificate of Provenance will be issued for each package of seed for each seed lot.
14. A Certificate of Provenance will not be issued once the seed has left Canada. For the purpose of certification, "seed" is defined as material of which at least 95% by weight is actual seed of the designated species.
15. Seed intended for export must be marketed in packages to which labels issued by the C.F.S. are affixed with a seal by the supplier. Each label will show the reference number of the relevant Certificate of Provenance and a duplicate label will be placed inside the package.
16. Once a certified seed lot has been packaged, sealed and labelled, the exporter may break the seal to enable seed to be supplied in smaller packages. However, all such actions must be recorded and the exporter must apply to the C.F.S. for amended Certificates of Provenance and labels for the smaller packages. Certificates and labels relating to such opened packages must be returned to the C.F.S. for cancellation as soon as the amended documents are received by the company.
17. If the C.F.S. becomes aware of any infringement of the rules under which the scheme operates, or if it is of the opinion that the exporter's operation does not ensure trueness to name of the seed to be certified, it may refuse to proceed with inspection or to issue Certificates of Provenance.
18. The operation and rules of this scheme in no way absolve participants or their agents or employees from compliance with Government of Alberta

regulations or other requirements as they pertain to forests and forest tree seed in the Province.

19. All correspondence with the C.F.S. concerning the scheme in Alberta will be directed to:

Director,
Northern Forest Research Centre,
Canadian Forestry Service,
Department of the Environment,
5320 - 122nd Street,
Edmonton, Alberta.

APPENDIX A

SELECTED CLIMATIC DATA FOR FOREST REGIONS IN ALBERTA¹

Station	Years Observed	Location		Temperature - °F						Precipitation	
		Lat.	Long	Mean Annual Temp.	Jan. av. daily min. temp.	July av. daily max. temp.	Av. date mean temp. reaches 42°F	Av. length growing season 42°F+	Mean temp. growing season	Mean rainfall growing season	Mean annual precip.
Boreal Region											
B.17 Camrose	16	53°	113°	36F	- 7F.	77F.	Apr.25	163	54F	10.5"	15.5"
B.18b Hay River	45	61°	116°	25	-21F.	70F.	May 18	130	53F	5.8"	12.0"
B.19a Edson	22	54°	116°	36	- 2F.	75F.	Apr.27	160	53F	12.7"	18.6"
Sub-alpine Region											
SA.1 Lake Louise	21	51°	116°	31	- 8F.	71	May 15	127	50F	7.8"	23.8"

¹ Rowe, J.S. 1959. Forest Regions of Canada. Dept. of Northern Affairs and Natural Resources. Forestry Branch Bull. 123. 71p.

APPENDIX B

CERTIFICATE OF PROVENANCE

issued in accordance with the O.E.C.D. Scheme for Forest Reproductive Material

Country _____ Reference No. _____

It is certified that the forest reproductive material described below has been produced in accordance with the O.E.C.D. Scheme for Forest Reproductive Material.

1. Category of reproductive material: _____ Source-Identified _____

2. Nature of produce: _____ Seed _____

3. Genus, species, sub-species

(a) Common name _____

(b) Botanical name _____ (1) _____

4. Place or Zone of Provenance: Forest Region and Section (2) _____

Latitude from _____ to _____

Longitude " _____ to _____

Elevation " _____ ft to _____ ft

5. Origin: Indigenous _____ Unknown _____ Introduced from _____

6. Year of ripening of seed: _____

7. Weight of seed: _____

8. Remarks: _____

Name and Address of Designated Authority:

(Stamp of Designated Authority)

- (1) Nomenclature as in Hosie, R.C.1970.
Native Trees of Canada. 7th Edition.
Canadian Forestry Service, Dept. of
Fisheries and Forestry.

Signature: _____

Date: _____

- (2) Forest Regions and Sections from:

Rowe, J.S. 1959. Forest Regions of Canada. Dept. of Northern
Affairs and Natural Resources. Forestry Branch Bull.123.71 p.

APPENDIX C

LABEL to be used in accordance with the
O.E.C.D. Scheme for Forest Reproductive Material

OBVERSE SIDE

SPECIES (BOTANICAL NAME) _____		O.E.C.D. SCHEME FOR FOREST REPRODUCTIVE MATERIAL
SUBSPECIES, VARIETY OR CULTIVAR NAME _____		
CATEGORY _____	Weight _____	
CERTIFICATE NUMBER _____		
PLACE OR ZONE OF PROVENANCE _____		
LATITUDE	FROM _____ TO _____	
LONGITUDE	FROM _____ TO _____	
ELEVATION	FROM _____ ft. TO _____ ft.	

REVERSE SIDE

<p>DESIGNATED AUTHORITY</p> <p>Regional Director Canadian Forestry Service Northern Forest Research Centre 5320 - 122nd Street Edmonton, Alberta Canada</p> <p>Warning: Certification not valid unless label is fastened to container by unbroken seal and there is a duplicate label inside the container</p>	<p>SYSTEME O.C.D.E. POUR DES MATERIELS FORESTIERS DE REPRODUCTION</p>
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Color: Both sides shall be yellow with the
free end overprinted black for a
distance of 3 cm.

APPENDIX D

TO: Director
Northern Forest Research Centre
Canadian Forestry Service
5320 - 122nd Street
Edmonton, Alberta

Request for Certification of Source-Identified Forest Tree Seed.

1. Genus, species, sub-species _____
2. Zone of Provenance: Forest Region and Section _____
Latitude from _____ to _____
Longitude " _____ to _____
Elevation " _____ ft to _____ ft
3. Local or Place Name _____
4. Origin:
Indigenous _____ Unknown _____ Introduced from _____
5. Year of ripening of seed _____
6. Number and weights of packages _____
7. Company field representative _____
Location of: Seed processing plant _____
Storage plant _____
8. Exporter's stock number _____
9. I _____ certify that this seed is
described and has been collected and processed in compliance
with the rules and the zones of provenance that apply to the
O.E.C.D. Scheme.
Name of Exporting Firm _____
Signature _____
Date _____