

Oregon State University winter barley nurseries. The summary is divided into “Malting”, “Food”, and “Genetics”. In reality, the three areas of endeavor are tightly integrated. For example, the T-CAP FAC Association mapping panel is comprised of elite malting germplasm. Likewise, some malting germplasm has potential food applications, and vice versa. The emphasis of the program is on facultative growth habit in order to provide maximum flexibility in planting date (for growers) and breeding (for research and variety development). The list does not include 2013 spring-planted trials, as these are still under development.

Winter malting barley

Overview:

Number of advanced and fixed lines: 1810

- 101 in yield trial plots
- 1709 in single, double or six row plots (doubled haploid head rows)

Number of purification head rows:

- 360 (one genotype)

Details:

Winter Malting Barley Trial; Fall-planted; 22 entries from US and International Cooperators

- Corvallis, OR 3 rep, RCBD

Oregon Barley Winter/Facultative Statewide Yield Trial; Fall-planted; 28 entries

- Corvallis, OR 3 rep, RCBD
- Hermiston, OR 3 rep, RCBD
- Pendleton, OR 3 rep, RCBD

Oregon Two-row Malting Barley Trial; Fall-planted; 22 entries

- Corvallis, OR 3 rep, RCBD
- Idaho Falls, ID 1 rep w/repeated check
- Hazelton, ID 1 rep w/repeated check
- Rupert, ID 1 rep w/repeated check
- Fort Collins, CO Observation
- Wooster, OH Observation
- Aberdeen, ID Observation
- St. Paul, MN Observation

Oregon Two Row Malting Barley Preliminary Yield Trial; Fall-planted; 23 entries

- Corvallis, OR Unreplicated

Doubled Haploid Mini-Plots (6 rows of head rows/DH); Fall-planted; 98 entries

- Corvallis, OR Unreplicated

Doubled Haploid Single Rows (Corvallis)

- 144 lines. Fall-planted; Type 2 augmented design
- 630 lines. Winter-planted; Unreplicated nursery
- 611 lines. Late Winter-planted; Unreplicated nursery
- 226 lines. Full Pint/Golden Promise Population; Winter-planted; 1 rep w/repeated check

Purification Head Rows (Corvallis); Late Winter-planted

- Full Pint 360 rows

Observational Drill Strips (Corvallis); Fall-planted; 6 entries

- European Two Rows and OSU Lines

Winter food barley

Overview:

Number of advanced and fixed lines: 364

- 146 in yield trial plots
- 43 in six row plots (doubled haploid head rows)

Number of segregating head rows:

- 492 (F3 to F5)

Details:

Oregon Winter Food Barley Trial; Fall-planted; 16 entries

- Corvallis, OR 3 rep, RCBD
- Hermiston, OR 3 rep, RCBD
- Pendleton, OR 3 rep, RCBD
- Pullman, WA 3 rep, RCBD
- Aberdeen, ID 3 rep, RCBD
- Mt. Vernon, WA 3 rep, RCBD

Oregon Hull-less Food Barley Trial; Fall-planted; 15 entries

- Corvallis, OR 3 rep, RCBD
- Pullman, WA 2 rep, RCBD
- Mt. Vernon, WA 2 rep, RCBD

Oregon Colored Food Barley Trial; Fall-planted; 25 entries

- Corvallis, OR 2 rep, RCBD
- Pullman, WA 2 rep, RCBD
- Mt. Vernon, WA 2 rep, RCBD

Oregon Food Barley Preliminary Yield Trials (Corvallis); Fall-planted; 76 entries total

- F5 Two Rows Unreplicated nursery; 45 entries
- Doubled Haploids Unreplicated nursery; 31 entries

Food Barley Reference Panel (YT Plots); Fall-planted; 10 entries

- Corvallis, OR Unreplicated nursery

Doubled Haploid Mini-Plots (6 rows of head rows/DH); Fall-planted; 43 entries

- Corvallis, OR Unreplicated nursery

Head Rows (Corvallis); Fall-planted; 492 segregating head rows

- F4 Black Beaut Head Rows 156 rows
- F5 Colored Food Barley Head Rows 56 entries, 336 rows

Observational Drill Strips (Corvallis); Fall-planted; 4 entries

- European and OSU Lines

Genetics

Overview:

Number of advanced and fixed lines: 2591

- 306 in yield trial plots
- 2285 in single or double row plots

Details:

OSU-TCAP Facultative 6 row trial; Fall-planted; NUE; Hi, Lo N, 303 entries

- Corvallis, OR Type 2 augmented design

OSU-TCAP Low Temperature Tolerance Panel; Fall & Winter-planted; 1000 entries

- Corvallis, OR Type 2 augmented design

OSU-TCAP NSGC Winter Barley Core; Winter-planted; 376 entries

- Corvallis, OR Augmented design

ARS BSR Mapping Population; Winter-planted; 346 entries

- Corvallis, OR Unreplicated
- Madre Selva/Butta-12 Population; Winter-planted; 191 entries***
- Corvallis, OR Unreplicated
- Minnesota Genomic Selection; Fall-planted; 256 entries***
- Corvallis, OR Type 2 augmented design
- Kurtford Conversion; Winter-planted; 97 entries***
- Corvallis, OR 2 rep, RCBD
- Uniform Barley Winter Hardiness Nursery; Winter-planted; 14 entries***
- Corvallis, OR 2 rep, RCBD
- Oregon/Nebraska (OrNe); BSR; Winter-planted; 5 entries***
- Corvallis, OR 2 rep, RCBD
- Hull-less YT; BSR ; Winter-planted; 3 entries***
- Corvallis, OR 4 rep, CRD