



Oregon Seed Certification Service

Department of Crop and Soil Science

031 Crop Science Bldg., Corvallis, Oregon 97331

T 541-737-4513 | F 541-737-2624 | seedcert@oregonstate.edu | seedcert.oregonstate.edu

Oregon Certification Variety Review Application Instructions **Grasses**

All variety applications must meet the following criteria to be considered by the Oregon Certification Variety Review (OCVR) Committee. For general instructions, please also see the *Variety Application Process* document.

- 1) Applications must be submitted on the most recent version of the application form, as published on the Oregon Seed Certification Service (OSCS) website: seedcert.oregonstate.edu/varieties.
- 2) Application standards are based on the criteria set forth by the Association of Official Seed Certifying Agencies (AOSCA).
- 3) Applications will only be accepted for varieties produced and certified in Oregon.
- 4) Applications are accepted from the original developer, variety owner, or owner's designated representative.
- 5) Applications will be reviewed in the order in which they are received.
- 6) Applications should be submitted prior to planting certified field production intended for OSCS inspection.
- 7) Only complete applications, as described below, will be accepted.

Along with the general criteria above, two distinct categories of variety applications are accepted by the OCVR Committee. The categories are based on the AOSCA criteria for certifying varieties. Please submit the appropriate materials as described in the categories below to the OCVR Committee for consideration.

Category I Applications

To be eligible to submit an OCVR Category I application, a variety must have been previously approved by an AOSCA national certified variety review board, eligible for certification under an OECD seed scheme, been issued a certificate by the U.S. Plant Variety Protection (PVP) Office, or been issued a patent by the U.S. Patent and Trademarks Office (PTO). Please submit the following to the OCVR for consideration:

- 1) Certified Variety Application form
- 2) Variety Ownership Declaration form
- 3) Variety Summary Page form
- 4) If based on a national variety review board or OECD acceptance, a complete copy of the approved review board or OECD application with required documentation
- 5) If based on a PVP certificate, a complete copy of the approved PVP application along with supporting documentation for the summary page (Parts I – IV below)
- 6) If based on a patent from PTO, a complete copy of the approved PTO application along with supporting documentation for the summary page (Parts I – IV below)
- 7) A copy of the approval notification
- 8) A two-cup sample of representative seed
- 9) Variety names must be cleared by the Seed Regulatory and Testing Branch of USDA-AMS prior to OCVR application submission. Applicants must submit notification of variety name approval.

Category II Applications

Category II applications will be accepted by the OCVR for varieties that have been reviewed and released by a university or state agricultural experiment station, approved for certification by another AOSCA member agency, or for a variety that has been submitted for PVP or PTO but has not yet been issued a certificate. Please submit the following to the OCVR for consideration:

- 1) Certified Variety Application form
- 2) Variety Ownership Declaration form
- 3) Variety Summary Page form
- 4) If previously approved by a university, agricultural experiment station, or another AOSCA member agency, a complete copy of the original application or published release with required documentation as well as supporting documentation for the summary page as described below (Parts I – IV)
- 5) If based on a PVP or PTO submission, a complete, signed and dated copy of the PVP/PTO application along with the PVP/PTO tracking number as well as supporting documentation for the summary page as described below (Parts I – IV)
- 6) Variety names must be cleared by the Seed Regulatory and Testing Branch of USDA-AMS prior to OCVR application submission. Applicants must submit notification of variety name approval.
- 7) A two-cup sample of representative seed.

General Information for Supporting Documentation All Applications (Parts I – IV)

- 1) The applicant must describe and document in this application the origin, breeding history, morphological and other descriptive characteristics, and performance and adaptation claims of the variety by supplying the information requested in Parts I – IV below. Varieties will not be approved unless the application is properly documented.
- 2) Data, presented in well-constructed tables, for all morphological and performance characteristics are to be compiled from replicated trials designed and based on good scientific methods and properly constructed and executed, from which statistically sound inferences for measured characters can be reasonably detected.
- 3) For each data set, or, if appropriate, combined compatible data sets over years and/or locations, include some measure of variance and statistical separation of means at the 5% or higher level of confidence.
- 4) Where descriptive or performance character claims (e.g., greater, lesser, or similar) in relation to a check variety(s) are made in the summary statement or elsewhere in the application, the character claim must be statistically significant (5% level) for at least two of the locations (or two years at one location) where tested, or with a statistically compatible combined data set of at least two locations and/or years.
- 5) Do not attach photocopied computer printouts of nationally coordinated multiple location trials such as NTEP or Rutgers. Please extract data according to the following options:
 - a. Include all locations and utilize statistics for the overall table, but condense the number of entries to no more than 10 (including the proposed variety, 3 checks, and up to 6 other varieties). For each location, provide the overall number of entries and the overall high, low, mean, and statistics (e.g., LSD and CV) supporting the analysis for each trait.
 - b. Pick individual locations (number optional as long as requirements for location-years are met) from the overall table. Condense the entries and provide complete statistical information for each location as in 1) above. These locations stand alone and adaptation claims (Summary Page Statement #5) must be limited to stating that the variety was tested at these locations.
 - c. If regional adaptation claims are made, all of the locations in a described region of the nationally coordinated trial must be included. Condense the entries and provide complete statistical information for each location as in 1) above. Calculate new overall statistics for the region if desired, and if data across locations are compatible.

