



2022

OREGON PEPPERMINT AND SPEARMINT  
ROOTSTOCK CERTIFICATION STANDARDS



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**2022 OREGON**  
**PEPPERMINT AND SPEARMINT ROOTSTOCK**  
**CERTIFICATION STANDARDS**

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## CERTIFICATION FEES

- A. Greenhouse Production: \$325.00 for each greenhouse unit provides for up to three inspection trips, each additional trip will be \$90.00.
- B. Mother Block Production: \$300.00 per site.
- C. Field Production:  
\$275.00 minimum per grower for the first acre or fraction thereof, \$35.00 for each additional acre or fraction thereof.

This fee schedule will be applied to the total combined acreage in certified mint production, and is based upon the assumption that all fields are in close proximity.

- D. Reinspection fee is one-half the entire acreage fee for the particular field, or a minimum of \$50.00.
- E. Applications received after the deadline will have an additional \$50.00 fee imposed.
- F. Refunds
  - 1. All refunds will be consistent with the refund policy outlined in the current *Oregon Seed Certification Service Handbook*. To be eligible for refunds, applications must be withdrawn prior to inspection. A Special Request fee will be withheld for processing.
  - 2. No refund will be made after inspection.

## APPLICATION DEADLINES

- A. Greenhouse Inspection: **April 15**.  
Lots planted after April 15 must be signed up within five days after planting has started to avoid late application fees.
- B. Field Inspection: **June 15**.  
Fields planted after June 15th must be signed up within 5 days after planting has started to avoid late application fees.
- C. Acceptance of applications submitted after **July 31<sup>st</sup>** is contingent on approval by OSCS.

**OREGON  
PEPPERMINT AND SPEARMINT ROOTSTOCK  
CERTIFICATION STANDARDS**

**I. CERTIFICATION IN OREGON**

The general standards for certification found in the Oregon Seed Certification Service Handbook are basic to all crops, and together with the following specific regulations constitute the certified Oregon Peppermint and Spearmint Rootstock Certification Standards.

"Certification in Oregon is authorized by Revised Statutes 633.620, and 630. It is administered by the dean of the College of Agriculture at Oregon State University and his appointed representatives. A certification board, appointed by the dean of the College of Agriculture, develops and determines policy; accepts, rejects, and deletes varieties from the certification program; evolves, modifies, and alters standards for certification subject to the approval of the dean. The Certification Program is a service of the College of Agriculture administered through the Oregon State University Extension Service. It is divided into two projects. The Foundation Seed and Plant Materials Project is responsible for making available sufficient improved planting stock to insure a continuous supply of early generation material for later increase by Oregon growers engaged in the certification program. The Certification Project is responsible for maintaining the pedigree of superior varieties under a generation system by appropriate inspection and records to insure that genetically pure varieties are produced under the Oregon Certification program. County Agricultural Extension Agents are the certification representatives within counties. Application blanks, lists of eligible varieties, and the Oregon standards for seed certification can be obtained at each county Extension office. Certification requests shall be filed in the county where the crop is grown."

Under state regulations, control areas are established for the protection of the mint industry. Refer to Oregon State Administrative Rules for further information.

**II. PURPOSE OF CERTIFICATION**

The purpose shall be to provide a service to the public for the maintenance and increase of quality seed and propagating material of varieties grown and distributed in such a manner as to ensure varietal purity through the appropriate application of these rules.

**III. ADMINISTRATIVE DEFINITIONS**

- A. Certification: indicates that the requirements specified in the Oregon Peppermint and Spearmint Rootstock Certification Standards have been met. Except as might otherwise be specified, the measurement method or basis for determining compliance with the standards is a visual inspection of the fields and crops as described in the standards. Certification does not constitute a guarantee or warranty nor is it a representation that the mint rootstock is merchantable or fit for a particular purpose.
- B. Tolerance: a permissible allowance for a disease, varietal mixture or other problem as specified in the standards governing certification of mint rootstock. Except as might

otherwise be specified, the measurement method or basis for determining compliance with the stated tolerances is visual inspection of a sample of the plants in the field. Diseases, varietal mixture, or other problems may be present at a level in excess of specified tolerances, because diseases and diseased plants, varietal mixtures, and other problems which cannot readily be observed visually at the time of official inspection may not be detected at such time. Furthermore, even the inspection of larger samples might not reveal deviations in excess of specified tolerances. Finally, with respect to the term "none" regarding defects as varietal mixture or *Verticillium dahliae*, the tolerance is chosen for reasons of convenience and practicality and is not construed to mean that the lot inspected is free of defects. It does mean that no varietal mixture or *Verticillium dahliae* was observed during the inspection process.

