#### STATUTORY INSTRUMENTS

## 1977 No. 891

#### **SEEDS**

## The Forest Reproductive Material Regulations 1977

Made - - - 23rd May 1977

Laid before Parliament 2nd June 1977

Coming into Operation 1st July 1977

The Minister of Agriculture, Fisheries and Food, the Secretary of State for Scotland and the Secretary of State for Wales, acting jointly, in exercise of the powers vested in them by sub-sections (1), (1A), (2), (3), (4) and (8) of section 16 of the Plant Varieties and Seeds Act 1964(a) as amended by section 4(1) of, and sub-paragraphs (1), (2), (3), (4) and (5) of paragraph 5 of Schedule 4 to, the European Communities Act 1972(b), and all other powers enabling them in that behalf, after consultation with the Council on Tribunals and with representatives of such interests as appear to them to be concerned, hereby make the following regulations:—

#### PART I

#### GENERAL

#### Citation and commencement

- 1.—(1) These regulations may be cited as the Forest Reproductive Material Regulations 1977.
  - (2) These regulations shall come into operation on 1st July 1977.

## Interpretation

- 2.—(1) The Interpretation Act 1889(c) shall apply for the interpretation of these regulations as it applies for the interpretation of an Act of Parliament and as if these regulations and the regulations hereby revoked were Acts of Parliament.
  - (2) In these regulations, unless the context otherwise requires—
    - "the Act" means the Plant Varieties and Seeds Act 1964 as amended by section 43 of, and Schedule 7 to, the Agriculture (Miscellaneous Provisions) Act 1968(d) and section 4(1) of, and paragraph 5 of Schedule 4 to, the European Communities Act 1972;
    - "basic material" means-
      - (a) in relation to forest reproductive material produced by sexual means, stands of trees and seed orchards, and
      - (b) in relation to forest reproductive material produced by vegetative means, clones and mixtures of clones;
  - (a) 1964 c. 14.
- (b) 1972 c. 68.
- (c) 1889 c. 63.

- "clone" means a group of plants produced vegetatively from one original seedling or stock (and includes parts of plants so produced);
- "Commissioners" means Forestry Commissioners;
- "cones" means cones containing seed;
- "forest reproductive material" means-
  - (a) seed and cones intended for the production of plants,
  - (b) parts of plants intended for the production of plants, and
  - (c) young plants raised from seed or from parts of plants, natural seedlings and sets,

derived from basic material of the genera and species specified in Schedule 1;

- "marketing" means exposure for sale, offer for sale, sale or delivery, and "marketed" shall be construed accordingly;
- "Member State" means a state, other than the United Kingdom, which is a member of the European Communities;
- "National Register" means the National Register of Basic Material for the Production of Forest Reproductive Material established in accordance with regulation 5(1) of the 1973 Regulations;
- "1973 Regulations" means the Forest Reproductive Material Regulations 1973(a), as amended(b);
- "official testing station" means the official testing station for forest reproductive material in Great Britain established by the Commissioners;
- "origin" means the place in which an indigenous stand of trees is growing, or the place from which a non-indigenous stand was originally introduced;
- "parts of plants" means cuttings, layers, roots and scions;
- "provenance" means the place in which any stand of trees, whether indigenous or non-indigenous, is growing;
- "region of provenance" means for a species, a sub-species or variety, the area or group of areas subject to practically uniform ecological conditions in which are found stands showing similar phenotypic or genetic characteristics: Provided always that the region of provenance of the forest reproductive material produced in a seed orchard shall be the region of provenance of the basic material used for the establishment of that orchard;
- "seed" includes fruits;
- "seed orchard" means a plantation of selected clones or progenies which is isolated or laid out to avoid or reduce pollination from outside sources, and managed so as to produce frequent, abundant and easily harvested crops of seed;

<sup>(</sup>a) S.I. 1973/944 (1973 II, p. 2843).

<sup>(</sup>b) S.I. 1973/1108, 1974/877 (1973 II, p. 3388; 1974 II, p. 3342).

- "selected reproductive material" means—
  - (a) forest reproductive material derived from basic material approved for registration in accordance with paragraph (2)(a) and (b)(i) of regulation 5 of these regulations or (in relation to basic material approved for registration before 1st July 1977) in accordance with regulation 6(2) of the 1973 Regulations;
  - (b) forest reproductive material officially designated as selected reproductive material under legislation of a Member State or Northern Ireland corresponding to paragraph (2)(a) and (b)(i) of regulation 5 of these regulations or to regulation 6(2) of the 1973 Regulations.
- "small quantity of seed" means a quantity of seed sufficient to produce not more than 1,000 useable plants:
- "Test Certificate" means a test certificate issued under regulation 13 of these regulations or under regulation 8 of the 1973 Regulations;
- "tested reproductive material" means-
  - (a) forest reproductive material derived from basic material approved for registration in accordance with paragraph (2)(a) and (b)(ii) of regulation 5;
  - (b) forest reproductive material officially designated as tested reproductive material under legislation of a Member State or Northern Ireland corresponding to paragraph (2)(a) and (b)(ii) of regulation 5;
- "the Tribunal" means the Plant Varieties and Seeds Tribunal established by section 10 of, and Schedule 4 to, the Act.
- (3) Any reference in these regulations to a numbered regulation or a schedule is a reference to the regulation or schedule so numbered in these regulations.

## Application

- 3.—(1) These regulations shall not apply to—
  - (a) seed or cones collected or marketed for export to countries other than Member States;
  - (b) parts of plants or young plants taken, raised or marketed for purposes other than the production of wood;
  - (c) seed or cones authorised by the Commissioners in writing to be used in tests or for scientific purposes.
- (2) Regulations 8, 9, 10, 11(1)(a), 14 and 15 shall not apply to—
  - (a) small quantities of seed not intended for forestry purposes;
  - (b) parts of plants or young plants intended for export to countries othe than Member States, or authorised by the Commissioners in writing to be used in tests or for scientific purposes;
  - (c) forest reproductive material authorised by the Commissioners in writing to be used in selection work.

#### PART II

## REGISTRATION OF BASIC MATERIAL AND DELINEATION OF REGIONS OF PROVENANCE

## National Register of Basic Material

- 4.—(1) The Commissioners shall continue to maintain the National Register which shall be kept at the Commissioners' principal office and in which shall be recorded the particulars of such basic material as may be approved and accepted by the Commissioners for registration.
- (2) A copy of the National Register shall be held at the official testing station, and at every Forestry Commission Conservancy Office in Great Britain.
- (3) The Commissioners shall provide reasonable facilities for inspecting the National Register and each of the copies thereof mentioned in paragraph (2) of this regulation, and for taking copies of and extracts from them.

## Registration of basic material

- 5.—(1) An owner of basic material seeking approval and registration thereof in the National Register shall apply in writing to the Commissioners who, upon receiving payment of their fee for their services in connection with such application, shall arrange for an inspection of the basic material to be made by a Forestry Commission officer.
- (2) The Commissioners shall not approve basic material for registration unless they are satisfied—
  - (a) that its qualities are such as to make it suitable for reproductive purposes and that it has no characteristics undesirable for forestry purposes and
  - (b) either—
    - (i) that the material conforms to the requirements set out in Schedule 2, or
    - (ii) that the material shows improved value for use as determined by tests which conform to the requirements set out in Schedule 3.
- (3) If the basic material inspected is approved for registration the Commissioners shall register it in the National Register.
- (4) Entries in the National Register relating to basic material approved for registration in accordance with paragraph (2)(a) and (b)(i) of this regulation shall be made separately from entries relating to basic material so approved in accordance with paragraph (2)(a) and (b)(ii).
- (5) The Commissioners may at any time remove basic material from the National Register if they are satisfied that it should be so removed having regard to the matters mentioned in paragraph (2) of this regulation.
- (6) For the purposes of this regulation basic material shows improved value for use when the genetic characters of that material, taken as a whole, show a distinct improvement for forestry purposes as compared with the genetic characters of standards selected in accordance with Schedule 3, at least for cultivation in the region in which those standards are generally used.

