

2018 WESTERN REGIONAL SPRING BARLEY NURSERY



NATIONAL SMALL GRAINS GERMPLASM RESEARCH FACILITY, ABERDEEN, IDAHO

WESTERN REGIONAL SPRING BARLEY NURSERY

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This report is compiled in electronic format intended for transmittal to the nursery cooperators.

This is a joint progress report of cooperative investigations underway in the State Agricultural Experiment Stations and the Agricultural Research Service of the U.S. Department of Agriculture. This report is primarily a tool for use by cooperators, their official staffs and those persons having direct and special interest in the development of agricultural research programs.

This report includes data furnished by the State Agricultural Experiment Stations as well as by the Agricultural Research Service and was compiled in the Northern Plains Area and the Pacific West Area, Agricultural Research Service, U.S. Department of Agriculture. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

NATIONAL SMALL GRAINS GERMPLASM RESEARCH FACILITY, ABERDEEN, IDAHO

Cooperative Institutions:

AMERICAN MALTING BARLEY ASSOCIATION, INC.

BUSCH AGRICULTURAL RESOURCES LLC

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HIGHLAND SPECIALTY GRAIN

MONTANA STATE UNIVERSITY

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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

In cooperation with
State Agricultural Experiment Stations

2018 Western Regional Spring Barley Nursery

| Seed | Entry | | | | Years | | |
|-------------|-------|--------------|---|-------|-----------|--------|---------------------|
| Source | No. | Entry | Parentage | Type | Grade | Tested | Cooperator |
| WSU | 1 | Steptoe | CI 15229 | 6 row | feed | | Check, Ulrich, Wood |
| USDA-ARS | 2 | Baronesse | PI 568246 | 2 row | feed | | Check |
| USDA-ARS | 3 | Harrington | | 2 row | Malt | | Check |
| USDA-ARS | 4 | AC Metcalfe | | 2 row | Malt | | Check, Beattie |
| USDA-ARS | 5 | 08ARS116-91 | MT010158 / Tetonia // Voyager | 2 row | Malt | 3 | HU |
| USDA-ARS | 6 | 08ARS028-20 | 2Ab04-X01084-27 / Newdale | 2 row | Malt | 2 | HU |
| USDA-ARS | 7 | 10ARS191-3 | Tetonia / MT010160 // 2Ab07-X04M281-32 | 2 row | Malt | 1 | HU |
| USDA-ARS | 8 | 11ARS162-4 | 2Ab04-X00017-1 / Voyager // CDC Reserve | 2 row | Malt | 0 | HU |
| WSU | 9 | 11WA-107.58 | Farmington/Baronesse//Bob/Merit | 2 row | Feed/Malt | 2 | Murphy, Wood |
| WSU | 10 | 11WA-107.43 | Farmington/Baronesse//Bob/Merit | 2 row | Feed/Malt | 2 | Murphy, Wood |
| WSU | 11 | 13WAM-101.2 | 07MB-390/AC Metcalfe | 2 row | Feed/Malt | 0 | Murphy, Wood |
| WSU | 12 | 13WAM-149.2 | 04WA-113.A/Pinnacle | 2 row | Feed/Malt | 0 | Murphy, Wood |
| WSU | 13 | 13WAM-135.26 | 06WA-406.11/CDC Copeland | 2 row | Feed/Malt | 0 | Murphy, Wood |
| HSG | 14 | HO515-510 | TR06297 / Xena | 2 row | Feed | 0 | McKay |
| HSG | 15 | HO515-555 | Xena / TR05912 | 2 row | Feed | 0 | McKay |
| BARI | 16 | 2B11-4949 | MERIT 57 / MT050118 | 2 row | Malt | 1 | Heward |
| BARI | 17 | 2B13-6991 | | 2 row | Malt | 0 | Heward |
| BARI | 18 | 2IM14-7765 | | 2 row | Malt | 0 | Heward |
| BARI | 19 | 2IM14-7830 | | 2 row | Malt | 0 | Heward |
| BARI | 20 | 2IM14-8212 | | 2 row | Malt | 0 | Heward |
| USK | 21 | CDC Bow | SM04261/TR05285 | 2 row | Malt | 1 | Beattie, Duncan |
| USK | 22 | CDC Fraser | TR04280/SM04261 | 2 row | Malt | 1 | Beattie, Duncan |
| NDSU | 23 | 2ND32529 | 2ND27705 / 2ND27560 | 2 row | Malt | 1 | Horsley |
| NDSU | 24 | 2ND32829 | 2ND27480 / 2ND28065 | 2 row | Malt | 0 | Horsley |
| MSU | 25 | MT124112 | | 2 row | Feed/Malt | 1 | Sherman |
| MSU | 26 | MT124128 | | 2 row | Feed/Malt | 1 | Sherman |
| MSU | 27 | MT124069 | | 2 row | Feed/Malt | 0 | Sherman |
| MSU | 28 | MT124134 | | 2 row | Feed/Malt | 1 | Sherman |
| USU | 29 | UTSB10905-72 | Century/IdagoldII//Goldeneye | 6 row | Feed | 1 | Hole |
| USU | 30 | UTSB11301-1 | Century/IdagoldII/5/99NZ102/4/Columbia//Steptoe/M27/3/Maranna | 6 row | Feed | 0 | Hole |
| new entries | | | | | | | |