- C. Farm: is defined as any land area, either contiguous or non-contiguous, on which the same vehicles, implements, equipment, or livestock travel. People must thoroughly disinfect or change footwear when traveling between farms to keep separate farm status.
- D. Limited Generation Program: Oregon certified mint rootstock is classified in a limited generation system. "Generation system" means that a rootstock lot drops to the next lower class with each year of production. A typical sequence of field production would include planting greenhouse-produced Nuclear generation rooted cuttings in order to produce four years of certified rootstock. For Program A, the Strict Land Requirements Program, the classification for each sequential year of rootstock production in the field is the Foundation, Registered, Certified 1, and Certified 2 generation, in that order. For Program B, the Field Class Program, the respective classification would be Field Class 1, 2, 3, and 4. The rootstock must be inspected annually and meet the requirements of the certification standards to maintain eligibility for certification.

#### **IV. DISCLAIMER OF WARRANTY**

Certification does not constitute a warranty by either the Oregon Seed Certification Service or the grower of certified mint regarding the quality or freedom from disease of the mint beyond the express representation that the mint was produced and inspected under the regulations of the Oregon Seed Certification Service, and at the time of field inspections met the rules and regulations of the Oregon Seed Certification Service. The reliability of any tests performed on the mint is subject to the normal limits of laboratory accuracy. By acceptance of the mint, the buyer expressly agrees that the exclusive remedy for breach of any warranty shall be limited in all events to a return of the purchase price of the mint.

#### **V. VARIETAL ELIGIBILITY REQUIREMENTS FOR CERTIFICATION**

Varieties eligible for certification must be approved by the Oregon State University Seed Certification Board to be eligible for certification. Eligibility requirements for certification of publicly and privately developed varieties are the same. In Oregon, certification does not imply recommendation. Variety recommendations for the state of Oregon are the responsibility of staff members within the College of Agriculture working in the area of the crops involved. Recommendations are based on research data and knowledge of the variety under consideration. A list of crops approved for certification in Oregon is prepared each year.

To have a new mint variety considered for entry in the certification program, a grower, breeder, or originator shall submit the appropriate form to the Seed Certification Office, Crop Science Bldg., Room 31, Oregon State University, 97331-3003. Appropriate forms can be obtained from the Seed Certification Office. For newly developed varieties this request must be submitted one year prior to the time certification is desired. For varieties previously accepted by other certification or regulatory agencies, this request must be submitted prior to time of planting. For

further information regarding acceptance of a variety for certification by the Certification Board, please see “Variety Eligibility and Acceptance Requirements for Certification” in the Oregon Seed Certification Service Handbook.

## **VI. VARIETIES CERTIFIED**

- A. Peppermint: Mitcham, Todd's Mitcham, Murray Mitcham, Roberts Mitcham, M-83-7
- B. Spearmint: Scotch, Native, Scotch 213, Scotch 227, Scotch 770
- C. New varieties entered for certification in Oregon must be approved by the Oregon Certification Board.

## **VII. GENERAL LAND REQUIREMENTS**

- A. Land to produce certified mint rootstock, must not have produced crops known to be hosts for the *Verticillium dahliae* fungus during the previous three years. This includes the following: artichokes, blackberries, eggplant, hops, lettuce, maples, peppers, potatoes, raspberries, spinach, sunflowers, strawberries, and tomatoes

Excepted from this requirement are fields that have been properly tarp-fumigated, immediately prior to being planted with tissue-cultured strawberry plants, and then followed directly with a certified class of mint rootstock. This exception only applies to mint rootstock certified under *Program B*, the Field Class Program (section XI in these standards).

- B. Certified peppermint and spearmint plantings of different varieties or classes (Registered, Certified 1, etc.) must be physically separated by at least 12 feet if in an open field, or by a roadway, fence row, or similar physical barrier that will prevent mixing of rootstocks.
- C. Land that has grown certified mint may not be replanted to a new variety or lot or produce a rootstock lot of equal or higher generation than that previously produced unless such land has been out of mint production for at least one growing season and volunteer plants have been completely eliminated.
- D. Land planted for the production of certified mint must have no history of uncertified mint.

## **VIII. GENERAL ROOTSTOCK AND DOCUMENTATION REQUIREMENTS**

- A. Only peppermint and spearmint rootstock produced from plants certified by the Oregon Seed Certification Program or, with prior approval, from an official certification program that meets or exceeds Oregon's Certification Standards at all applicable generations, will be eligible for Certification inspection.
- B. Mother Block Rootstock:
  - 1. Site approval by the Oregon Seed Certification Service for Mother Block is required prior to planting.
  - 2. Mother Blocks must be established from Seed Certification inspected greenhouse Nuclear rooted cuttings. The only exception will be the production from the Mother Block maintained by the Mint Industry Research Council (MIRC). This national source of rootstock material may be accepted without Seed Certification inspection by

greenhouse operations for production of rooted cuttings that will subsequently be inspected by Seed Certification for the Nuclear generation.