Appeals against refusal to register or removal from the National Register

- 6.—(1) Where the Commissioners propose to make a decision—
  - (a) to refuse to register basic material submitted for registration, or
  - (b) to remove basic material from the National Register,

the Commissioners shall give to the owner of the basic material notice of the proposal together with the reasons for it; and the owner may, within 28 days from the day on which the notice is given, submit to the Commissioners representations in writing or a written request to make oral representations with respect to the proposal.

- (2) Where, within the period specified in paragraph (1) above, the owner of the basic material shall submit a request to make oral representations, the Commissioners shall give him an opportunity to be heard either in person or by any person authorised by him in that behalf.
- (3) The Commissioners shall not decide to refuse to register the basic material submitted for registration or, as the case may be, to remove the basic material from the National Register until after the expiration of the said period and, before deciding whether or not to do so, shall consider any representations made to them by or on behalf of the owner of the basic material.
- (4) For the purpose of making a decision in any such case a quorum of the Commissioners shall be one Commissioner, and the procedure to be followed at an oral hearing before the Commissioners shall be such as the Commissioners may direct.
- (5) Where the Commissioners decide to refuse to register basic material submitted for registration or to remove basic material from the National Register, they shall notify the owner accordingly and shall at the same time furnish a statement of their reasons for the decision.
- (6) An appeal shall lie to the Tribunal from any decision of the Commissioners as to a matter mentioned in paragraph (1) of this regulation.
- (7) Where an appeal is brought against a decision of the Commissioners under the foregoing provisions of this regulation, the operation of such decision shall be suspended pending the final determination of the appeal; and the Commissioners shall take such steps as may be necessary to give effect to any decision given on the final determination of an appeal.

## Map of regions of provenance

- 7.—(1) The Commissioners shall prepare a map of the regions of provenance of basic material intended for the production of selected reproductive material in Great Britain delineating their boundaries by reference to boundaries of local government areas or geographic or altitudinal features.
- (2) The map shall be held at the Commissioners' principal office, and a copy thereof shall be kept at the official testing station and at every Forestry Commission Conservancy Office in Great Britain; and the Commissioners shall provide reasonable facilities for inspecting the said map and the said copies thereof, and for taking copies of and extracts from them.
- (3) The Commissioners may from time to time alter the map so as to show any change which has occurred to any of the boundaries of the regions of provenance, and the said copies thereof shall be altered accordingly.

#### PART III

## COLLECTION, MARKING AND LABELLING OF FOREST REPRODUCTIVE MATERIAL FOR MARKETING

Collection and taking of forest reproductive material

- 8.—(1) Except in the case of forest reproductive material authorised for marketing under regulation 11(2), no seed or cones shall be collected, and no parts of plants shall be taken, for the purpose of marketing unless they are derived from basic material which has been approved by the Commissioners and registered by them in the National Register.
- (2) Any person proposing to collect seed or cones or to take parts of plants for the purpose of marketing shall inform the Commissioners of the proposed collection or taking at least 28 days before the date on which the collection or taking is to commence stating—
  - (a) his name, his address and (if any) his telephone number,
  - (b) the place of collection or of taking, and
  - (c) the proposed date of commencement, and the approximate date of completion, of the collection or taking.
- (3) On completion of the collection of any lot of seed or of the taking of any lot of parts of plants the owner thereof shall inform the Commissioners in writing of the kind and the quantity of seed collected or of parts of plants taken, and the Commissioners shall—
  - (a) if satisfied that the seed or parts of plants are derived from basic material approved and registered in accordance with regulation 5, issue to the owner in respect of the lot a Master Certificate of Provenance or of Clonal Identity in the form set out in Schedule 4, or
  - (b) if the seed or parts of plants have been authorised for marketing under regulation 11(2), issue to the owner in respect of the lot a certificate of provenance or of clonal identity in the form set out in Schedule 9, or in a form to the like effect.
- (4) On completion of the collection of any lot of cones the owner thereof shall inform the Commissioners in writing of the quantity of cones collected, and on completion of extraction of seed therefrom the owner of the seed shall inform the Commissioners in writing of the kind and the quantity of seed extracted and the Commissioners shall—
  - (a) if satisfied that the seed is derived from basic material approved and registered in accordance with regulation 5, issue to the owner in respect of the seed extracted from the lot a Master Certificate of Provenance in the form set out in Schedule 4, or
  - (b) if the seed has been authorised for marketing under regulation 11(2), issue to the owner in respect of the seed extracted from the lot a certificate of provenance in the form set out in Schedule 9, or in a form to the like effect.

#### Identification criteria

9.—(1) Forest reproductive material shall during collection, taking, extraction, processing, storage, transportation and raising, for the purpose of marketing, and while being marketed, be kept by the person in possession thereof in

separate lots distinguished from each other by reference to the following criteria (hereafter in this regulation referred to as the "identification criteria"), namely—

- (a) the species and, where applicable, sub-species, variety, clone;
- (b) in the case of selected reproductive material or tested reproductive material, its category;
- (c) in the case of selected reproductive material, its region of provenance;
- (d) in the case of tested reproductive material, its basic material;
- (e) in the case of forest reproductive material which, although not derived from officially approved basic material, has been authorised for marketing under regulation 11(2), its place of provenance and the altitude of that place;
- (f) its origin;
- (g) in the case of seed, the year in which it shall have ripened; and
- (h) (i) in the case of seedlings, the length of time the seedlings have been in the seed bed, and also,
  - (ii) in the case of transplants, the length of time they have existed as seedlings and as transplants, respectively, and the number of times transplanted.
- (2) The person in possession of any such lot shall—
  - (a) if it is not marked as mentioned in this paragraph when it comes into his possession, mark it, and
- (b) secure that until it leaves his possession it continues to be marked, with the particulars of the identification criteria relating to it, and such marking shall be effected in accordance with regulation 10.

Marking of forest reproductive material for the purposes of regulation 9

- 10.—(1) The marking of each lot of forest reproductive material required by regulation 9 to be marked shall be effected as follows, that is to say, there shall be indelibly marked in writing, printing, stencilling or by any other appropriate means—
  - (a) where the lot is in a single bundle or sack or package or in a single container of any other kind whatsoever, a label securely attached to such bundle, sack, package or container;
  - (b) where the lot comprises more than one bundle or sack or package or container, a label securely attached to each bundle or sack or package or container in the lot, or, alternatively, where the lot comprises parts of plants or young plants only, a notice displayed in such a manner that it shall be readily observable and be unequivocally associated with the lot; and
  - (c) where the lot is not in a bundle or sack or package or other container, a notice displaying the mark in such a manner that it shall be both readily observable and unequivocally associated with the lot.
- (2) Any label or notice used for the purposes of this regulation and attached or displayed in connection with a lot containing tested reproductive material shall be coloured blue, and any such label or notice attached to or displayed in connection with a lot containing selected reproductive material shall be coloured green.

#### PART IV

#### **MARKETING**

Marketing of forest reproductive material

- 11.—(1) Except as provided by paragraph (2) of this regulation—
  - (a) no forest reproductive material shall be marketed unless—
    - (i) in the case of such material derived from the genera and species listed in paragraph 1 of Schedule 1, it is selected reproductive material or tested reproductive material;
    - (ii) in the case of such material derived from the genera and species listed in paragraph 2 of Schedule 1, it is tested reproductive material;
  - (b) no seed shall be marketed—
    - (i) except under the description "EEC Standard";
    - (ii) except in a sealed package, the sealing device of which shall be such as shall become unserviceable when the package is opened; and
    - (iii) unless a Test Certificate has been issued in respect of it establishing that it complies with the conditions laid down in Part III of Schedule 7, or, in the case of seed imported from a Member State or Northern Ireland it has been established by documentary evidence that it complies with the conditions laid down in Part III of Schedule 7;
    - (iv) in any seed testing year unless either—
      - (aa) it has been officially tested and a Test Certificate issued in respect of it during the same seed testing year as that in which it is marketed, or
      - (bb) in the case of seed imported from a Member State or Northern Ireland, the seed has been tested for the purpose of giving the results required to be given in a Test Certificate during the same seed testing year as that in which it is marketed:

Provided that seed marketed during July or August of any seed testing year shall be deemed to comply with the foregoing provisions of this sub-paragraph if the seed was tested in any of the months of the preceding seed testing year;

- (c) no parts of plants shall be marketed under the description "EEC Standard" unless they comply with the conditions set out in Schedule 5;
- (d) no young plants shall be marketed under the description "EEC Standard" unless they comply with the conditions set out in Schedule 6.
- (2) Any forest reproductive material, the marketing of which is prohibited under paragraph (1) of this regulation may, if the Commissioners so authorise by licence in writing, be marketed during such period or periods and subject to such conditions as the Commissioners may prescribe or impose.
- (3) In this regulation "seed testing year" means the period beginning with the 1st July in any calendar year and ending with the 30th June in the next calendar year.