2016-18 Western Regional Spring Barley Nursery Mean Data

| Ent # | Entry | Yield (Bu/A) | | | TWT (lbs/Bu) | | | Heading (Julian) | | | Height (inch) | | | Plump >6/64 (%) | | | Protein (%) | | |
|----------------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|------------------|--------------|--------------|---------------|-------------|-------------|-----------------|-------------|-------------|-------------|-------------|-------------|
| | | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| 1 | Stephoe | 91.7 | 96.6 | 114.6 | 48.7 | 47.0 | 49.6 | 170.7 | 175.3 | 168.7 | 30.1 | 28.6 | 29.8 | 92.7 | 85.1 | 89.4 | 11.9 | 11.0 | 11.4 |
| 2 | Baronesse | 105.3 | 107.0 | 113.2 | 52.2 | 51.1 | 52.7 | 175.3 | 180.0 | 173.0 | 28.6 | 28.3 | 29.3 | 86.3 | 86.1 | 91.5 | 12.5 | 12.2 | 13.0 |
| 3 | Harrington | 91.8 | 97.4 | 101.8 | 50.9 | 50.6 | 51.8 | 175.4 | 180.6 | 173.5 | 30.3 | 30.9 | 29.7 | 88.4 | 80.7 | 87.0 | 12.8 | 13.3 | 13.3 |
| 4 | AC Metcalfe | 93.3 | 94.1 | 100.2 | 51.8 | 51.3 | 52.8 | 175.0 | 179.3 | 173.5 | 31.4 | 31.5 | 31.1 | 87.0 | 85.6 | 93.4 | 12.4 | 12.9 | 13.5 |
| 5 | 08ARS116-91 | 96.8 | 102.0 | 109.7 | 51.0 | 50.4 | 52.5 | 174.0 | 177.4 | 171.7 | 28.8 | 28.7 | 28.3 | 86.8 | 86.5 | 88.2 | 12.6 | 12.5 | 13.0 |
| 6 | 08ARS028-20 | 98.7 | 104.1 | 114.4 | 51.0 | 50.1 | 52.2 | 176.4 | 181.0 | 174.9 | 28.5 | 28.0 | 27.8 | 83.2 | 82.4 | 88.5 | 12.0 | 12.2 | 13.0 |
| 7 | 10ARS191-3 | | 110.3 | 123.2 | | 50.8 | 52.7 | | 180.2 | 175.7 | | 31.4 | 30.2 | | 80.8 | 89.1 | | 12.3 | 12.5 |
| 8 | 11ARS162-4 | | | 104.4 | | | 50.8 | | | 175.4 | | | 30.2 | | | 90.3 | | | 13.1 |
| 9 | 11WA-107.58 | 107.5 | 108.8 | 118.5 | 54.4 | 53.6 | 53.8 | 174.9 | 179.6 | 173.5 | 30.1 | 30.2 | 28.8 | 93.0 | 92.1 | 93.9 | 12.4 | 12.6 | 12.8 |
| 10 | 11WA-107.43 | 105.0 | 106.1 | 113.2 | 53.3 | 53.2 | 53.6 | 173.9 | 179.0 | 173.3 | 28.9 | 29.5 | 28.1 | 89.0 | 88.2 | 91.5 | 12.4 | 12.5 | 13.1 |
| 11 | 13WAM-101.2 | | | 112.4 | | | 52.4 | | | 176.9 | | | 27.7 | | | 90.2 | | | 13.6 |
| 12 | 13WAM-149.2 | | | 108.0 | | | 53.2 | | | 174.3 | | | 28.5 | | | 93.5 | | | 12.8 |
| 13 | 13WAM-135.26 | | | 109.5 | | | 53.6 | | | 172.6 | | | 26.8 | | | 91.9 | | | 13.2 |
| 14 | H0515-510 | | | 115.2 | | | 52.8 | | | 171.5 | | | 29.9 | | | 86.7 | | | 12.5 |
| 15 | H0515-555 | | | 112.7 | | | 52.9 | | | 173.4 | | | 28.8 | | | 91.7 | | | 12.4 |
| 16 | 2B11-4949 | 101.8 | 106.0 | 113.9 | 50.5 | 50.4 | 52.2 | 175.9 | 179.9 | 173.3 | 27.7 | 28.4 | 27.8 | 85.7 | 82.8 | 89.6 | 12.4 | 12.7 | 13.3 |
| 17 | 2B13-6991 | | | 110.7 | | | 52.5 | | | 171.7 | | | 28.9 | | | 91.7 | | | 13.2 |
| 18 | 2IM14-7765 | | | 110.3 | | | 50.7 | | | 175.5 | | | 29.1 | | | 90.7 | | | 12.5 |
| 19 | 2IM14-7830 | | | 117.5 | | | 52.3 | | | 174.1 | | | 27.9 | | | 89.3 | | | 12.8 |
| 20 | 2IM14-8212 | | | 109.5 | | | 51.6 | | | 172.7 | | | 27.9 | | | 93.2 | | | 12.3 |
| 21 | CDC Bow | | 86.7 | 108.5 | | 49.9 | 52.4 | | 181.7 | 176.1 | | 30.3 | 31.2 | | 88.4 | 93.1 | | 12.6 | 12.7 |
| 22 | CDC Fraser | | 93.7 | 103.5 | | 48.9 | 51.6 | | 180.9 | 176.5 | | 28.6 | 30.3 | | 88.0 | 92.9 | | 12.9 | 13.2 |
| 23 | 2ND32529 | | 98.2 | 108.7 | | 50.8 | 51.9 | | 177.2 | 171.7 | | 29.2 | 29.0 | | 90.8 | 94.2 | | 11.2 | 11.5 |
| 24 | 2ND32829 | | | 105.8 | | | 50.8 | | | 168.9 | | | 29.2 | | | 92.8 | | | 11.7 |
| 25 | MT124112 | | 104.3 | 106.9 | | 51.6 | 52.4 | | 177.3 | 170.6 | | 28.0 | 28.5 | | 92.7 | 94.3 | | 11.2 | 11.9 |
| 26 | MT124128 | | 99.4 | 102.3 | | 52.7 | 53.3 | | 175.6 | 169.2 | | 27.1 | 27.1 | | 95.4 | 94.9 | | 11.3 | 12.4 |
| 27 | MT124069 | | | 102.5 | | | 52.2 | | | 175.1 | | | 29.7 | | | 90.8 | | | 12.6 |
| 28 | MT124134 | | 97.1 | 104.9 | | 52.9 | 53.0 | | 175.1 | 169.7 | | 28.0 | 27.7 | | 95.7 | 95.3 | | 11.4 | 12.0 |
| 29 | UTSB10905-72 | 105.1 | 110.1 | 117.6 | 49.7 | 49.0 | 50.5 | 171.3 | 175.4 | 169.7 | 31.5 | 30.9 | 30.9 | 94.6 | 92.1 | 92.0 | 12.1 | 12.1 | 12.6 |
| 30 | UTSB11301-1 | | | 114.7 | | | 51.1 | | | 171.7 | | | 30.7 | | | 89.1 | | | 12.1 |
| MEAN: | | 99.7 | 101.8 | 110.1 | 51.7 | 50.7 | 52.2 | 174.8 | 178.6 | 173.0 | 30.1 | 29.3 | 29.0 | 87.8 | 85.6 | 91.3 | 12.4 | 12.3 | 12.7 |
| CHECK'S MEAN: | | 95.5 | 98.8 | 106.3 | 50.9 | 50.1 | 51.9 | 174.1 | 178.8 | 172.2 | 30.1 | 29.8 | 29.7 | 88.6 | 84.4 | 90.2 | 12.4 | 12.3 | 13.0 |
| Observations: | | 12 | 11 | 11 | 10 | 9 | 8 | 8 | 8 | 5 | 9 | 9 | 10 | 7 | 8 | 9 | 3 | 5 | 6 |

2016-18 Western Regional Spring Barley Nursery Mean Data (Metric)