3. Oregon Seed Certification Service will make two inspections of Mother Block rootstock.
  4. The Mother Block cannot be used for commercial rootstock or oil production.
- C. In the event that Mother Block rootstock is not available for greenhouse increase, the Seed Certification Service may inspect fields currently in the certification program and designate rootstock sources eligible for nuclear cutting increase.
- D. Producers of certified classes of rootstock must provide documentation of the source and generation of the rootstock being planted at the time of application for certification.
- E. Producers of certified rootstock must provide Shipping Certificates to their buyers in order for the rootstock to be considered as certified.

## **IX. CERTIFICATION CLASSIFICATIONS**

Oregon certified mint rootstock is classified in a limited generation system, with the specific classification dropping to the next lower class with each successive production year.

### **A. Mother Block Rootstock**

This is the source of genetic material used by certified greenhouse operations to produce certified Nuclear generation rooted tip cuttings. Mother Blocks are grown and maintained by Seed Certification approved greenhouse operations. Extensions of the Mother Block within the greenhouse are termed Mother Beds.

### **B. Nuclear Rooted Cuttings**

Rooted tip cuttings produced in the greenhouse from Mother Block rootstock, and which have passed certification inspections, are termed Nuclear rooted cuttings.

### **C. Field Production of Rootstock: Two Programs Based on Land Requirements Risk Assessment.**

In response to needs expressed by Oregon mint growers, the Oregon Mint Certification Advisory Committee proposed, and the Oregon Certification Board approved, a supplementary and parallel limited-generation program with land requirements less-strict than those in the previous certification standards

Thus, started in 1989, Oregon certified rootstock growers and buyers now have two parallel limited generation programs, with different levels of risk, from which to choose: Program A, the Strict Land Requirements Program; and Program B, the Field Class Program, with less-strict land requirements.

Other than land requirements the two programs are very similar. There is no tolerance for *Verticillium dahliae* in either program. However, because the Field Class Program has less-strict land requirements, the rootstock grower and buyer assume a greater degree of risk for an undetected presence of *Verticillium dahliae* than they would with rootstock produced in the Strict Land Requirements Program.

#### **1. Program A: Strict Land Requirements Program**

- a. Foundation rootstock: First year increase in field from Nuclear rooted cuttings. (May also be increased one year by greenhouse cuttings using Foundation rootstock as a source with Seed Certification approval; see section XIII B.)
- b. Registered: First year increase from Foundation.
- c. Certified 1: First year increase from Registered.
- d. Certified 2: First year increase from Certified 1.

**2. Program B: Field Class Program**

- a. Field Class 1: First year increase from Nuclear rooted cuttings. (Same additional provision as in IX. C.1.a.)
- b. Field Class 2: First year increase from either Foundation or Field Class 1.
- c. Field Class 3: First year increase from either Registered or Field Class 2.
- d. Field Class 4: First year increase from either Certified 1 or Field Class 3.



**X. SPECIFIC REQUIREMENTS FOR PROGRAM A: Strict Land Requirements Program**

A. The standards in this section are in addition to those presented elsewhere in this handbook, with the exception that standards listed in Section XI do not apply.

B. Land Requirements

1. Farm History:

The specific field site entered for certification must not have ever had a known infestation of *Verticillium dahliae*. See Program B, the field class program (section XI in these standards ) for exceptions.

2. Isolation:

Certified peppermint rootstock may not be grown in any county of Oregon which is known to have *Verticillium* wilt disease caused by strains of *Verticillium dahliae* pathogen to mint, except as specifically provided below:

- a. In counties known to have *Verticillium dahliae*, certified mint may be grown in geographically isolated areas provided approval is given by the Certification Office for the specific location of such certified plantings. Certified mint must not be grown when the specific location is within five (5) miles of uncertified mint unless there are adequate physical and cultural barriers as determined by the Certification Office prior to planting.

In order to maintain farm status in Program A (the Strict Land Requirements Program) when a certified rootstock lot produced on the farm reaches the end of its certification - eligible stand life, and the grower desires to keep the stand in production as uncertified mint, the grower must annually complete an "Uncertified Mint Field Inspection Application" to have the Seed Certification office inspect the field for *Verticillium dahliae* at the regular acreage fee rate. This inspection would only affect the status of other fields eligible for certification, and practices required for a certified field must also be practiced on the uncertified field. Mint rootstock from an uncertified field so inspected cannot be sold as certified rootstock. The rootstock lots on this farm that pass certification evaluations will be annotated in the annual Directory of Certified Rootstock to reflect the presence of inspected uncertified mint on the farm.