#### Supplier's Certificate

- 12.—(1) A person who sells any lot of forest reproductive material shall at the time of sale or delivery of the lot or within a period of 14 days after the sale or delivery (whichever is the later) furnish to the buyer a supplier's certificate relating to that lot and which complies with the following requirements of this regulation.
- (2) A supplier's certificate, for the purpose of this regulation, means a document in writing giving the particulars specified in Part I of Schedule 8 and, in addition—
  - (a) in the case of seed, the particulars specified in Part II of Schedule 8, or
  - (b) in the case of young plants or parts of plants sold or delivered under the description "EEC Standard", the particulars specified in Part III of Schedule 8.
- (3) A supplier's certificate which relates to tested reproductive material shall be on blue coloured paper, and such a certificate which relates to selected reproductive material shall be on green coloured paper.
- (4) The particulars required to be furnished in a supplier's certificate relating to seed shall, in relation to items 3, 4, 5, 6 and 7 of Part II of Schedule 8—
  - (a) in the case of seed imported from a Member State or Northern Ireland, correspond to the relevant information set out in a Test Certificate, a supplier's certificate or an equivalent document relating to that seed, or
  - (b) in the case of any other seed, correspond to the test results declared in the Test Certificate relating to that seed.

## PART V

## SEED TESTING

## Seed testing

- 13.—(1) Seed testing in Great Britain for the purposes of these regulations shall be carried out at the official testing station.
- (2) An application for a seed test and Test Certificate shall be made in accordance with the procedure laid down in Part I of Schedule 7 and shall be accompanied by a sample representative of the bulk of the seed to which the application relates and by the fee charged by the Commissioners for their services in connection with the application.
- (3) A sample of the seed to which the application relates shall be taken ir accordance with the rules laid down in Part II of Schedule 7.
- (4) If the test made as a result of the application establishes that the sample sent therewith satisfies the conditions specified in Part III of Schedule 7 the officer in charge of the official testing station shall, on behalf of the Commis sioners, issue to the applicant a Test Certificate in the form set out in Part IV of Schedule 7.

#### PART VI

## IMPORTATION OF FOREST REPRODUCTIVE MATERIAL

Importation of forest reproductive material from Member States

14. Forest reproductive material shall not be imported into Great Britain from a Member State unless accompanied by an official certificate of provenance or of clonal identity issued by a competent authority of that State in the form set out in Schedule 9, or in a form to the like effect, and, in the case of seed, by a document stating in relation to that seed the particulars required to be furnished in Part II of Schedule 8. Such official certificate and any such document shall be produced by the importer or consignee to the proper officer of Customs and Excise at the time of importation.

Importation from countries not being Member States

- 15.—(1) Forest reproductive material shall not be imported into Great Britain from a country which is not a Member State unless—
  - (a) it is accompanied by an official certificate of provenance or of clonal identity issued by a competent authority of that State in the form set out in Schedule 9, or a form to the like effect, and, in the case of seed, by a document stating in relation to that seed the particulars specified in Part II of Schedule 8, and
  - (b) an import licence in respect of it has been issued by the Commissioners, and
  - (c) the said certificate, the said document (if any) and the said import licence are produced by the importer or consignee to the proper officer of Customs and Excise at the time of importation.
- (2) An application for an import licence shall be made to the Commissioners, who may grant the licence, grant it subject to conditions, or refuse it.

## PART VII

## MISCELLANEOUS

Keeping and retention of records

- 16. Any person concerned in the collection, taking, extraction, processing, storage, transportation, raising or marketing of forest reproductive material shall—
  - (a) keep or cause to be kept, if so required by a notice in writing served on him by the Commissioners, such records relating to those activities and in such form as may be specified in the said notice, and shall retain or cause to be retained all such records for the period of time specified in the said notice, and
  - (b) furnish to the Commissioners on request such information relating to those records as they may require.

## Production of records

- 17. Any person concerned in the collection, taking, extraction, processing, storage, transportation, raising or marketing of forest reproductive material shall on request produce to an authorised officer of the Commissioners, and allow the officer to take copies of—
  - (a) records kept by him or on his behalf in pursuance of regulation 16,

- (b) certificates or licences issued to him under these regulations, and copies in his possession of such certificates or licences the originals of which have been issued to other persons, and
- (c) books or records (other than those kept in pursuance of regulation 16) in his possession or control relating to those activities.

## Sampling

- 18.—(1) A sample of seed to be taken by an authorised officer in exercise of the powers conferred by section 25(5) of the Act for the purposes of enforcement of these regulations shall be taken in accordance with the rules laid down in paragraphs 1 to 5 of Part II of Schedule 7.
- (2) A sample of seed taken by an authorised officer shall be divided by him into three parts, of which one part shall be delivered or sent by him to the owner of the seed or his representative, one part shall be delivered or sent to the officer in charge of the official testing station, and the remaining part shall be retained by the authorised officer and be available for production to a court in accordance with section 26(7) of the Act: Provided that where it appears to the person taking the sample that the seed from which the sample has been taken was purchased for use and not for re-sale, the first part of the sample shall be delivered or sent to the last seller of the seed or to his representative in place of the owner of the seed or his representative.
- (3) The weight of a sample taken for the enforcement of these regulations in relation to seed of any species mentioned in part (a) of the table set out in paragraph 6 of Part II of Schedule 7 shall be such as to allow that each of the parts into which the sample is divided is not less than the minimum sample weight indicated in relation to that species in part (a) of that table, and the minimum number of seeds in a sample taken for the enforcement of these regulations in relation to seed of any species mentioned in part (b) of the said paragraph shall be such as to allow that each of the parts into which the sample is divided contains not less than the minimum number of seeds in the sample indicated in relation to that species in part (b) of that table.
- (4) In this regulation "authorised officer" means a person authorised under section 25 of the Act by the Minister of Agriculture, Fisheries and Food as respects England, by the Secretary of State as respects Scotland and Wales, or by the Commissioners.

## Certificates of taking and testing of a sample

19.—(1) A certificate of the taking of a sample of seeds shall, for the purposes of section 26(3) of the Act, be in the form set out in Part I of Schedule 10.

(2) A certificate of the result of a test of a sample of seed taken by an authorised officer for the purposes of Part II of the Act shall be in the form set out in Part II of Schedule 10.

#### Revocation

20. The Forest Reproductive Material Regulations 1973(a), the Forest Reproductive Material (Amendment) Regulations 1973(b) and the Forest Reproductive Material (Amendment) Regulations 1974(c) are hereby revoked.

<sup>(</sup>b) S.I. 1973/1108 (1973 II, p. 3388).

In Witness whereof the Official Seal of the Minister of Agriculture, Fisheries and Food is hereunto affixed on

(L.S.)

John Silkin,

Minister of Agriculture, Fisheries and Food.

20th May 1977.

Bruce Millan,
Secretary of State for Scotland.

23rd May 1977.

John Morris,
Secretary of State for Wales.

17th May 1977.

2490 SEEDS

Regulation 2(2).