| Ent # | Entry | Yield (Mg/Ha) | | | Test Weight (kg/m ³) | | | Heading (Julian) | | | Height (cm) | | | Plump (>2.4mm) | | | Protein (%) | | |
|----------------------|--------------|---------------|-------------|-------------|----------------------------------|--------------|--------------|------------------|--------------|--------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-------------|-------------|
| | | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| 1 | Step toe | 4.93 | 5.20 | 7.620 | 626.9 | 604.5 | 643.4 | 170.7 | 175.3 | 168.7 | 76.5 | 72.7 | 75.7 | 92.7 | 85.1 | 89.4 | 11.9 | 11.0 | 11.4 |
| 2 | Baronesse | 5.67 | 5.75 | 7.494 | 671.9 | 658.2 | 682.8 | 175.3 | 180.0 | 173.0 | 72.6 | 71.9 | 74.5 | 86.3 | 86.1 | 91.5 | 12.5 | 12.2 | 13.0 |
| 3 | Harrington | 4.94 | 5.24 | 6.729 | 655.2 | 650.7 | 671.8 | 175.4 | 180.6 | 173.5 | 77.0 | 78.5 | 75.7 | 88.4 | 80.7 | 87.0 | 12.8 | 13.3 | 13.3 |
| 4 | AC Metcalfe | 5.02 | 5.06 | 6.642 | 666.8 | 660.3 | 684.3 | 175.0 | 179.3 | 173.5 | 79.8 | 80.0 | 79.7 | 87.0 | 85.6 | 93.4 | 12.4 | 12.9 | 13.5 |
| 5 | 08ARS116-91 | 5.21 | 5.49 | 7.265 | 656.5 | 649.1 | 679.9 | 174.0 | 177.4 | 171.7 | 73.2 | 72.9 | 71.6 | 86.8 | 86.5 | 88.2 | 12.6 | 12.5 | 13.0 |
| 6 | 08ARS028-20 | 5.31 | 5.60 | 7.572 | 656.5 | 645.3 | 676.6 | 176.4 | 181.0 | 174.9 | 72.4 | 71.1 | 70.3 | 83.2 | 82.4 | 88.5 | 12.0 | 12.2 | 13.0 |
| 7 | 10ARS191-3 | | 5.94 | 8.134 | | 654.0 | 682.6 | | 180.2 | 175.7 | | 79.8 | 77.3 | | 80.8 | 89.1 | | 12.3 | 12.5 |
| 8 | 11ARS162-4 | | | 6.911 | | | 658.9 | | | 175.4 | | | 77.0 | | | 90.3 | | | 13.1 |
| 9 | 11WA-107.58 | 5.78 | 5.85 | 7.857 | 700.2 | 689.5 | 697.8 | 174.9 | 179.6 | 173.5 | 76.5 | 76.7 | 73.5 | 93.0 | 92.1 | 93.9 | 12.4 | 12.6 | 12.8 |
| 10 | 11WA-107.43 | 5.65 | 5.71 | 7.498 | 686.1 | 684.5 | 694.7 | 173.9 | 179.0 | 173.3 | 73.4 | 75.0 | 71.6 | 89.0 | 88.2 | 91.5 | 12.4 | 12.5 | 13.1 |
| 11 | 13WAM-101.2 | | | 7.435 | | | 679.4 | | | 176.9 | | | 70.1 | | | 90.2 | | | 13.6 |
| 12 | 13WAM-149.2 | | | 7.150 | | | 689.3 | | | 174.3 | | | 72.5 | | | 93.5 | | | 12.8 |
| 13 | 13WAM-135.26 | | | 7.248 | | | 695.2 | | | 172.6 | | | 67.8 | | | 91.9 | | | 13.2 |
| 14 | HO515-510 | | | 7.628 | | | 684.4 | | | 171.5 | | | 76.2 | | | 86.7 | | | 12.5 |
| 15 | HO515-555 | | | 7.470 | | | 685.7 | | | 173.4 | | | 73.3 | | | 91.7 | | | 12.4 |
| 16 | 2B11-4949 | 5.48 | 5.70 | 7.561 | 650.0 | 649.1 | 676.5 | 175.9 | 179.9 | 173.3 | 70.4 | 72.1 | 70.1 | 85.7 | 82.8 | 89.6 | 12.4 | 12.7 | 13.3 |
| 17 | 2B13-6991 | | | 7.334 | | | 679.8 | | | 171.7 | | | 73.5 | | | 91.7 | | | 13.2 |
| 18 | 2IM14-7765 | | | 7.312 | | | 657.3 | | | 175.5 | | | 74.4 | | | 90.7 | | | 12.5 |
| 19 | 2IM14-7830 | | | 7.782 | | | 677.8 | | | 174.1 | | | 70.9 | | | 89.3 | | | 12.8 |
| 20 | 2IM14-8212 | | | 7.263 | | | 668.7 | | | 172.7 | | | 70.9 | | | 93.2 | | | 12.3 |
| 21 | CDC Bow | | 4.67 | 7.194 | | 642.5 | 678.6 | | 181.7 | 176.1 | | 76.9 | 79.7 | | 88.4 | 93.1 | | 12.6 | 12.7 |
| 22 | CDC Fraser | | 5.04 | 6.855 | | 629.6 | 668.7 | | 180.9 | 176.5 | | 72.7 | 77.4 | | 88.0 | 92.9 | | 12.9 | 13.2 |
| 23 | 2ND32529 | | 5.29 | 7.202 | | 654.0 | 673.2 | | 177.2 | 171.7 | | 74.2 | 73.9 | | 90.8 | 94.2 | | 11.2 | 11.5 |
| 24 | 2ND32829 | | | 7.009 | | | 658.8 | | | 168.9 | | | 74.4 | | | 92.8 | | | 11.7 |
| 25 | MT124112 | | 5.61 | 7.084 | | 663.7 | 679.6 | | 177.3 | 170.6 | | 71.1 | 72.1 | | 92.7 | 94.3 | | 11.2 | 11.9 |
| 26 | MT124128 | | 5.35 | 6.781 | | 678.4 | 690.7 | | 175.6 | 169.2 | | 68.8 | 68.6 | | 95.4 | 94.9 | | 11.3 | 12.4 |
| 27 | MT124069 | | | 6.773 | | | 676.6 | | | 175.1 | | | 75.8 | | | 90.8 | | | 12.6 |
| 28 | MT124134 | | 5.22 | 6.954 | | 681.1 | 686.6 | | 175.1 | 169.7 | | 71.1 | 70.7 | | 95.7 | 95.3 | | 11.4 | 12.0 |
| 29 | UTSB10905-72 | 5.65 | 5.92 | 7.790 | 639.7 | 630.5 | 655.0 | 171.3 | 175.4 | 169.7 | 80.0 | 78.6 | 79.3 | 94.6 | 92.1 | 92.0 | 12.1 | 12.1 | 12.6 |
| 30 | UTSB11301-1 | | | 7.608 | | | 662.3 | | | 171.7 | | | 78.1 | | | 89.1 | | | 12.1 |
| MEAN: | | 5.36 | 5.47 | 7.30 | 665.7 | 652.2 | 676.8 | 174.8 | 178.6 | 173.0 | 77.0 | 74.4 | 73.8 | 87.8 | 85.6 | 91.3 | 12.4 | 12.3 | 12.7 |
| CHECK'S MEAN: | | 5.14 | 5.31 | 7.20 | 655.2 | 644.9 | 672.4 | 174.1 | 178.8 | 172.2 | 76.5 | 75.8 | 75.7 | 88.6 | 84.4 | 90.2 | 12.4 | 12.3 | 13.0 |
| Observations: | | 12 | 11 | 11 | 10 | 9 | 8 | 8 | 8 | 5 | 9 | 9 | 10 | 7 | 8 | 9 | 3 | 5 | 6 |