Oregon counties known to have infestations of *Verticillium dahliae* on January 1, 2013 are as follows:

Baker, Benton, Columbia, Crook, Deschutes, Grant, Hood River, Jefferson, Josephine, Lake, Lane, Linn, Malheur, Marion, Polk, Umatilla, Union, and Yamhill.

3. Equipment Sanitation:

All vehicles, equipment, and implements used on a certified mint field must be thoroughly cleaned and disinfected if they may have ever been used on land where there had been an infestation of *Verticillium dahliae*. Once disinfected, the equipment may not be moved between certified and wilt-infested fields without re-sanitization before again being used on the certified field.

C. Certification Classification

1. Foundation: First year increase from Nuclear rooted cuttings.
2. Registered: First year increase from Foundation.
3. Certified 1: First year increase from Registered.
4. Certified 2: First year increase from Certified 1.

D. Rootstock Requirements

1. Only Foundation and Registered stock will remain eligible for certification once such stock is sold or leaves the control of the grower who originally received Nuclear plants from which it is propagated. However, Certified 1 is permitted to be sold, planted, and eligible for recertification as Field Class 4 under Program B.
2. Certified 2 rootstock is not eligible to be planted for further certification increase.

E. Field Inspection Tolerance

FACTORS	Certification Class			
	Foundation	Registered	Certified 1	Certified 2
Other Varieties:	None*	None	None	None
Off-Type Plants:	None	None	1/acre	1/acre
<i>Verticillium dahliae</i>	None	None	None	None
Specified Weeds:	**	**	**	**
Quackgrass				
Field bindweed				
Canada Thistle				
Goldenrod				
Puncturevine				
Creeping buttercup				
Skeletonweed				
Russian Thistle				

\* "None" means that none were found during normal inspection procedures. It is not a guarantee to mean that the field is free from disease, other varieties, or off-type plants.

\*\* Uncontrolled plants will be a basis for rejection or downgrading a field to the "For Own Use Only" classification.

## **XI. SPECIFIC REQUIREMENTS FOR *PROGRAM B*: Field Class Program**

A. The standards in this section are in addition to those presented elsewhere in this handbook, with the exception that standards listed in Section X do not apply.

### **B. Land Requirements**

#### **1. Farm History:**

The specific field site entered for certification must not have ever had a known infestation of *Verticillium dahliae*.

Excepted from this requirement are fields that have been properly tarp-fumigated, immediately prior to being planted with tissue-cultured strawberry plants, and then followed directly with a certified class of mint rootstock. This exception only applies to mint rootstock certified under *Program B*, the Field Class Program (section XI in these standards).

#### **2. Isolation:**

a. There are no minimum distance requirements from uncertified fields, except to prevent physical varietal contamination as specified in section VII.B.

b. Fields must be located so that the movement of soil and water from adjacent non-certified fields onto the certified field is prevented.

#### **3. Equipment Sanitation:**

There are no requirements. However, the steps outlined in Section X.B.3. are highly recommended.

### **C. Certification Classification**

1. Field Class 1: First year increase from Nuclear rooted cuttings.

2. Field Class 2: First year increase from Foundation or Field Class 1.

3. Field Class 3: First year increase from Registered or Field Class 2.

4. Field Class 4: First year increase from Certified 1 or Field Class 3.

### **D. Rootstock Requirements**

1. Field Class 4 rootstock is not eligible to be planted for further certification increase.

E. Field Inspection Tolerance

FACTORS	Certification Class			
	Field Class 1	Field Class 2	Field Class 3	Field Class 4
Other Varieties:	None*	None	None	None
Off-Type Plants:	None	None	1/acre	1/acre
<i>Verticillium dahliae</i>	None	None	None	None
Specified Weeds:	**	**	**	**
Quackgrass				
Field bindweed				
Canada Thistle				
Goldenrod				
Puncturevine				
Creeping buttercup				
Skeletonweed				
Russian Thistle				

\* "None" means that none were found during normal inspection procedures. It is not a guarantee to mean that the field is free from disease, other varieties, or off-type plants.

\*\* Uncontrolled plants will be a basis for rejection or downgrading a field to the "For Own Use Only" classification.