## **SCHEDULE 1**

## Genera and species of basic material from which is derived the forest reproductive material to which these regulations apply

1. In relation to forest reproductive material produced by sexual means:

English Name **Botanical** Name Synonym Silver fir Abies alba Mill. Abies pectinata DC Beech Fagus sylvatica L. European Larch Larix decidua Mill. Japanese Larch Larix leptolepis (Sieb. & Zucc.) Gord. Norway spruce Picea abies Karst. Picea excelsa Link Picea menziesii Carr. Sitka spruce Picea sitchensis Trautv. et Mey. Austrian and Pinus nigra Arn. Pinus laricio Poir. Corsican pine Scots pine Pinus sylvestris L. Weymouth pine Pinus strobus L. Douglas fir Pseudotsuga taxifolia Pseudotsuga douglasii (Poir.) Britt. Carr. Pseudotsuga menziesii (Mirb.) Franco Red Oak Quercus borealis Quercus rubra Du Roi Michx. Pedunculate oak Quercus pedunculata Quercus robur L. Sessile oak Quercus sessiliflora Quercus petraea Liebl.

2. In relation to forest reproductive material produced by vegetative means:

Poplar Populus species

Regulation 5(2)(a) and (b)(i).

## **SCHEDULE 2**

## Requirements for the approval of basic material intended for the production of selected reproductive material

## A. Stands

- 1. Location—The stands shall be situated at a sufficient distance from poor stands of the same species or from stands of a related species or variety which can form hybrids with the species in question. This requirement is particularly important when the surrounding stands are not indigenous.
- 2. Uniformity—The stands shall show a normal degree of individual variation in morphological characters.
- 3. Volume production—Where volume production is an essential criterion for approval it must be superior to the accepted mean under similar ecological conditions.

- 4. Wood quality—The quality of wood shall be taken into account and may in certain circumstances be an essential criterion.
- 5. Morphology—The stands shall show particularly good morphological features especially as regards straightness of stem, branching habit, small size of branches and natural pruning; the proportion of forked trees and of those showing spiral grain shall be low.
- 6. Health and resistance—The stands shall in general be healthy and show, in the place where they are growing, maximum resistance to harmful organisms and to adverse external conditions.
- 7. Effective size of the population—The stands shall consist of one or more groups of trees with adequate interpollination. To avoid the unfavourable effects of inbreeding, the stands shall consist of a sufficient number of individuals on a minimum area.
- 8. Age—The stands shall consist of trees of such an age that the criteria given above can be clearly judged.

#### B. Seed Orchards

Seed orchards shall be established in a manner that will ensure that the seed collected will represent at least the average genetic quality of the basic material forming the seed orchard.

## C. Clones

Items 4, 5, 6, 7 and 9 of Part A shall apply insofar as they are appropriate.

Regulation 5(2)(a) and (b)(ii).

#### **SCHEDULE 3**

Requirements for comparative tests for the approval of basic material intended for the production of tested reproductive material

## PART I

## General

- 1. Comparative tests for the approval of basic material are to be prepared, set up, conducted and their results interpreted in such a way as to give an objective comparison, both as between the reproductive materials and with one or preferably several prechosen standards.
- 2. Every care shall be taken to ensure that the reproductive material, including the standards, is representative of the basic material being studied.
- 3. If during tests it is proved that the reproductive material does not possess at least the characters:
  - —which identify its basic material, then such reproductive material must be immediately eliminated;
  - of resistance of the basic material to harmful organisms of economic importance, then such reproductive material may be eliminated.

## PART II

## **Setting Up the Tests**

1. Reproductive material is to be raised in nurseries and planted in the tests in a replicated random layout enabling the possible causes of genetic and environmental variation and interactions and experimental errors to be checked.

- 2. Each experimental unit shall contain a sufficient number of trees in order that the individual characteristics of each material to be examined can be evaluated.
- 3. The basic materials represented and the replicates must be sufficient in number to give a satisfactory degree of statistical accuracy.

## PART III

## **Management of Tests**

- 1. Reproductive materials and standards must be treated in an identical way throughout the test. This includes treatment in the nursery, whether seeds, rooting cuttings or vegetative production of root stocks, and the establishment and management of the forest tests themselves, as regards fertilizing, spacing, pruning and all other methods and techniques of culture and husbandry.
- 2. As regards thinning, the methods used should take into account the development of each reproductive material.

## PART IV

#### Procurement of Reproductive Material for Testing including Standards

- 1. The basic material shall be:
  - (i) well defined as regards provenance, constitution, composition and reasonable isolation from foreign pollen;
  - (ii) of such age and development that reasonable stability of the main features of the offspring can be expected.
- 2. Sexual reproductive material shall be:
  - (i) harvested in years of good flowering and good fruit setting unless artificial pollination is used;
  - (ii) harvested by methods that ensure that the samples obtained are representative.
- 3. Vegetative reproductive material shall originate from a single individual.

### PART V

## Supplementary Requirements for Standards

- 1. Standards should, if possible, have been used over a sufficiently long period in the region in which the test is to be carried out. They shall normally be represented by materials which, at the time of commencement of testing, have proved their suitability for forestry in the ecological conditions for which it is proposed to approve the material. They should come as far as possible from approved basic material.
- 2. In the case of sexual reproductive material, clones or progenies from controlled pollination may also be used as standards.
- 3. Whenever possible, several standards are to be used. When it is shown to be necessary, the standard may be replaced by the most suitable of the materials being tested.
  - 4. The same standards shall be used in as many tests as possible.

#### PART VI

#### Characters to be Examined

- 1. The characters to be examined shall be:
  - -identifying characters, in the case of basic material;
  - -behavioural characters;
  - —production characters.
- 2. The identifying characters of the basic material shall be entered, in sufficient detail, on a descriptive sheet.
- 3. As regards behavioural and production characters, weight shall usually be given to growth, adaptability and resistance to abiotic factors and to harmful organisms of economic importance. In addition, other characters, considered important in view of the objective sought, shall be considered and evaluated in relation to the ecological conditions of the region in which the test is carried out.

## PART VII

#### **Analysis of Results and Evaluation**

- 1. The results of the tests as to behavioural and production characteristics for each character evaluated as provided in paragraph 3 of Part VI shall be set out separately in the form of numerical data. These characters shall be evaluated individually.
- 2. Material will be classified for each behavioural and production character for each environment tested. The means and variance of the tests are to be presented.

The significance level of differences shall be shown. The difference in both absolute and relative terms shall be expressed as far as possible as genetic gain relative to the standard.

The age of the reproductive material at which the character is evaluated should be indicated.

3. A significant superiority, both economically and statistically (95 per cent. level), as compared with the standards must be demonstrated for at least one important character, see paragraph 3 of Part VI. Where superiority is found for only one important character the values of at least two other important characters as assessed under paragraph 3 of Part VI must at least achieve the average values of the standards for these two characters.

It shall be clearly reported if there are any characters as assessed under paragraph 3 of Part VI which are significantly (95 per cent. level) inferior to those of the standards. However, if their efforts are likely to be compensated for by favourable characters, this must be stated.

- 4. When the aim of the test is to approve basic material with reference to a character which is essential for survival under extreme ecological conditions, equality to the average value of the standards for the other characters is not required.
- 5. The methodology used for the test and the detailed results obtained shall be made available to those able to show a legitimate interest.

## PART VIII

## **Early Tests**

Nursery, greenhouse and laboratory tests are acceptable as valid early tests if it can be shown that there is a close correlation between the results shown in the early tests and subsequent stages of development of such material.

Regulation 8(3) and (4).