2018 Western Regional Spring Barley Nursery Mean Data All Locations

| Ent # | Entry | YIELD | | Test Wt. | | HEADING | HEIGHT | | LODGING | PLUMP | Protein |
|----------------------|--------------|--------------|--------------|-------------|--------------|--------------|-------------|-------------|------------|-------------|-------------|
| | | Bu/A | Mg/ha | lbs./Bu | kg/m3 | (Julian) | in. | cm | 0-10 | >2.4mm | % |
| 1 | Stephoe | 114.6 | 7.620 | 49.6 | 643.4 | 168.7 | 29.8 | 75.7 | 1.5 | 89.4 | 11.4 |
| 2 | Baronesse | 113.2 | 7.494 | 52.7 | 682.8 | 173.0 | 29.3 | 74.5 | 1.4 | 91.5 | 13.0 |
| 3 | Harrington | 101.8 | 6.729 | 51.8 | 671.8 | 173.5 | 29.7 | 75.7 | 2.7 | 87.0 | 13.3 |
| 4 | AC Metcalfe | 100.2 | 6.642 | 52.8 | 684.3 | 173.5 | 31.1 | 79.7 | 1.8 | 93.4 | 13.5 |
| 5 | 08ARS116-91 | 109.7 | 7.265 | 52.5 | 679.9 | 171.7 | 28.3 | 71.6 | 1.4 | 88.2 | 13.0 |
| 6 | 08ARS028-20 | 114.4 | 7.572 | 52.2 | 676.6 | 174.9 | 27.8 | 70.3 | 0.8 | 88.5 | 13.0 |
| 7 | 10ARS191-3 | 123.2 | 8.134 | 52.7 | 682.6 | 175.7 | 30.2 | 77.3 | 1.4 | 89.1 | 12.5 |
| 8 | 11ARS162-4 | 104.4 | 6.911 | 50.8 | 658.9 | 175.4 | 30.2 | 77.0 | 1.7 | 90.3 | 13.1 |
| 9 | 11WA-107.58 | 118.5 | 7.857 | 53.8 | 697.8 | 173.5 | 28.8 | 73.5 | 0.7 | 93.9 | 12.8 |
| 10 | 11WA-107.43 | 113.2 | 7.498 | 53.6 | 694.7 | 173.3 | 28.1 | 71.6 | 0.7 | 91.5 | 13.1 |
| 11 | 13WAM-101.2 | 112.4 | 7.435 | 52.4 | 679.4 | 176.9 | 27.7 | 70.1 | 1.0 | 90.2 | 13.6 |
| 12 | 13WAM-149.2 | 108.0 | 7.150 | 53.2 | 689.3 | 174.3 | 28.5 | 72.5 | 2.1 | 93.5 | 12.8 |
| 13 | 13WAM-135.26 | 109.5 | 7.248 | 53.6 | 695.2 | 172.6 | 26.8 | 67.8 | 1.9 | 91.9 | 13.2 |
| 14 | HO515-510 | 115.2 | 7.628 | 52.8 | 684.4 | 171.5 | 29.9 | 76.2 | 1.2 | 86.7 | 12.5 |
| 15 | HO515-555 | 112.7 | 7.470 | 52.9 | 685.7 | 173.4 | 28.8 | 73.3 | 0.6 | 91.7 | 12.4 |
| 16 | 2B11-4949 | 113.9 | 7.561 | 52.2 | 676.5 | 173.3 | 27.8 | 70.1 | 1.2 | 89.6 | 13.3 |
| 17 | 2B13-6991 | 110.7 | 7.334 | 52.5 | 679.8 | 171.7 | 28.9 | 73.5 | 0.9 | 91.7 | 13.2 |
| 18 | 2IM14-7765 | 110.3 | 7.312 | 50.7 | 657.3 | 175.5 | 29.1 | 74.4 | 0.8 | 90.7 | 12.5 |
| 19 | 2IM14-7830 | 117.5 | 7.782 | 52.3 | 677.8 | 174.1 | 27.9 | 70.9 | 0.9 | 89.3 | 12.8 |
| 20 | 2IM14-8212 | 109.5 | 7.263 | 51.6 | 668.7 | 172.7 | 27.9 | 70.9 | 1.3 | 93.2 | 12.3 |
| 21 | CDC Bow | 108.5 | 7.194 | 52.4 | 678.6 | 176.1 | 31.2 | 79.7 | 0.6 | 93.1 | 12.7 |
| 22 | CDC Fraser | 103.5 | 6.855 | 51.6 | 668.7 | 176.5 | 30.3 | 77.4 | 0.8 | 92.9 | 13.2 |
| 23 | 2ND32529 | 108.7 | 7.202 | 51.9 | 673.2 | 171.7 | 29.0 | 73.9 | 1.4 | 94.2 | 11.5 |
| 24 | 2ND32829 | 105.8 | 7.009 | 50.8 | 658.8 | 168.9 | 29.2 | 74.4 | 2.2 | 92.8 | 11.7 |
| 25 | MT124112 | 106.9 | 7.084 | 52.4 | 679.6 | 170.6 | 28.5 | 72.1 | 0.5 | 94.3 | 11.9 |
| 26 | MT124128 | 102.3 | 6.781 | 53.3 | 690.7 | 169.2 | 27.1 | 68.6 | 0.7 | 94.9 | 12.4 |
| 27 | MT124069 | 102.5 | 6.773 | 52.2 | 676.6 | 175.1 | 29.7 | 75.8 | 1.9 | 90.8 | 12.6 |
| 28 | MT124134 | 104.9 | 6.954 | 53.0 | 686.6 | 169.7 | 27.7 | 70.7 | 0.7 | 95.3 | 12.0 |
| 29 | UTSB10905-72 | 117.6 | 7.790 | 50.5 | 655.0 | 169.7 | 30.9 | 79.3 | 1.1 | 92.0 | 12.6 |
| 30 | UTSB11301-1 | 114.7 | 7.608 | 51.1 | 662.3 | 171.7 | 30.7 | 78.1 | 0.7 | 89.1 | 12.1 |
| MEAN: | | 110.1 | 7.296 | 52.2 | 676.8 | 173.0 | 29.0 | 73.8 | 1.5 | 91.3 | 12.7 |
| CHECK MEAN: | | 106.3 | 7.196 | 51.9 | 672.4 | 172.2 | 29.7 | 75.7 | 2.2 | 90.2 | 13.0 |
| Observations: | | 11 | 11 | 8 | 8 | 5 | 10 | 10 | 6 | 9 | 6 |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Gongshe Hu</i> | | | | Location: Aberdeen, ID | | | | | No. of Reps: 3 | |
|---------------------------------------|--------------|--------------|------------|-------------------------------|-------------------|----------------|---------------|-------------|--------------------------------|--------------|
| Harvest Plot Area (sq.ft.): 50 | | | | Seed Date: 4/10/2018 | | | | | Harvest Date: 8/13/2018 | |
| | | YIELD | | Test Wt. | | HEADING | HEIGHT | | LODGING | PLUMP |
| Ent # | Entry | Bu/A | Mg/ha | lbs./Bu | kg/m ³ | (Julian) | in. | cm | 0-10 | >2.4mm |
| 1 | Steptoe | 162.0 | 10.895 | 52.7 | 683.0 | 160.0 | 34.0 | 86.4 | 2.7 | 94.7 |
| 2 | Baronesse | 140.5 | 9.449 | 55.9 | 724.5 | 164.0 | 35.0 | 88.9 | 0.7 | 96.5 |
| 3 | Harrington | 135.6 | 9.119 | 55.9 | 724.5 | 166.0 | 37.3 | 94.7 | 0.0 | 96.4 |
| 4 | AC Metcalfe | 123.6 | 8.312 | 55.8 | 723.2 | 165.7 | 39.3 | 99.8 | 0.3 | 97.4 |
| 5 | 08ARS116-91 | 150.9 | 10.148 | 55.5 | 719.3 | 161.0 | 34.3 | 87.1 | 0.0 | 95.8 |
| 6 | 08ARS028-20 | 148.9 | 10.014 | 54.9 | 711.5 | 166.7 | 34.0 | 86.4 | 0.0 | 96.1 |
| 7 | 10ARS191-3 | 173.4 | 11.661 | 55.6 | 720.6 | 166.7 | 38.3 | 97.3 | 0.0 | 92.5 |
| 8 | 11ARS162-4 | 148.3 | 9.973 | 53.7 | 696.0 | 166.0 | 37.7 | 95.8 | 1.7 | 95.3 |
| 9 | 11WA-107.58 | 145.4 | 9.778 | 56.9 | 737.4 | 164.3 | 36.3 | 92.2 | 0.0 | 96.7 |
| 10 | 11WA-107.43 | 140.5 | 9.449 | 57.1 | 740.0 | 162.0 | 34.3 | 87.1 | 0.0 | 96.3 |
| 11 | 13WAM-101.2 | 165.9 | 11.157 | 55.7 | 721.9 | 168.0 | 32.0 | 81.3 | 0.0 | 96.9 |
| 12 | 13WAM-149.2 | 134.3 | 9.032 | 56.9 | 737.4 | 165.3 | 35.7 | 90.7 | 0.7 | 96.9 |
| 13 | 13WAM-135.26 | 157.2 | 10.572 | 56.7 | 734.8 | 163.3 | 33.0 | 83.8 | 0.0 | 96.5 |
| 14 | HO515-510 | 149.6 | 10.061 | 55.3 | 716.7 | 163.3 | 37.0 | 94.0 | 0.3 | 90.3 |
| 15 | HO515-555 | 156.9 | 10.552 | 56.1 | 727.1 | 166.3 | 35.3 | 89.7 | 0.0 | 93.3 |
| 16 | 2B11-4949 | 162.3 | 10.915 | 54.4 | 705.0 | 165.3 | 33.7 | 85.6 | 0.0 | 90.0 |
| 17 | 2B13-6991 | 141.8 | 9.536 | 54.3 | 703.7 | 161.7 | 36.0 | 91.4 | 0.0 | 94.4 |