**XII. FIELD INSPECTION**

- A. Application for certification must be made by **June 15th** each year. Harvesting before inspection forfeits certification.
- B. The increase of certified Nuclear or Foundation Greenhouse plants by the applicant is eligible for certification for four growing seasons if acreages pass inspection requirements each year.
- C. Any other field condition causing distinctly inferior rootstock may be reason for rejection.
- D. Inspections will begin soon after July 1st each year and continue through the end of August.
- E. Acceptance of applications submitted after **July 31<sup>st</sup>** is contingent on approval by OSCS.

**XIII. GREENHOUSE PROPAGATION**

- A. Greenhouse Standards
  - 1. All soil, sand and unsealed bulk potting mixtures used in a greenhouse must be pasteurized or fumigated with approved material and rates. Commercially produced potting mixtures packaged in sealed containers must be stored and handled to prevent any contamination with *Verticillium dahliae*.
  - 2. Greenhouse inspection must be requested prior to removal of cuttings.

3. A certification inspection must be made before the increase is set in the field with the right to collect any plant material and isolate for *Verticillium dahliae*.
  4. Greenhouse operations must operate in a manner that provides a high-quality product with reasonable assurance of varietal purity and freedom of disease or insect problems. Failure to do so may result in refusal of certification.
  5. No *Verticillium dahlia*, off-type plants, or variety mixtures are permitted.
  6. All general mint rootstock certification standards apply.
- B. Foundation Rootstock that meets all certification standards is eligible for propagation in grower greenhouse as Foundation increase followed by another year in the field as Foundation rootstock with Seed Certification Service approval.

#### **XIV PRACTICAL SANITATION SUGGESTIONS**

- A. Growers of certified mint rootstock should make disease prevention a primary goal in all operations related to rootstock production.
- B. All equipment, including trucks, machinery, etc., used in non-certified mint fields should not enter certified plantings without being thoroughly cleaned and disinfected.
- C. Growers should thoroughly clean and disinfect their own digging and handling machinery before using.
- D. Harvested rootstock should be loaded out at a point removed from the certified acreage.

#### **XV. BASIS FOR REFUSAL TO APPROVE OR INSPECT**

- A. Approval for certification requires that the mint rootstock lot meet the requirements in the certification standards:

The certification inspector may refuse to approve a field for certification due to an unsatisfactory appearance caused by weeds, poor growth, poor stand, disease, insect damage, or other conditions such as hilling, which may prevent thorough inspection or may reflect unfavorably upon the certification program. In such cases the field will be downgraded to "For Own Use Only" and the rootstock produced that year cannot be sold with a certification classification unless a reinspection is made and the field is approved. If the unsatisfactory condition is corrected, the field may be entered for certification the following year if eligible.

- B. The certification inspector may refuse to inspect a field if:
  1. The location of the field is such that inspection would be unduly expensive.
  2. A grower fails to follow the rules governing certification, including failure to pay for services previously rendered.
  3. Heavy weed infestation, lodging, crop is overgrown, pesticide application or other conditions that preclude satisfactory or safe inspection.
  4. The exact location of the field or seed lot is not clear to the inspector. An accurate map of the field location must accompany the application for certification, enabling the

inspector to locate the field and lot in the absence of the grower.

#### **XVI. APPEAL PROCEDURES**

If a grower disagrees with a decision rendered on his crop by a certification staff member, he may appeal this decision. The grower must file a letter of appeal within 15 days of receiving his decision notice. The letter of appeal must be signed by the grower and sent to the Seed Certification Office, 031 Crop Science Building, Oregon State University, Corvallis, OR 97331-3003. Copies are to be made and sent to the county seat.

The Seed Certification Office will contact the grower and make appeal inspections where warranted, insofar as time, weather and crop conditions permit. If a mutually satisfactory agreement can not be reached, the Seed Certification Office will forward as promptly as possible all information to the Certification Board for a hearing.

Any additional expenses involved in an appeal, such as additional laboratory testing, grow-out tests, etc., will be the responsibility of the grower, providing that the grower has requested or approved the additional procedures.

#### **XVII. PUBLISHING OF MINT GROWERS LIST**

A Directory of Growers of Certified Mint Rootstock will be published annually after final field inspection. Only those fields meeting the minimum standards for certification or those classified as "For Own Use Only" will appear in the directory.

#### **XVIII. COMPLETION OF CERTIFICATION**

A. Rootstocks will not be considered certified until:

1. The field has passed inspection.
2. Appropriate "Shipping Certificates" have been issued by the rootstock grower. Shipping Certificates are available to the growers from the Seed Certification office.

#### **XIX. PHYTO-SANITARY CERTIFICATES**

Contact the Oregon Department of Agriculture regarding any phyto-sanitary requirements necessary for interstate shipments of mint rootstocks.