## **SCHEDULE 4**

## Master Certificate of Provenance(1) Master Certificate of Clonal Identity(1)

Certificate No.....

| This    | is   | to  | certify  | that  | the   | forest | reproc  | ductive | mater   | ial 1 | listed | below   | is   | corre | ctly |
|---------|------|-----|----------|-------|-------|--------|---------|---------|---------|-------|--------|---------|------|-------|------|
| describ | ed   | and | l is app | roved | l for | marke  | ting in | accord  | lance v | with  | the F  | orest F | lep: | roduc | tive |
| Materi  | al l | Reg | ulation  | s 197 | 7.    |        |         |         |         |       |        |         |      |       |      |

|  | eproductive material listed below is correcting in accordance with the Forest Reproducti |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| 1. Type of Material: Seed/Young                                | Plants/Parts of Plants(1):   |  |  |  |  |  |  |  |
| 2. Genus and species, sub-species                              | , variety,(1):   |  |  |  |  |  |  |  |
| <ul><li>(a) Common name:</li><li>(b) Botanical name:</li></ul> |  |  |  |  |  |  |  |  |
| 3. Clone, for vegetative reproduct                             | tive material(1):  |  |  |  |  |  |  |  |
| 4. Category: tested or selected(1):                            |  |  |  |  |  |  |  |  |
| 5. Region of Provenance (for selected reproductive material):  |  |  |  |  |  |  |  |  |
| 6. Basic material (for tested repro                            | 6. Basic material (for tested reproductive material):                                    |  |  |  |  |  |  |  |
| 7. Origin:   | 7. Origin:   |  |  |  |  |  |  |  |
| 8. Year in which the seed shall ha                             | ave ripened(1):  |  |  |  |  |  |  |  |
| 9. Quantity of material:                                       |  |  |  |  |  |  |  |  |
| 10. Additional information(1):                                 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | Signed: (Authorised by the Forestry Commission)  |  |  |  |  |  |  |  |
|  | Address:   |  |  |  |  |  |  |  |
| (Stamp of Forestry Commission)                                 | Date:  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Note: (1) Delete words which do not apply.

Regulation 11(1)(c).

#### **SCHEDULE 5**

#### Conditions which Parts of Plants must satisfy

- 1. Lots shall include at least 95 per cent. of parts of plants of fair marketable quality.
- 2. Fair marketable quality shall be determined by reference to the criteria relating to general characteristics, health and, where appropriate, size, set out in the two following paragraphs.
  - 3. Populus species:
    - (1) General characteristics and health
      Parts of plants shall not be considered to be of fair marketable quality if:
      - (a) the wood is unripe;
      - (b) the wood is more than two seasons old;
      - (c) they have abnormalities of form, such as forking, branching or excessive bending;
      - (d) they have less than two well-formed buds;
      - (e) they have not been severed with a clean cut;
      - (f) they are partly or totally dried out, injured or have the bark detached from the wood;
      - (g) they are affected by necroses or damage caused by harmful organisms;
      - (h) they have any other defects which reduce their value for reproductive purposes;

except that paragraphs (a), (b), (c) and (d) shall not apply to root cuttings and soft wood cuttings.

- (2) Minimum dimensions of parts of the plants of the Aigeiros section, other than root cuttings and soft wood cuttings:
  - (a)—minimum length: 20 cm
  - (b)—minimum top diameter:

8 mm for those described as Class 1/EEC

10 mm for those described as Class 2/EEC

4. Forest Species other than Populus:

General characteristics and health

Parts of plants shall not be considered to be of fair marketable quality if:

- (a) they have abnormalities of form or insufficient vigour;
- (b) they have not been severed by a clean cut;
- (c) their age or size makes them unsuitable for propagation purposes;
- (d) they are partially or totally dried out or show injury other than wounds incurred in the taking of cuttings;
- (e) they are affected by necroses or are damaged by harmful organisms;
- (f) they have any other defects which reduce their value for reproductive purposes.

NOTE: All these criteria shall be considered in relation to the species or clones in question.

Regulation 11(1)(d).

#### **SCHEDULE 6**

## Conditions which Young Plants must satisfy

- 1. Lots shall include at least 95 per cent. of young plants of fair marketable quality.
- 2. Fair marketable quality shall be determined by reference to the criteria relating to general characteristics, health, age and size, set out in paragraphs 3 and 4 below.
  - 3. General characteristics and health

An asterisk in the following table shows for each genus and species in question the defects which prevent young plants from being classified as of fair marketable quality. All these criteria shall be considered in relation to the species or clone in question and to the suitability of the reproductive material for forestry purposes.

| Defects which prevent young plants from being classed as of fair marketable quality   | Abies alba,<br>Picea          | Larix                       | Pinus                       | Pseudotsuga<br>taxifolia          | Fagus<br>sylvatica,<br>Quercus        | Populus sp             |
|---|-------------------------------|-----------------------------|-----------------------------|-----------------------------------|---------------------------------------|------------------------|
| (a) young plants with unhealed wounds  —except cutting wounds where excess leaders have been removed  —except other such wounds incurred in the taking of cuttings  —except branch wounds | * * * * * * *(1) *(1) * * * * | * * * * * * * * * * * * * * | * * * * * *(1) *(1) * * * * | * * * * * * * * * * * * * * * * * | * * * * * * * * * * * * * * * * * * * | * * * * * * *(2)  *(3) |

- (1) Except where the young plants were taken from the nursery during the first growing season.
  - (2) Not applicable to clones of Populus deltoides angulata.
  - (3) Not applicable to Populus plants butt trimmed in the nursery.
  - (4) Not applicable to sets.
  - (5) Not applicable to Quercus borealis.

## 4. Age and size

## A. Species other than Populus

- (a) Criteria of age and size of young plants shall not apply to young plants which have not been transplanted.
  - (b) Minimum standards for age and size are listed in the table below:

|                                  | Norm   | nal young p   | lants   | Stocky young plants                                    |   |   |  |
|----------------------------------|--|---|---|--|---|---|--|
|                                  | Maximum<br>age in<br>years<br>(See<br>Note 1<br>below) | Height<br>in cm<br>(See<br>Note 2<br>below)                 | Minimum<br>diameter<br>of<br>root<br>collar<br>(mm) | Maximum<br>age in<br>years<br>(See<br>Note 1<br>below) | Height<br>in cm<br>(See<br>Note 2<br>below)                 | Minimum<br>diameter<br>of<br>root<br>collar<br>(mm) |  |
| Abies alba                       | 4<br>5<br>5<br>5<br>5                                  | 10-15<br>15-25<br>25-35<br>35-45<br>45-60<br>60 and<br>over | 4<br>5<br>5<br>6<br>8<br>10                         | 4<br>4<br>5<br>5<br>5<br>—                             | 10–15<br>15–20<br>20–25<br>25–35<br>35–40<br>40 and<br>over | 4<br>5<br>6<br>7<br>8<br>10                         |  |
| Larix                            | 2<br>3<br>4<br>4<br>5<br>5                             | 20-35<br>35-50<br>50-65<br>65-80<br>80-90<br>90 and<br>over | 4<br>5<br>6<br>7<br>8<br>10                         |  |   |   |  |
| Picea abies                      | 3<br>4<br>5<br>5<br>5                                  | 15-25<br>25-40<br>40-55<br>55-65<br>65-80<br>80 and<br>over | 4<br>5<br>6<br>7<br>9                               | 4<br>5<br>5<br>5<br>5<br>5                             | 15-20<br>20-30<br>30-40<br>40-50<br>50-60<br>60 and<br>over | 4<br>5<br>6<br>8<br>9                               |  |
| Picea sitchensis                 | 3<br>4<br>4<br>5<br>5                                  | 20-30<br>30-50<br>50-65<br>65-75<br>75-85<br>85 and<br>over | 4<br>5<br>6<br>8<br>9                               |  |   |   |  |
| Pinus sylvestris                 | 2<br>3<br>3<br>3<br>4                                  | 6–15<br>15–25<br>25–35<br>35–45<br>45–55                    | 3<br>4<br>5<br>6<br>7                               | 2<br>3<br>3<br>3<br>4                                  | 6-10<br>10-20<br>20-30<br>30-40<br>40-50<br>50 and<br>over  | 3<br>4<br>5<br>6<br>7<br>8                          |  |
| Pinus nigra<br>(forma austriaca) | 2<br>3<br>4<br>4<br>4                                  | 6-15<br>15-25<br>25-35<br>35-45<br>45-55                    | 3<br>4<br>5<br>6<br>7                               | 2<br>3<br>4<br>4<br>4                                  | 6-10<br>10-20<br>20-30<br>30-40<br>40-50<br>50 and<br>over  | 3<br>4<br>5<br>6<br>7<br>8                          |  |