| 18 | 2IM14-7765 | 129.1 | 8.682 | 53.2 | 689.5 | 168.0 | 35.3 | 89.7 | 0.0 | 95.6 |
| 19 | 2IM14-7830 | 141.0 | 9.482 | 54.2 | 702.4 | 166.7 | 32.0 | 81.3 | 0.0 | 92.7 |
| 20 | 2IM14-8212 | 146.1 | 9.825 | 53.4 | 692.1 | 163.7 | 34.7 | 88.1 | 0.0 | 94.4 |
| 21 | CDC Bow | 140.1 | 9.422 | 54.4 | 705.0 | 169.7 | 36.7 | 93.2 | 0.0 | 94.3 |
| 22 | CDC Fraser | 121.4 | 8.164 | 53.8 | 697.2 | 169.0 | 37.3 | 94.7 | 0.0 | 95.7 |
| 23 | 2ND32529 | 146.7 | 9.866 | 54.7 | 708.9 | 163.3 | 35.3 | 89.7 | 0.7 | 95.1 |
| 24 | 2ND32829 | 159.7 | 10.740 | 53.3 | 690.8 | 160.7 | 34.7 | 88.1 | 2.3 | 91.5 |
| 25 | MT124112 | 143.4 | 9.644 | 55.3 | 716.7 | 160.3 | 32.7 | 83.1 | 0.0 | 97.2 |
| 26 | MT124128 | 132.7 | 8.924 | 55.6 | 720.6 | 160.0 | 31.7 | 80.5 | 0.0 | 95.5 |
| 27 | MT124069 | 138.3 | 9.301 | 55.2 | 715.4 | 166.7 | 36.7 | 93.2 | 0.3 | 94.1 |
| 28 | MT124134 | 140.2 | 9.428 | 56.1 | 727.1 | 160.0 | 31.7 | 80.5 | 1.0 | 96.6 |
| 29 | UTSB10905-72 | 161.4 | 10.854 | 53.5 | 693.4 | 160.3 | 37.0 | 94.0 | 0.7 | 95.7 |
| 30 | UTSB11301-1 | 150.3 | 10.108 | 54.2 | 702.4 | 161.0 | 36.0 | 91.4 | 1.0 | 91.2 |
| MEAN: | | 146.3 | 9.8 | 55.0 | 712.9 | 164.2 | 35.2 | 89.3 | 0.4 | 94.9 |
| CHECK'S MEAN: | | 140.4 | 9.4 | 55.1 | 713.8 | 163.9 | 36.4 | 92.5 | 0.9 | 96.3 |
| CV % | | 8.5 | | | | 0.6 | 4.7 | | 163.6 | |
| LSD (.05) | | 17.1 | 0.9 | | | 1.4 | 2.2 | | 0.9 | |
| Observations: | | 3 | 3 | Bulk | Bulk | 3 | 3 | 3 | 3 | Bulk |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Jason Heward</i> | | | | Location: Idaho Falls, ID | | | | No. of Reps: 2 | |
|---------------------------------------|--------------|--------------|-------------|----------------------------------|-------------|----------------|--------------|-----------------------|----------------|
| Harvest Plot Area (sq.ft.): 85 | | | | Seed Date: | | | | Harvest Date: | |
| | | YIELD | | HEIGHT | | LODGING | PLUMP | THIN | Protein |
| Ent # | Entry | Bu/A | Mg/ha | in. | cm | 0-10 | >2.4mm | <2.2mm | % |
| 1 | Steptoe | 157.6 | 10.597 | 37.0 | 94.0 | 1.0 | 85.4 | 4.62 | 11.34 |
| 2 | Baronesse | 165.5 | 11.127 | 34.0 | 86.4 | 1.5 | 85.9 | 4.47 | 12.04 |
| 3 | Harrington | 149.8 | 10.071 | 34.0 | 86.4 | 1.0 | 78.0 | 5.83 | 12.14 |
| 4 | AC Metcalfe | 155.7 | 10.469 | 34.5 | 87.6 | 1.0 | 90.8 | 2.30 | 12.43 |
| 5 | 08ARS116-91 | 148.0 | 9.952 | 30.5 | 77.5 | 1.0 | 78.1 | 7.73 | 11.84 |
| 6 | 08ARS028-20 | 166.3 | 11.186 | 31.5 | 80.0 | 1.0 | 86.7 | 3.30 | 11.85 |
| 7 | 10ARS191-3 | 173.8 | 11.691 | 34.0 | 86.4 | 1.0 | 84.4 | 3.39 | 11.68 |
| 8 | 11ARS162-4 | 162.5 | 10.928 | 35.0 | 88.9 | 1.0 | 87.7 | 4.40 | 11.90 |
| 9 | 11WA-107.58 | 166.6 | 11.203 | 35.5 | 90.2 | 1.0 | 88.5 | 2.89 | 12.23 |
| 10 | 11WA-107.43 | 162.2 | 10.911 | 33.5 | 85.1 | 1.0 | 85.2 | 3.90 | 12.89 |
| 11 | 13WAM-101.2 | 157.2 | 10.574 | 31.0 | 78.7 | 1.0 | 85.2 | 3.69 | 12.45 |
| 12 | 13WAM-149.2 | 165.9 | 11.159 | 35.5 | 90.2 | 1.0 | 93.8 | 1.66 | 12.85 |
| 13 | 13WAM-135.26 | 163.9 | 11.024 | 32.0 | 81.3 | 1.0 | 90.7 | 2.74 | 12.57 |
| 14 | HO515-510 | 165.1 | 11.106 | 34.5 | 87.6 | 1.0 | 80.7 | 5.61 | 11.33 |
| 15 | HO515-555 | 163.4 | 10.987 | 32.0 | 81.3 | 1.0 | 88.7 | 2.66 | 12.20 |
| 16 | 2B11-4949 | 164.0 | 11.030 | 32.5 | 82.6 | 1.0 | 89.3 | 2.67 | 11.90 |
| 17 | 2B13-6991 | 161.6 | 10.866 | 33.5 | 85.1 | 1.0 | 86.6 | 4.19 | 12.37 |
| 18 | 2IM14-7765 | 152.9 | 10.285 | 32.0 | 81.3 | 1.0 | 78.6 | 7.37 | 11.85 |
| 19 | 2IM14-7830 | 160.8 | 10.813 | 32.0 | 81.3 | 1.0 | 82.4 | 5.93 | 11.93 |
| 20 | 2IM14-8212 | 165.8 | 11.148 | 32.5 | 82.6 | 1.0 | 89.1 | 3.32 | 11.15 |
| 21 | CDC Bow | 164.2 | 11.040 | 35.5 | 90.2 | 1.0 | 91.8 | 2.02 | 11.86 |
| 22 | CDC Fraser | 156.3 | 10.511 | 32.5 | 82.6 | 1.0 | 86.7 | 4.11 | 12.23 |
| 23 | 2ND32529 | 170.5 | 11.469 | 28.0 | 71.1 | 1.0 | 93.4 | 1.81 | 10.92 |
| 24 | 2ND32829 | 158.1 | 10.631 | 32.0 | 81.3 | 1.0 | 92.2 | 2.31 | 11.26 |
| 25 | MT124112 | 151.6 | 10.198 | 31.0 | 78.7 | 1.0 | 95.2 | 1.45 | 11.68 |
| 26 | MT124128 | 139.8 | 9.403 | 28.5 | 72.4 | 1.0 | 94.2 | 1.89 | 11.66 |
| 27 | MT124069 | 150.7 | 10.136 | 31.5 | 80.0 | 1.0 | 87.1 | 3.30 | 11.21 |
| 28 | MT124134 | 141.2 | 9.494 | 30.0 | 76.2 | 1.0 | 93.4 | 2.32 | 11.58 |
| 29 | UTSB10905-72 | 159.8 | 10.749 | 35.5 | 90.2 | 1.0 | 85.0 | 4.28 | 11.68 |
| 30 | UTSB11301-1 | 159.0 | 10.690 | 35.0 | 88.9 | 1.0 | 73.9 | 9.10 | 11.39 |
| MEAN: | | 159.3 | 10.7 | 32.9 | 83.5 | 1.0 | 87.0 | 3.84 | 11.88 |
| CHECK'S MEAN: | | 157.1 | 10.6 | 34.9 | 88.6 | 1.1 | 85.0 | 4.31 | 11.99 |
| CV % | | | | | | | | | |
| LSD (.05) | | | | | | | | | |
| Observations: | | | | | | | | | |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Gongshe Hu</i> | | | | Location: Tetonia, ID | | | | No. of Reps: 3 | |
|---------------------------------------|--------------|-------------|------------|------------------------------|-------|----------|--------|-------------------------------|------------|
| Harvest Plot Area (sq.ft.): 80 | | | | Seed Date: 5/2/2018 | | | | Harvest Date: 9/6/2018 | |
| Ent # | Entry | YIELD | | Test Wt. | | HEADING | HEIGHT | | LODGING |
| | | Bu/A | Mg/ha | lbs./Bu | kg/m3 | (Julian) | in. | cm | 0-10 |
| 1 | Steptoe | 95.0 | 6.389 | | | | | | 0.0 |
| 2 | Baronesse | 81.3 | 5.467 | | | | | | 0.0 |
| 3 | Harrington | 78.6 | 5.286 | | | | | | 0.0 |
| 4 | AC Metcalfe | 74.9 | 5.037 | | | | | | 0.0 |
| 5 | 08ARS116-91 | 90.0 | 6.053 | | | | | | 0.0 |
| 6 | 08ARS028-20 | 88.4 | 5.945 | | | | | | 0.0 |
| 7 | 10ARS191-3 | 101.4 | 6.819 | | | | | | 0.0 |
