



**GUIDELINES FOR SUBMITTING ENTRIES, DATA  
COLLECTION, AND DATA REPORTING for the  
WESTERN WINTER BARLEY NURSERY,  
WESTERN REGIONAL SPRING BARLEY NURSERY, and  
WESTERN REGIONAL SPRING DRYLAND BARLEY  
NURSERY**

**Sponsoring Organization:** The USDA-ARS is the sponsoring organization. The coordinator will operate under the guidelines approved by the cooperators of each nursery.

**Coordinator:** The coordinator must be an employee of the USDA-ARS and be stationed in the primary growing area of the nurseries. He will be responsible for nursery correspondence, coordinating the nursery entries and locations, collating, analyzing, and summarizing the nursery results, and producing both preliminary and final annual reports. Periodic discussions are to be held with cooperators to discuss any changes in guidelines, locations where the nursery is grown, or any other issues needing input.

**Cooperators:** The nurseries are open to barley breeding programs (both public and private) in the western United States and Canada. Conditions for participation in the nursery include:

- 1) Entries are subject to open germplasm exchange under ethical plant breeding practices.
- 2) Full, meaningful pedigrees must be given for each entry (any selection numbers in the pedigree must have been identified in previous nurseries or been available to cooperators in the past, if not, the pedigree of the selection must be given).
- 3) Cooperators receiving both yield and observation nurseries will provide all applicable data to the coordinator to be shared among all cooperators. Data must be submitted in the proper format and in a timely manner to the coordinator.

**Entries:** The coordinator will decide on the suitability of entries for the nurseries each year. Each nursery will have a maximum of 40 entries. Historical checks will be maintained in the nursery. Other checks may be maintained upon agreement by the coordinator and cooperators. Number of entries per cooperator will be subject to the total number of cooperators. Multiple cooperators at a location do not limit the number of entries from each cooperator. A cooperator may recommend optional entries to the coordinator to be used if the number of entries do not exceed the nursery maximum. As of September 02, the maximum number of entries per cooperator for each nursery is as follows:

WRSBN—3 entries per cooperator (12 cooperators)  
WRDSBN—6 entries per cooperator (6 cooperators)  
WWBN—4 to 5 entries per cooperator (8 cooperators)

Entries submitted for testing must meet the following criteria:

- 1) The entry must have been grown a minimum of several station-years over a two-year period in the Western Regional Nursery region prior to submission.
- 2) The entry may be either a promising feed or malting type. Potential market type of the entry should be indicated, as only malting types will be submitted to the CCRU in Madison, WI for micro-malting.
- 3) Entries shall be grown in the nurseries for two years, with an optional third year.
- 4) Cultivars that have been grown or tested in the region should not be submitted for entry in the nurseries. Cultivars released for other regions but not tested in the region are eligible for inclusion in the trials.

**Locations:** Open to any barley researcher in the western U.S. and Canada plus observation nurseries for special evaluations. Each cooperator may have multiple test locations as long as there is no duplication of effort with other cooperators. The coordinator will mediate location conflicts.

**Seed distribution:** Each cooperator (person or organization) will be responsible for distributing their seed of new entries and repeat entries according to the yearly mailing and seed requirement lists (WRSBN and WRDSBN).

**Observations:** At each location, data should be collected for as many of the following parameters as follows:

1. **Planting Date.**
2. **Heading date,** expressed as days from January 1.
3. **Plant Height,** cm or inches, your choice.
4. **Lodging,** as an actual percent or on a scale of 1-9, 1-8, etc. Please be sure to include your unit of measure and an explanation of it.
5. **Yield,** preferably reported as grams/plot. Please include the plot area harvested.
6. **Test Weight,** report as lbs/bu or kg/hl. Please be sure to include the unit of measure.
7. **Plump,** please express as a percentage of samples on top of a 6/64-inch (2.4 mm) grading screen.
8. **Thin:** Please express as a percentage of sample through a 5.5/64-inch (2.2 mm) grading screen.
9. **Disease and Miscellaneous Data,** the disease readings and miscellaneous data that you submit will be reported as received.
10. **Location,** latitude, longitude, elevation
11. **Fertilization,** N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, and other in kg ha<sup>-1</sup>

The following nursery location information is optional:

1. **Precipitation**, spring growth to harvest average and present year in mm.
2. **Soil Moisture**, available to 1.22 m when spring growth commences and water applied
3. **Previous Crop**
4. **Soil Type**, series and texture
5. **Soil Analysis**, 0-.15m: pH, % organic mater, Calcium, NO<sub>3</sub>-N, P, K, conductivity, sample depth

**Data submission:** Data should be transmitted electronically utilizing Excel compatible format by the due date shown in the critical date timeline. Transmittal by printed hard copy is permissible if electronic means are not available.

**Malting Quality Testing:** Malting quality samples of promising malting type entries plus malting checks in the WRSBN will be submitted to the Cereal Crops Research Unit at Madison, WI. Three locations will provide samples as determined by the coordinator, the cooperators, and the CCRU. Currently, the three locations providing samples are Aberdeen, ID; Fairfield, MT, and Pullman WA.

**Reports:** A **Preliminary Report** is due **January 1<sup>st</sup>** showing results from all locations. This report is to be used to assist cooperators in making decisions and recommendations for the coming year. A **Final Report** is due **July 1<sup>st</sup>** that summarizes and analyzes the previous year's data and gives long-term summaries. The final report will be electronically transmitted to the cooperators and posted on the coordinator's web-site. Hard copies will be available by special request.

#### **Critical Event Timeline:**

**August 25**, entry and location recommendations due for WWBN.

**September 1**, WWBN entry and distribution lists distributed to cooperators.

**September 10**, seed of WWBN entries should be distributed.

**December 1**, submit data from previous year to coordinator and submit malting samples to the Cereal Crops Research Unit in Madison, WI.

**January 1**, preliminary report due to cooperators.

**February 1**, entry and location recommendations due for WRSBN and WRDSBN.

**February 10**, a 200 gram sample of new entries due at coordinator's location for BSMV tests.

**March 1**, WRSBN and WRDSBN mailing and distribution lists distributed to cooperators.

**March 10**, seed of WRSBN and WRDSBN should be distributed.