|  | Norm   | Normal young plants  |   |  | Stocky young plants   |   |  |  |
|--|--|--|---|--|---|---|--|--|
|  | Maximum<br>age in<br>years<br>(See<br>Note 1<br>below) | Height<br>in cm<br>(See<br>Note 2<br>below)  | Minimum<br>diameter<br>of<br>root<br>collar<br>(mm) | Maximum<br>age in<br>years<br>(See<br>Note 1<br>below) | Height<br>in cm<br>(See<br>Note 2<br>below)                                   | Minimum<br>diameter<br>of<br>root<br>collar<br>(mm) |  |  |
| Pinus nigra<br>(other than forma<br>austriaca) | 2<br>3<br>3<br>4<br>4                                  | 5-10<br>10-20<br>20-30<br>30-40<br>40-50<br>50 and<br>over                               | 3<br>4<br>5<br>6<br>7<br>8                          | 3<br>4<br>4<br>4<br>4                                  | 10-15<br>15-30<br>30-40<br>40-50<br>50 and<br>over                            | 4<br>5<br>6<br>7<br>8                               |  |  |
| Pinus strobus                                  | 2<br>3<br>4<br>4<br>5<br>5<br>5                        | 6-10<br>10-20<br>20-30<br>30-40<br>40-50<br>50-60<br>60 and<br>over                      | 3<br>4<br>5<br>6<br>7<br>8<br>10                    |  |   |   |  |  |
| Pseudotsuga<br>taxifolia                       | 2<br>3<br>3<br>4<br>4<br>4<br>4<br>4<br>4              | 20-25<br>25-30<br>30-40<br>40-50<br>50-60<br>60-70<br>70-80<br>80-100<br>100 and<br>over | 3<br>4<br>5<br>6<br>7<br>8<br>9<br>12<br>14         | 3<br>4<br>4<br>4<br>4<br>4<br>4<br>4                   | 20-25<br>25-35<br>35-40<br>40-45<br>45-55<br>55-65<br>65-70<br>70 and<br>over | 4<br>5<br>6<br>6<br>7<br>8<br>9                     |  |  |
| Fagus sylvatica,<br>Quercus                    | 2<br>3<br>4<br>4<br>5                                  | 15-25<br>25-40<br>40-55<br>55-70<br>70-85<br>85 and<br>over                              | 4<br>5<br>6<br>7<br>9<br>11                         |  |   |   |  |  |

#### **NOTES:**

- 1. Age: Age is expressed in complete years. Each growing season or part thereof shall count as a complete year. The growing season shall be considered as having begun:
  - —in the case of plants with a terminal shoot not yet containing a dormant terminal bud, when this shoot is not less than one quarter of the length of the previous year's shoot.
  - —in the case of young plants with a shorter terminal shoot, when this shoot contains a dormant bud.
- 2. Height: Height shall be measured to within plus or minus 1 centimetre in the case of young plants not exceeding 30 centimetres in height, and to within plus or minus  $2\cdot 5$  centimetres in the case of young plants exceeding 30 centimetres in height.

#### B. Populus

#### (a) Age of young plants

The maximum age shall be four years for the stem and, where appropriate, five years for the root.

(b) Size standards shall apply only to *Populus* plants of the *Aigeiros* section, and shall be as set out in the following table:

| Age                    | Point of diameter | EEC<br>Classifi-                             | Diameter  | Height (m)   |  |  |
|------------------------|-------------------|--|---|--|--|--|
| Age                    | measure-<br>ment  | cation<br>Number                             | (mm)  | minimum  | maximum  |  |
| 0+1                    | 0·50m             | Nla<br>Nlb<br>Nlc<br>Nld<br>Nle<br>Nlf       | 6 to 8<br>more than 8 but not more than 10<br>more than 10 but not more than 12<br>more than 12 but not more than 15<br>more than 15 but not more than 20<br>20   | 1·00<br>1·00<br>1·00<br>1·00<br>1·00                         | 1·50<br>1·75<br>2·00<br>2·25<br>2·50                 |  |
| more<br>than<br>1 year | 1m                | N2<br>N3<br>N4<br>N5<br>N6<br>N7<br>N8<br>N9 | more than 8 but not more than 10 more than 10 but not more than 15 more than 15 but not more than 20 more than 20 but not more than 25 more than 25 but not more than 30 more than 30 but not more than 40 more than 40 but not more than 50 50 | 1·75<br>1·75<br>1·75<br>2·25<br>2·25<br>2·75<br>2·75<br>4·00 | 2·50<br>3·00<br>3·50<br>4·00<br>4·75<br>5·75<br>6·75 |  |

Regulations 11, 13 and 18. Regulation 13(2).

## **SCHEDULE 7**

## **Seed Testing**

## PART I

## Procedure for Applying for a Seed Test

- 1. Applications for a seed test shall be made in writing to the officer in charge of the official testing station at the Forestry Commission Research Station, Alice Holt Lodge, Wrecclesham, Farnham, Surrey.
- 2. The sample of the seed to be tested shall be enclosed in one of the standard seed envelopes obtainable from the official testing station or in an envelope of a similar kind and having an equivalent durability, which envelope shall be packed in a protective outer cover to prevent damage during transit.
  - 3. The following particulars shall be written on the outside of the seed envelope:—
    - (i) Full name and address of sender.
    - (ii) Date of sampling.
    - (iii) Species, and sub-species (if any) and variety (if any) of the seed.
    - (iv) Stock number or reference.
    - (v) Quantity of seed represented by the sample.
    - (vi) The number of the master or other certificate of provenance (if any).
    - (vii) A statement as to whether or not the seed is or has been kept in cold storage.

Regulation 13(3) and 18(1).

#### PART II

#### Rules for the Taking of Samples

- 1. Prior to sampling a seed lot shall be well mixed so as to be as uniform among its parts as is practicable.
- 2. When the seed lot is in sacks or other similar sized containers, the number of containers to be sampled shall be in accordance with the following tables:

| Number of containers Minimum number of containers to be sampled in the lot |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| 1- 5 (inclusive)   | Each container, portions being taken from at least 5 positions |  |  |  |  |  |  |
| 6–14 ",  | Not less than 5 containers                                     |  |  |  |  |  |  |
| 15–30 ,,   | At least 1 container in 3                                      |  |  |  |  |  |  |
| 31–49 ,,   | Not less than 10 containers                                    |  |  |  |  |  |  |
| 50 or more   | At least 1 container in 5                                      |  |  |  |  |  |  |

When there are more than 5 containers in the lot the containers to be sampled must be selected at random.

- 3. For sampling seed lots in containers weighing less than 50kg a 100kg weight of seed is taken as the basic unit. Containers shall be combined to form sampling units weighing a maximum of 100kg (e.g. 5 containers each of 20kg form one unit). For sampling purposes each unit shall be regarded as one container and the sampling intensity prescribed above shall be used.
  - 4. The samples shall be taken in the following manner:
    - (a) Seeds in full sacks or other containers

The sacks or containers shall be sampled at random and samples taken from the top, middle or bottom, but not necessarily from more than one position, of each selected sack or container. The position from which the seed is taken shall be varied from container to container and seed shall be taken from different horizontal positions.

Wherever practicable, seed in sacks shall be sampled with a metal spear, trier or probe with a solid point which shall be of sufficient length to reach beyond the middle of the sack when inserted from the side and shall have an oval aperture so placed that the instrument removes portions of seed of equal volume from each part of the sack through which it travels. The instrument shall be inserted into the sack in an upward direction at an angle of approximately 30° to the horizontal, with its aperture downwards until the aperture reaches the centre of the sack. It shall then be rotated so as to bring the aperture uppermost and withdrawn at once at a decreasing speed so that the quantity of seeds obtained from successive locations increases progressively from the centre to the side of the sack.

Alternatively, a longer instrument may be inserted until the aperture reaches the further side of the sack, rotated in the manner described above and then withdrawn at a uniform speed.

A stick sampler may be used in place of the instrument mentioned above. It may be used horizontally or vertically. If there is more than one aperture it must have transverse partitions so that each aperture opens into a separate compartment; it shall be inserted diagonally into the sack in the closed position, then opened, gently agitated to allow it to fill completely, closed again, withdrawn and emptied.

Seeds in containers other than sacks shall wherever practicable be sampled with an instrument as aforesaid, which shall be used as already described.

Where it is not practicable to sample seeds in sacks or other containers in the manner already described, portions may be taken by hand, care being taken to keep the fingers tightly closed about the seeds so that none may escape as the hand is withdrawn. If necessary, in order to reach the lower levels, part of the contents shall be emptied into another sack or other container.