| 8 | 11ARS162-4 | 74.0 | 4.977 | | | | | | 0.0 |
| 9 | 11WA-107.58 | 104.4 | 7.021 | | | | | | 0.0 |
| 10 | 11WA-107.43 | 86.9 | 5.844 | | | | | | 0.0 |
| 11 | 13WAM-101.2 | 80.5 | 5.414 | | | | | | 0.0 |
| 12 | 13WAM-149.2 | 81.4 | 5.474 | | | | | | 0.0 |
| 13 | 13WAM-135.26 | 99.0 | 6.658 | | | | | | 0.0 |
| 14 | HO515-510 | 88.8 | 5.972 | | | | | | 0.0 |
| 15 | HO515-555 | 82.0 | 5.515 | | | | | | 0.0 |
| 16 | 2B11-4949 | 82.8 | 5.568 | | | | | | 0.0 |
| 17 | 2B13-6991 | 79.8 | 5.367 | | | | | | 0.0 |
| 18 | 2IM14-7765 | 83.7 | 5.629 | | | | | | 0.0 |
| 19 | 2IM14-7830 | 86.4 | 5.810 | | | | | | 0.0 |
| 20 | 2IM14-8212 | 84.7 | 5.696 | | | | | | 0.0 |
| 21 | CDC Bow | 72.6 | 4.882 | | | | | | 0.0 |
| 22 | CDC Fraser | 71.8 | 4.829 | | | | | | 0.0 |
| 23 | 2ND32529 | 80.7 | 5.427 | | | | | | 0.0 |
| 24 | 2ND32829 | 90.7 | 6.100 | | | | | | 0.0 |
| 25 | MT124112 | 84.0 | 5.649 | | | | | | 0.0 |
| 26 | MT124128 | 97.2 | 6.537 | | | | | | 0.0 |
| 27 | MT124069 | 88.3 | 5.938 | | | | | | 0.0 |
| 28 | MT124134 | 87.2 | 5.864 | | | | | | 0.0 |
| 29 | UTSB10905-72 | 91.8 | 6.174 | | | | | | 0.0 |
| 30 | UTSB11301-1 | 86.9 | 5.844 | | | | | | 0.0 |
| MEAN: | | 85.9 | 5.8 | | | | | | -- |
| CHECK'S MEAN: | | 82.5 | | | | | | | -- |
| CV % | | 6.0 | | | | | | | -- |
| LSD (.05) | | 3.0 | 3.0 | | | | | | 3.0 |
| Observations: | | | | | | | | | |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>John Rickertsen</i> | | | | Location: Hettinger, ND | | | | | | No. of Reps: 3 | | |
|---------------------------------------|--------------|--------------|------------|--------------------------------|--------------|----------------|---------------|-------------|----------------|--------------------------------|--------------|----------------|
| Harvest Plot Area (sq.ft.): 64 | | | | Seed Date: 4/27/2018 | | | | | | Harvest Date: 8/18/2018 | | |
| | | YIELD | | Test Wt. | | HEADING | HEIGHT | | LODGING | PLUMP | THIN | Protein |
| Ent # | Entry | Bu/A | Mg/ha | lbs./Bu | kg/m3 | (Julian) | in. | cm | 0-10 | >2.4mm | <2.2mm | % |
| 1 | Step toe | 83.1 | 5.588 | 45.1 | 584.5 | 165.0 | 20.6 | 52.3 | 0.0 | 89.2 | 10.80 | 13.30 |
| 2 | Baronesse | 89.7 | 6.032 | 49.9 | 646.7 | 171.0 | 24.5 | 62.2 | 0.0 | 89.9 | 10.10 | 15.40 |
| 3 | Harrington | 81.3 | 5.467 | 49.7 | 644.1 | 171.0 | 24.0 | 61.0 | 0.0 | 87.2 | 12.80 | 14.50 |
| 4 | AC Metcalfe | 74.7 | 5.024 | 49.7 | 644.1 | 171.0 | 26.2 | 66.5 | 0.0 | 92.2 | 7.80 | 15.90 |
| 5 | 08ARS116-91 | 78.8 | 5.299 | 48.7 | 631.2 | 170.0 | 23.5 | 59.7 | 0.0 | 84.8 | 15.20 | 14.50 |
| 6 | 08ARS028-20 | 78.5 | 5.279 | 48.1 | 623.4 | 173.0 | 21.5 | 54.6 | 0.0 | 87.0 | 13.00 | 14.90 |
| 7 | 10ARS191-3 | 107.1 | 7.202 | 49.6 | 642.8 | 172.0 | 27.6 | 70.1 | 0.0 | 89.3 | 10.70 | 13.70 |
| 8 | 11ARS162-4 | 83.9 | 5.642 | 48.0 | 622.1 | 173.0 | 25.6 | 65.0 | 0.0 | 89.7 | 10.30 | 14.80 |
| 9 | 11WA-107.58 | 95.4 | 6.416 | 50.7 | 657.1 | 171.0 | 23.8 | 60.5 | 0.0 | 91.2 | 8.80 | 14.90 |
| 10 | 11WA-107.43 | 96.6 | 6.496 | 50.7 | 657.1 | 170.0 | 24.1 | 61.2 | 0.0 | 90.8 | 9.20 | 14.00 |
| 11 | 13WAM-101.2 | 85.6 | 5.757 | 49.7 | 644.1 | 174.0 | 23.9 | 60.7 | 0.0 | 90.8 | 9.20 | 15.90 |
| 12 | 13WAM-149.2 | 89.0 | 5.985 | 50.2 | 650.6 | 171.0 | 22.8 | 57.9 | 0.0 | 89.8 | 10.20 | 15.20 |
| 13 | 13WAM-135.26 | 82.6 | 5.555 | 49.9 | 646.7 | 170.0 | 19.8 | 50.3 | 0.0 | 90.1 | 9.90 | 15.40 |
| 14 | HO515-510 | 84.6 | 5.689 | 49.8 | 645.4 | 170.0 | 24.1 | 61.2 | 0.0 | 87.5 | 12.50 | 14.90 |
| 15 | HO515-555 | 93.3 | 6.274 | 49.8 | 645.4 | 172.0 | 24.1 | 61.2 | 0.0 | 89.4 | 10.60 | 15.10 |
| 16 | 2B11-4949 | 83.5 | 5.615 | 49.1 | 636.3 | 171.0 | 23.0 | 58.4 | 0.0 | 88.4 | 11.60 | 15.50 |
| 17 | 2B13-6991 | 87.8 | 5.905 | 49.3 | 638.9 | 170.0 | 21.5 | 54.6 | 0.0 | 88.7 | 11.30 | 14.80 |
| 18 | 2IM14-7765 | 89.2 | 5.999 | 49.0 | 635.0 | 174.0 | 23.5 | 59.7 | 0.0 | 89.7 | 10.30 | 14.40 |
| 19 | 2IM14-7830 | 100.1 | 6.732 | 50.1 | 649.3 | 171.0 | 24.7 | 62.7 | 0.0 | 90.8 | 9.20 | 14.20 |
| 20 | 2IM14-8212 | 81.6 | 5.488 | 48.2 | 624.7 | 171.0 | 23.2 | 58.9 | 0.0 | 91.7 | 8.30 | 14.00 |
| 21 | CDC Bow | 93.1 | 6.261 | 49.6 | 642.8 | 173.0 | 27.7 | 70.4 | 0.0 | 93.6 | 6.40 | 14.10 |
| 22 | CDC Fraser | 77.9 | 5.239 | 47.6 | 616.9 | 174.0 | 25.6 | 65.0 | 0.0 | 90.2 | 9.80 | 14.30 |
| 23 | 2ND32529 | 83.7 | 5.629 | 48.7 | 631.2 | 169.0 | 24.1 | 61.2 | 0.0 | 92.0 | 8.00 | 12.90 |
| 24 | 2ND32829 | 86.7 | 5.831 | 48.1 | 623.4 | 167.0 | 25.6 | 65.0 | 0.0 | 91.7 | 8.30 | 12.40 |
| 25 | MT124112 | 75.8 | 5.098 | 48.5 | 628.6 | 169.0 | 23.0 | 58.4 | 0.0 | 91.0 | 9.00 | 13.10 |
| 26 | MT124128 | 70.3 | 4.728 | 49.1 | 636.3 | 167.0 | 22.0 | 55.9 | 0.0 | 93.9 | 6.10 | 13.70 |
| 27 | MT124069 | 73.8 | 4.963 | 48.7 | 631.2 | 173.0 | 24.8 | 63.0 | 0.0 | 85.7 | 14.30 | 14.40 |
| 28 | MT124134 | 77.8 | 5.232 | 49.3 | 638.9 | 168.0 | 25.9 | 65.8 | 0.0 | 93.4 | 6.60 | 12.90 |
| 29 | UTSB10905-72 | 79.0 | 5.313 | 45.3 | 587.1 | 168.0 | 24.0 | 61.0 | 0.0 | 90.3 | 9.70 | 15.40 |
| 30 | UTSB11301-1 | 80.3 | 5.400 | 46.4 | 601.3 | 170.0 | 25.1 | 63.8 | 0.0 | 88.0 | 12.00 | 14.10 |
| MEAN: | | 84.8 | 5.7 | 48.9 | 633.7 | 171.0 | 24.0 | 61.0 | 0.0 | 89.9 | 10.10 | 14.40 |
| CHECK'S MEAN: | | 82.2 | 5.5 | 48.6 | 629.9 | 169.5 | 23.8 | 60.5 | 0.0 | 89.6 | 10.38 | 14.78 |
| CV % | | 8.9 | | 1.2 | | 2.1 | 9.4 | | -- | 2.0 | 17.80 | 4.40 |
| LSD (.05) | | 12.4 | | 1.0 | | 1.1 | 3.7 | | -- | 2.9 | 2.90 | 1.00 |
| Observations: | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.00 | 3.00 |