- 6) Locations intended for comparative measurements of either morphological or performance characters must be differentiated by natural aspects (soil types, elevation, year of establishment, precipitation patterns, slope inclinations, etc.) rather than agronomic treatments (fertilizer, irrigation, plant spacing, planting date within a cropping season, herbicides, insecticides, growth regulators, etc.). Locations must be separated by at least 10 miles. Include a short synopsis of each test location (as directed in Parts II & III) describing test design (type of test, # entries, # reps, # plants per rep, etc.), the natural aspects, and any agronomic treatments as listed above.
- 7) Required data must come from the variety as described or the application will be returned. The descriptive and performance data must come from breeder or later generation seed.
- 8) Consecutively number all pages.

Supporting Documentation Required All Applications

Part I. Breeding History: (Documentation for Summary Page Statement #2). Provide on a separate page(s) a detailed and complete description of the origin and chronological breeding history as documentation for Statement 2 on the summary page. Use of a flow chart to document breeding history is strongly recommended.

- 1) Use terminology as defined in: Glossary of Crop Science Terms, published by the Crop Science Society, July 1992, or any basic university-level plant breeding textbook.
- 2) List and identify all sources of germplasm and their origin used in the development of the variety. Include varieties used, public germplasm releases, germplasm received from cooperators, and/or specific dates and locations where germplasm was collected.
- 3) If at least 70% of the germplasm source for the variety originates directly from a pre-existing variety, then the pre-existing variety is to be included as a check variety and at least one descriptive or performance factor must be claimed to be distinct (see General Information, Part 4 above) from the pre-existing variety. Apomictic varieties must be compared directly to their maternal parent and data for the percent apomixis for both must be included.
- 4) List population size and the percent rogued in each breeding cycle.
- 5) State propagule type (seed, sprig, etc.) and pollination method (open, polycross, etc.) used in each breeding cycle.
- 6) State the year breeder seed was declared and produced.

Part II. Descriptive Information: (Documentation for Summary Page Statement #3) Attach tabular data for morphological measurements, maturity ratings and other growth, physiological, pest, or environmental reaction characteristics that will be used by OSCS to monitor the reproduction of your variety. These measurements must come from field-grown spaced plants or replicated seed yield trials and must include at least 30 plants or 30 data points for each characteristic. Morphological measurements are to be taken at or near maturity. Data from the variety and check varieties for each morphological or other descriptive characteristic must include the results from at least two years at one location or one year at two or more locations (see General Information, Parts 1-7). Comparisons must include three or more standard check cultivars taken from the PVP list of standard check cultivars when established for the species. Otherwise, varieties most genetically similar to the applicant variety shall be used. Note: At least two check varieties must be consistent across locations.

Include data for the following in tables on attached pages and include a short synopsis of each test location (design, natural aspects, and agronomic treatments):

- 1) Heading date (when 50% of the plants in the variety have at least three heads emerged from the boot) **Required**
Note: Other measurements of relative maturity may be substituted if properly described and justified.
- 2) Mature plant height in cm. **Required**
- 3) Flag leaf height in cm. **Required**

- 4) Flag leaf blade length in cm. **Required**
- 5) Flag leaf width in mm. **Required**
 Note: Measurements for 2-5 above may be reported from the first subtending leaf (leaf below the flag leaf) instead of the flag leaf, but it must be clearly labeled which leaf the data is from.
- 6) Inflorescence length in cm. **Required**
- 7) Weight per 1,000 seeds in grams. **Optional**
- 8) Other significant seed characteristics (color, shape, length, width, and awn length if present) **Optional**
- 9) Other growth characteristics **Optional**
 - a. Cool or warm season
 - b. Bunch, rhizomatous, or stoloniferous
 - c. Annual or perennial
- 10) Other descriptive characteristics **Optional**
 - a. Physiological (DNA or electrophoresis analysis)
 - b. Biotic or abiotic environmental reactions