## (b) Seeds in a partly filled container

The seeds shall be thoroughly mixed by hand and small portions then taken from at least 5 different positions.

#### (c) Seeds in bulk

Portions of seed shall be taken with a stick sampler from at least the number of positions indicated in the table below:—

| Number of position to be sample | Size of bulk       |           |  |
|---------------------------------|--------------------|-----------|--|
| Not less than 3                 | Not exceeding 50kg |           |  |
|                                 | Not exceeding      | Exceeding |  |
| Not less than 5                 | 1,500 kg           | 50 kg     |  |
| At least 1 for each 300 kg      | 3,000 kg           | 1,500 kg  |  |
| Not less than 10                | 5,000 kg           | 3,000 kg  |  |
| At least 1 for each 500 kg      | 5.000 kg 20.000 kg |           |  |

Sampling positions must be selected at random in both vertical and horizontal planes. If the sampler has more than one aperture it shall have transverse partitions so that each aperture opens into a separate compartment.

## (d) Seeds in a cleaning, mixing or dressing machine

Portions of seed shall be drawn during the cleaning, mixing or dressing process so that the entire cross section of the seed stream is uniformly sampled at regular intervals throughout the whole of the process. The frequency shall be at least as indicated in the table below:—

| Number of times to be sampled Not less than 3 | •             | Size of lot<br>Not exceeding 50 kg |  |  |
|---|---------------|------------------------------------|--|--|
|   | Not exceeding | Exceeding                          |  |  |
| Not less than 5                               | 1,500 kg      | 50 kg                              |  |  |
| At least 1 for each 300 kg                    | 3,000 kg      | 1,500 kg                           |  |  |
| Not less than 10                              | 5,000 kg      | 3,000 kg                           |  |  |
| At least 1 for each 500 kg                    | 20,000 kg     | 5.000 kg                           |  |  |

5. When the individual portions taken from the lot exceed the amount required they shall be put together in a clean receptacle and well mixed. The composite sample so obtained shall be reduced by using an efficient seed divider.

6. Maximum weights of lots sampled and minimum weights of, or minimum numbers of, seeds in samples to be submitted for testing

In relation to seed of the species mentioned in the table below, the maximum weight of seed in a lot sampled and the minimum weight or the minimum number of seeds in a sample submitted for testing shall be as set out in the table below:—

|     | Specie  | s |      |      | Minimum<br>sample<br>weight<br>(gm)                           | Maximum<br>lot<br>weight<br>(kg)   |
|-----|---|---|------|------|---|--|
| (a) | Abies alba Mill Fagus sylvatica L Larix decidua Mill Larix leptolepis (Sieb. & Zucc.) (Picea abies Karst Picea sitchensis Trautv. et Mey. Pinus nigra Arn Pinus sylvestris L Pinus strobus L Pseudotsuga taxifolia (Poir.) Brit |   | <br> | <br> | 240<br>1,000<br>25<br>25<br>40<br>25<br>100<br>40<br>90<br>60 | 100<br>5,000<br>1,000<br>1,000<br>1,000<br>1,000<br>1,000<br>1,000<br>1,000<br>1,000 |
|     | Specie  | s |      |      | Minimum<br>number<br>of seeds<br>in sample                    | Maximum<br>lot<br>weight<br>(kg)   |
| (b) | Quercus borealis Michx<br>Quercus pedunculata Ehrh.<br>Quercus sessiliflora Sal   |   | <br> | <br> | 500<br>500<br>500   | 5,000<br>5,000<br>5,000  |

Regulations 11(1)(b) and 13(4).

## PART III

## Conditions which Seed must Satisfy

1. Seed shall comply with the conditions as to maximum permitted percentage by weight of seed of other forest tree species set out in the following table:—

| Maximum permitted percentage<br>by weight of seed of other<br>forest tree species   |
|---|
| 0·1% 0·1% 0·1% 0·5% (or 1·0% of other <i>Larix</i> seed) 0·5% (or 1·0% of other <i>Larix</i> seed) 0·5% 0·5% 0·5% 0·5% 0·5% 0·5% 0·5% 0·1% (or 1% of other <i>Quercus</i> seed) 0·1% (or 1% of other <i>Quercus</i> seed) |
| _   |

<sup>2.</sup> Seed shall, as far as practicable, be free from harmful organisms which might reduce its quality.

Regulations 11(1)(b) and 13(4).

## PART IV

#### **Test Certificate**

| No |  |  |
|----|--|--|
|    |  |  |

The Official Testing Station for Forest Reproductive Material for Great Britain

Forestry Commission Research Station Alice Holt Lodge, Wrecclesham, Farnham, Surrey

Sender of Sample:

Name:

Address:

Description of Sample:

Species:

Stock No. or reference: Quantity represented:

Number of master or other

certificate of provenance (if any):

Date of sampling:

Date received:

It is hereby certified that the results of the official test are as follows:

- 1. Percentage by weight of seed of other forest species:
- 2. Other particulars:
  - (a) Percentage of purity:
  - (b) Percentage of germination:
  - (c) Number per kilogramme of live seeds:
  - (d) Number per kilogramme of seeds capable of germinating:
  - (e) Weight of 1000 pure seeds in grammes:
- 3. Remarks:

Officer in Charge Date

Regulation 12.

## **SCHEDULE 8**

## Particulars required in a Supplier's Certificate

## PART I

## Particulars to be Furnished in Every Case

- 1. The number of the Master Certificate, if any, or the number, if any, of any certificate of provenance or clonal identity and the name of the country issuing it.
  - 2. Type of material, whether seed, cones, parts of plants or young plants.
  - 3. Quantity of material being marketed.

- 4. Botanical name: the species and, where applicable, sub-species, variety, clone.
- 5. In the case of selected reproductive material or tested reproductive material, its category.
  - 6. In the case of selected reproductive material, its region of provenance.
  - 7. In the case of tested reproductive material, its basic material.
- 8. In the case of forest reproductive material, which, although not derived from officially approved basic material, has been authorised for marketing in accordance with regulation 11(2), its place of provenance and the altitude of that place.
  - 9. Its origin.
- 10. (i) in the case of seedlings, the length of time the seedlings have been in the seed bed, and also,
- (ii) in the case of transplants, the length of time they have existed as seedlings and as transplants, respectively, and the number of times transplanted.
- 11. If the forest reproductive material although not derived from officially approved basic material is authorised for marketing in accordance with regulation 11(2),  $\varepsilon$  statement to that effect.
- 12. If derived from seed orchards a statement that the reproductive material is so derived.
  - 13. Name and address of the supplier.

#### PART II

## Further particulars to be furnished in the case of seed

- 1. Number of Test Certificate (if any).
- 2. The description "EEC Standard", OR, where the seed does not comply with the conditions laid down in Part III of Schedule 7, and is authorised for marketing unde regulation 11(2), a statement that it does not so comply.
  - 3. Percentage of purity.
  - 4. Percentage of germination.
  - 5. Number per kilogramme of live seeds.
  - 6. Number per kilogramme of seeds capable of germinating.
  - 7. Weight of 1000 pure seeds in grammes.
  - 8. Year in which the seed shall have ripened.
  - 9. If the seed has been kept in cold storage, a statement to that effect.

## PART III

## Particulars to be furnished in the case of young plants and parts of plants sold or delivered under the description "EEC Standard"

- 1. The description "EEC Standard".
- 2. EEC classification number, in the case of the genus Populus.
- 3. Location of nursery in which the young plants were raised during their la growing season.
- 4. Age, in the case of parts of plants of the genus *Populus* which have had more that one growing season.
  - 5. The size of the young plants.

Regulations 8(3) and (4), 14 and 15(1).