Optional observations:

Precipitation Apr - Aug 5.58 inches, Oct - Aug 8.86 inches

Soil Moisture 1 foot at planting

Previous Crop Oats

Soil Type Belfield-Savage-Daglum silt loams

Soil Analysis 75 lb N03-N, 36 lb P, 694 lb K per acre

pH - 7.1, OM - 3.0%

Comments:

Long term no-till, very dry conditions in May and June.

Fertilizer: 25 lbs/ac 18-46-0, 120 lbs/ac 46-0-0

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Gautam Pradhan / Diana Amiot</i> | | | Location: Williston, ND | | | | No. of Reps: 3 | | | |
|---|--------------|-------------|--------------------------------|-------------|--------------|-------------|--------------------------------|-------------|--------------|--------------|
| Harvest Plot Area (sq.ft.): | | | Seed Date: 4/25/2018 | | | | Harvest Date: 8/15/2018 | | | |
| Ent # | Entry | YIELD | | Test Wt. | | HEIGHT | | PLUMP | THIN | Protein |
| | | Bu/A | Mg/ha | lbs./Bu | kg/m3 | in. | cm | >2.4mm | <2.2mm | % |
| 1 | Steptoe | | | | | | | | | |
| 2 | Baronesse | 80.8 | 5.436 | 53.4 | 691.6 | 18.2 | 46.3 | 87.6 | 5.30 | 15.97 |
| 3 | Harrington | 56.5 | 3.800 | 53.9 | 698.5 | 18.6 | 47.3 | 82.6 | 7.61 | 14.73 |
| 4 | AC Metcalfe | 54.2 | 3.647 | 54.9 | 711.1 | 20.5 | 52.1 | 89.0 | 4.20 | 15.20 |
| 5 | 08ARS116-91 | 65.5 | 4.405 | 54.3 | 703.7 | 17.6 | 44.6 | 84.3 | 6.30 | 14.93 |
| 6 | 08ARS028-20 | 72.6 | 4.882 | 53.1 | 688.6 | 18.0 | 45.6 | 85.1 | 6.80 | 13.90 |
| 7 | 10ARS191-3 | 89.8 | 6.039 | 53.0 | 687.3 | 16.3 | 41.4 | 84.1 | 5.99 | 13.63 |
| 8 | 11ARS162-4 | 69.6 | 4.681 | 53.0 | 687.3 | 18.3 | 46.5 | 81.0 | 10.44 | 14.50 |
| 9 | 11WA-107.58 | 83.9 | 5.645 | 55.4 | 718.0 | 19.2 | 48.7 | 90.6 | 3.68 | 14.10 |
| 10 | 11WA-107.43 | 63.3 | 4.257 | 54.8 | 710.2 | 17.4 | 44.3 | 88.2 | 4.64 | 14.60 |
| 11 | 13WAM-101.2 | 77.5 | 5.210 | 53.3 | 690.3 | 19.1 | 48.5 | 83.1 | 7.13 | 16.57 |
| 12 | 13WAM-149.2 | 62.4 | 4.194 | 54.7 | 708.5 | 18.5 | 47.0 | 87.9 | 4.82 | 14.40 |
| 13 | 13WAM-135.26 | 64.5 | 4.335 | 53.9 | 698.1 | 16.9 | 43.0 | 85.3 | 6.65 | 16.40 |
| 14 | HO515-510 | 71.2 | 4.786 | 53.3 | 690.8 | 18.2 | 46.3 | 79.5 | 9.90 | 13.43 |
| 15 | HO515-555 | 67.4 | 4.533 | 53.5 | 692.9 | 21.8 | 55.3 | 90.5 | 3.94 | 13.33 |
| 16 | 2B11-4949 | 81.0 | 5.445 | 54.4 | 705.0 | 15.6 | 39.5 | 82.8 | 7.70 | 13.90 |
| 17 | 2B13-6991 | 62.6 | 4.210 | 54.8 | 709.8 | 21.6 | 54.9 | 88.5 | 4.92 | 14.87 |
| 18 | 2IM14-7765 | 70.3 | 4.725 | 53.0 | 687.3 | 19.6 | 49.7 | 90.5 | 3.95 | 13.30 |
| 19 | 2IM14-7830 | 71.1 | 4.779 | 53.7 | 696.4 | 17.8 | 45.3 | 82.6 | 8.58 | 14.23 |
| 20 | 2IM14-8212 | 59.9 | 4.031 | 52.7 | 683.4 | 17.4 | 44.3 | 91.9 | 3.74 | 13.60 |
| 21 | CDC Bow | 68.1 | 4.582 | 53.6 | 694.2 | 22.3 | 56.6 | 91.1 | 3.60 | 13.43 |
| 22 | CDC Fraser | 72.6 | 4.885 | 53.3 | 690.3 | 23.2 | 58.9 | 88.8 | 4.41 | 14.27 |
| 23 | 2ND32529 | 51.3 | 3.452 | 53.2 | 689.0 | 18.8 | 47.7 | 90.5 | 3.68 | 12.93 |
| 24 | 2ND32829 | 65.6 | 4.414 | 53.4 | 692.1 | 21.6 | 54.9 | 94.5 | 2.39 | 12.87 |
| 25 | MT124112 | 63.0 | 4.237 | 54.0 | 700.3 | 19.3 | 49.0 | 92.7 | 2.79 | 12.87 |
| 26 | MT124128 | 60.0 | 4.037 | 54.0 | 700.3 | 18.6 | 47.3 | 94.5 | 2.46 | 13.07 |
| 27 | MT124069 | 52.3 | 3.519 | 53.5 | 692.9 | 22.4 | 57.0 | 85.3 | 6.11 | 14.03 |
| 28 | MT124134 | 60.6 | 4.073 | 54.3 | 703.3 | 19.8 | 50.4 | 93.8 | 2.65 | 12.70 |
| 29 | UTSB10905-72 | 59.2 | 3.979 | 52.6 | 681.3 | 20.0 | 50.7 | 94.1 | 1.90 | 15.40 |
| 30 | UTSB11301-1 | 63.0 | 4.239 | 52.6 | 681.3 | 20.3 | 51.6 | 89.2 | 3.51 | 14.40 |
| MEAN: | | 66.9 | 4.5 | 53.7 | 696.0 | 19.2 | 48.8 | 87.9 | 5.16 | 14.19 |
| CHECK'S MEAN: | | 63.9 | 4.3 | 54.0 | 700.4 | 19.1 | 48.6 | 86.4 | 5.70 | 15.30 |
| CV % | | 10.3 | | 0.9 | | 6.5 | | 5.1 | 51.24 | 6.22 |
| LSD (.05) | | 11.3 | | 0.8 | | 2.1 | | 7.3 | 4.33 | 1.44 |
| Observations: | | | | | | | | | | |