Part III. State Primary Use and Provide Evidence of Performance and Adaptation:

(Documentation for Summary Page Statements #4 and #5) Evidence shall include tabular comparative data on yield, insect or disease resistance, environmental tolerances, and other factors supporting the performance and/or adaptive characteristics of the variety. These performance tests may be conducted by private seed firms and/or university or other public agencies. Tests shall include three or more check varieties taken from the PVP list of standard check varieties if available, or if not available, varieties that are used extensively in areas of intended usage may be substituted.

Note: At least two check varieties must be consistent across locations.

Forage production data must be from at least two years at two or more locations. All other performance data must be from two or more locations in a single year, or two or more years at one location. Include a short synopsis of each test location (design, natural aspects, and agronomic treatments).

- 1) Forage Performance
 - a. Comparative forage yields **Required** (2 years at 2 or more locations required)
 - b. Comparative performance data for at least one other trait **Required**
- 2) Turf Performance
 - a. Comparative performance data on turf quality **Required**
 - b. Comparative performance data on at least 3 other traits **Required**
- 3) Other Primary Use Performance (Restoration/Revegetation, Erosion Control, Ornamental, etc.)
 - a. Comparative performance data supporting one primary use trait **Required**
 - b. Comparative performance data for at least one other trait **Required**

Note: Availability of check varieties for some non-agronomic or newly cultivated species may be limited for both performance and descriptive character comparisons. A reasonable attempt to comply with stated check variety requirements must be made, but at least one variety (or germplasm selection) check must be included.

Part IV. Stock Seed Maintenance and Limitations of Generations: (Documentation for Summary Page Statement #6) Describe how breeder seed supply is to be maintained and the procedure for producing subsequent stock seed classes, a statement as to the limitation and sequence of generations that may be certified, length of stand (if applicable), and any other requirements or limitations necessary to maintain varietal characteristics.

At the time a variety is recommended for certification, a two-cup representative seed sample of the generation or generations as requested by a certifying agency shall be submitted to the certifying agency by the applicant. This sample is to be retained as a control sample against which all future seed stocks released for certified seed production may be compared to establish continued trueness to variety.

**Oregon Certification Variety Review
Summary Page Instructions
(Grasses)**

Please attach a one (1) page description/summary of your variety for use by the Oregon Seed Certification Service (OSCS). This description must stand on its own and the statements are to be documented by the required supporting data in this application. Include concise, lucid interpretation of descriptive and performance data as specified in the items below. Use short, narrative statements that contain a numerical mean or range for each trait, plus pertinent terminology for the variety and its comparison (e.g. similar, greater, or lesser) with at least two check varieties as outlined in the following instructions. Use complete sentences and number each item following the format given below.

Include the following:

1. Variety name:

Genus:

Experimental designation(s):

Date submitted:

Kind:

Species:

2. A brief summary of the origin and breeding history of the variety, and state the first year breeder seed was declared and produced. (See Instructions Part I).

3. A description (using numerical mean or range) in comparison with two or more check varieties for at least three of the six required morphological characteristics. Also list any other descriptive factors the breeder or his designee considers pertinent descriptors (variants, disease and insect reactions, etc.) that may be helpful to field inspectors in identifying the variety. (See Instructions Part II).

4. A summary of evidence of performance (using numerical mean or range) in comparison with two or more check varieties for the primary use and at least one other performance trait. (See Instructions Part III).

5. A statement giving region of probable adaptation and purposes (e.g., turf, cover crop, hay, grazing, erosion control) for which the variety will be used. This should include states and areas within states where the breeder has tested and anticipates recommending and merchandising the variety. Do not make claims regarding adaptation and performance in regions it has not been tested. (See Instructions Part III).

6. Procedures for maintaining seed stock, seed classes to be used, a statement as to the limitation of age of stand and generations that may be certified, other requirements or limitations necessary to maintain varietal characteristics, and who will maintain seed stocks of the variety. (See Instructions Part IV).

7. If this variety is accepted by official certifying agencies, when will certified seed first be offered for sale?

8. SIGNATURE OF APPLICANT