## **SCHEDULE 9**

# Certificate of Provenance(\*) Certificate of Clonal Identity(\*)

|                  | : No(Country)   | ••••••                                 |  |  |  |
|------------------|---|--|--|--|--|
| inspected by the | tified that the forest reproductive material described below has be competent authorities and that, according to the findings made submitted, it is in conformity with the information given below: | een<br>and                             |  |  |  |
| 1. Nature of     | 1. Nature of produce: seed/parts of plants/young plants(*).   |  |  |  |  |
| 2. Species, su   | 2. Species, sub-species, variety, clone(*):   |  |  |  |  |
| (a) Commo        | on name:  |  |  |  |  |
| (b) Botanio      | al name:  |  |  |  |  |
| 3. Category:     | selected reproductive material/tested reproductive material(*).   |  |  |  |  |
|                  | 4. (a) Region of provenance and provenance for selected reproductive materia  |  |  |  |  |
| (b) Basic n      | naterial—for tested reproductive material:  |  |  |  |  |
|                  | ous/introduced from:(origin)/unknown(*)   |  |  |  |  |
| 5. Kind of ba    | sic material: stands/clones/seed orchards(*).   |  |  |  |  |
| 6. (a) Year o    | 6. (a) Year of ripening of seed(*):   |  |  |  |  |
| (b) Length       | of time in nursery as seedlings/vegetatively reproduced young plants  | ants                                   |  |  |  |
| or transpla      | ints(*):  | ······································ |  |  |  |
| 7. Quantity:     |   |  |  |  |  |
| 8. Number a      | nd nature of packages:  |  |  |  |  |
| 9. Marking o     | f packages:   |  |  |  |  |
| 10. Additional   | information:  |  |  |  |  |
|                  |   |  |  |  |  |
|                  |   |  |  |  |  |
|                  | (Flace and date)  |  |  |  |  |
| (Stamp of com    | etent authority)(Signature)   |  |  |  |  |
|                  | (Position)  |  |  |  |  |

(\*)Delete where inapplicable.

Regulation 19(1).

## **SCHEDULE 10**

## PART I

## Certificate of the Taking of a Sample of Seeds

PLANT VARIETIES AND SEEDS ACT 1964
THE FOREST REPRODUCTIVE MATERIAL REGULATIONS 1977
CERTIFICATE OF THE TAKING OF A SAMPLE OF SEEDS UNDER
SECTION 25(5) OF THE ACT

on the premises of

|  | Name   |   |  |  |  |
|--|--|---|--|--|--|
|  | Address  |   |  |  |  |
|  |  |   |  |  |  |
| 1.   | Species:   |   |  |  |  |
| 2.   | Quantity from which sample   | le is taken:  |  |  |  |
| 3.   | The number of the Master Certificate, if any, or the number, if any, of the certificate of provenance or clonal identity and the name of the country issuing |   |  |  |  |
|  | it:  |   |  |  |  |
| 4.   | Supplier's reference/identity  | number for the seed:  |  |  |  |
| 5.   | . In the case of seed not covered by the Master Certificate, the place of provenance   |   |  |  |  |
|  | and altitude:  |   |  |  |  |
| 6.   | Date of sampling:  |   |  |  |  |
| 7.   | 7. Sampler's reference number:   |   |  |  |  |
| I certify that in taking the sample referred to above I used the method of sampling prescribed in Schedule 7 to the Forest Reproductive Material Regulations 1977. |  |   |  |  |  |
|  |  | (Signed)  |  |  |  |
|  |  | Authorised by the Minister of Agriculture, Fisheries and Food (*) |  |  |  |
|  |  | Authorised by the Secretary of State for Scotland (*)             |  |  |  |
|  |  | Authorised by the Secretary of State for Wales (*)                |  |  |  |
|  |  | Authorised by the Forestry Commissioners (*)                      |  |  |  |
|  |  | Date  |  |  |  |

(\*) Delete where inapplicable.

Regulation 19(2).

## PART II

## Certificate of the Result of a Test of Seeds

## PLANT VARIETIES AND SEEDS ACT 1964 THE FOREST REPRODUCTIVE MATERIAL REGULATIONS 1977

## REPORT OF THE

OFFICIAL TESTING STATION FOR FOREST REPRODUCTIVE MATERIAL IN GREAT BRITAIN ON A SAMPLE TAKEN UNDER SECTION 25(5) OF THE ACT

| Date received at station:   | Name:                       | on the premises of      |  |  |  |
|---|-----------------------------|-------------------------|--|--|--|
|   | Address:                    |                         |  |  |  |
| Date of sampling:   | Quantity represent          | Quantity represented:   |  |  |  |
| Quantity of sample:   | Stock No. or refer          | Stock No. or reference: |  |  |  |
| Description of seed given by the person on whose premises the sample was taken  |                             |                         |  |  |  |
| Species:  | Country in which            | Country in which grown: |  |  |  |
| Sub-species (if any) or variety (if any):   | Number of test certificate: |                         |  |  |  |
| It is hereby certified that the results of the official test are as follows:—  1. Species:  2. Sub-species (if any) and variety (if any):  3. Percentage by weight of other forest species:  4. Percentage of purity:  5. Percentage of germination:  6. Number per kilogramme of live seeds:  7. Number per kilogramme of seeds capable of germinating:  8. Weight of 1,000 pure seeds in grammes:  Other particulars: |                             |                         |  |  |  |
| Remarks:  | Officer in Cha              | ırge                    |  |  |  |
|   | Date                        |                         |  |  |  |

#### **EXPLANATORY NOTE**

(This Note is not part of the Regulations.)

These Regulations, which apply to Great Britain, revoke and re-enact with amendments the Forest Reproductive Material Regulations 1973 (as amended). The regulations are concerned with forest reproductive material (seed, cones, parts of plants and young plants) of the genera and species of tree specified in Schedule 1.

The principal requirements of the regulations are as follows:—

- (1) Basic material (stands of trees, seed orchards and clones) may be approved and registered in Great Britain by the Forestry Commissioners. To be approved for registration, such material must now fall into the category of "selected reproductive material" or "tested reproductive material" as defined. Machinery is provided for appeal against a decision of the Commissioners to refuse registration or to remove from the Register material already registered.
- (2) Forest reproductive material may not be marketed unless it is derived from basic material which has been approved and registered in Great Britain or in Northern Ireland or in another Member State of the European Communities, or has been authorised for marketing by the Forestry Commissioners. In addition seed may not (except with the authority of the Forestry Commissioners) be marketed other than under the description "EEC Standard" and unless it has been established, by a test in the official testing station in Great Britain or a test in Northern Ireland or another Member State, that it is of a certain standard. Young plants and parts of plants shall not be marketed under the description "EEC Standard" unless they satisfy certain conditions.
- (3) Provisions are made for the marking of forest reproductive material marketed or intended for marketing with certain particulars as to its nature and source, for the giving by sellers of supplier's certificates, for the controlling of importation, and for the keeping of records by persons trading in forest reproductive material. A procedure and rules are also laid down for the sampling of seed.

As formerly, the regulations do not apply to seed or cones to be exported to countries other than Member States, or to parts of plants or young plants intended for purposes other than the production of wood. A new exemption is introduced in relation to seed or cones authorised by the Forestry Commissioners to be used in tests or for scientific purposes. The partial exemptions are also extended, and specified regulations do not now apply to small quantities of seed (as defined) not intended for forestry purposes, to parts of plants or young plants intended for export to countries other than Member States or authorised by the Commissioners for use in tests or for scientific purposes, or to forest reproductive material authorised by the Commissioners for use in selection work.

The regulations implement requirements contained in the following instruments of the European Economic Community—

(i) Council Directive No. 66/404/EEC (OJ No. C 125 11.7.1966, p. 2326;
 OJ/SE 1965/1966, p. 161) on the marketing of forest reproductive material, as amended by Council Directive No. 69/64/EEC (OJ No. L 48 26.2.1969, p. 12; OJ/SE 1969 (I) p. 61) and Council Directive No. 75/445/EEC (OJ No. L 196 26.6.1975, p. 14);

(ii) Council Directive No. 71/161/EEC (OJ No. L 87 17.4.1971, p.14; OJ/SE 1971 (I) p.222) on external quality standards for forest reproductive material marketed within the Community, as amended by Commission Directive No. 74/13/EEC (OJ No. L 15 18.1.1974, p. 35).

Any contravention of these regulations will be an offence under Part II of the Plant Varieties and Seeds Act 1964.

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