Location: WREC; Latitude 48° 8' N; Longitude 103° 44' W; Elevation 2105 ft.

Planted: 04-25-2018.

Soil test (0-6"): P=22 ppm; K=350 ppm; pH=5.9; OM=2.6%.

(0-24"): NO3-N=53 lb/a.

Applied fertilizers in lb/a: N=19; P₂O₅=18; K₂O=0; S=5.

[†]Protein adjusted to 0% moisture.

[#]Yield = Reported on a 13.5% moisture basis.

Chemical Applications: Axial Star @ 16 oz/a and Bromac Advanced @ 16 oz/a (06-01-2018).

Trial received hail on June 28, 2018. The variety Steptoe was not included in the analyses.

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Jason Heward</i> | | | | Location: Fairfield, MT | | | | No. of Reps: 2 | | |
|---------------------------------------|--------------|--------------|------------|--------------------------------|-------------|---------|-------------|-----------------------|-------------|--------------|
| Harvest Plot Area (sq.ft.): 85 | | | | Seed Date: | | | | Harvest Date: | | |
| Ent # | Entry | YIELD | | HEIGHT | | LODGING | PLUMP | PLUMP | THIN | Protein |
| | | Bu/A | Mg/ha | in. | cm | 0-10 | >2.4mm | >2.2mm | <2.2mm | % |
| 1 | Steptoe | 112.7 | 7.576 | 32.5 | 82.6 | | 76.4 | 14.1 | 9.51 | 13.13 |
| 2 | Baronesse | 117.6 | 7.910 | 31.0 | 78.7 | | 85.1 | 10.7 | 4.22 | 12.73 |
| 3 | Harrington | 108.6 | 7.307 | 30.5 | 77.5 | | 77.8 | 15.2 | 7.05 | 13.78 |
| 4 | AC Metcalfe | 102.5 | 6.896 | 32.0 | 81.3 | | 90.8 | 6.8 | 2.44 | 13.26 |
| 5 | 08ARS116-91 | 113.2 | 7.615 | 29.5 | 74.9 | | 86.9 | 10.0 | 3.08 | 12.87 |
| 6 | 08ARS028-20 | 114.6 | 7.707 | 28.0 | 71.1 | | 72.7 | 19.4 | 7.89 | 14.40 |
| 7 | 10ARS191-3 | 116.0 | 7.798 | 32.0 | 81.3 | | 80.4 | 15.4 | 4.24 | 12.52 |
| 8 | 11ARS162-4 | 105.4 | 7.091 | 31.5 | 80.0 | | 86.4 | 8.4 | 5.27 | 13.57 |
| 9 | 11WA-107.58 | 116.0 | 7.799 | 32.5 | 82.6 | | 94.5 | 4.2 | 1.29 | 13.33 |
| 10 | 11WA-107.43 | 114.6 | 7.709 | 30.0 | 76.2 | | 86.1 | 10.9 | 3.02 | 13.43 |
| 11 | 13WAM-101.2 | 105.8 | 7.112 | 29.0 | 73.7 | | 77.4 | 16.3 | 6.32 | 14.32 |
| 12 | 13WAM-149.2 | 115.1 | 7.738 | 30.5 | 77.5 | | 94.3 | 4.2 | 1.57 | 12.09 |
| 13 | 13WAM-135.26 | 113.4 | 7.626 | 27.5 | 69.9 | | 87.3 | 9.4 | 3.30 | 12.35 |
| 14 | HO515-510 | 117.6 | 7.910 | 30.5 | 77.5 | | 71.9 | 19.0 | 9.11 | 13.26 |
| 15 | HO515-555 | 113.7 | 7.645 | 29.5 | 74.9 | | 86.2 | 10.8 | 3.01 | 11.01 |
| 16 | 2B11-4949 | 107.0 | 7.194 | 30.5 | 77.5 | | 80.8 | 13.2 | 5.98 | 13.67 |
| 17 | 2B13-6991 | 112.1 | 7.539 | 31.0 | 78.7 | | 89.4 | 7.7 | 2.95 | 12.75 |
| 18 | 2IM14-7765 | 107.1 | 7.201 | 29.5 | 74.9 | | 82.6 | 11.8 | 5.61 | 12.63 |
| 19 | 2IM14-7830 | 112.7 | 7.577 | 29.0 | 73.7 | | 86.1 | 9.7 | 4.17 | 13.29 |
| 20 | 2IM14-8212 | 117.9 | 7.927 | 29.5 | 74.9 | | 92.2 | 5.7 | 2.09 | 12.67 |
| 21 | CDC Bow | 110.2 | 7.409 | 34.5 | 87.6 | | 81.6 | 13.5 | 4.88 | 14.06 |
| 22 | CDC Fraser | 104.1 | 7.004 | 30.0 | 76.2 | | 87.8 | 8.6 | 3.59 | 14.11 |
| 23 | 2ND32529 | 115.0 | 7.732 | 30.5 | 77.5 | | 92.3 | 5.2 | 2.53 | 11.34 |
| 24 | 2ND32829 | 109.0 | 7.331 | 28.5 | 72.4 | | 85.7 | 9.9 | 4.40 | 12.52 |
| 25 | MT124112 | 113.8 | 7.652 | 30.0 | 76.2 | | 92.0 | 5.5 | 2.44 | 11.70 |
| 26 | MT124128 | 113.2 | 7.613 | 28.0 | 71.1 | | 90.7 | 6.2 | 3.15 | 12.59 |
| 27 | MT124069 | 106.7 | 7.175 | 30.0 | 76.2 | | 84.8 | 10.8 | 4.43 | 12.17 |
| 28 | MT124134 | 107.7 | 7.244 | 29.0 | 73.7 | | 94.5 | 3.9 | 1.51 | 12.13 |
| 29 | UTSB10905-72 | 113.6 | 7.637 | 33.5 | 85.1 | | 81.7 | 12.9 | 5.41 | 12.80 |
| 30 | UTSB11301-1 | 117.8 | 7.922 | 35.0 | 88.9 | | 70.7 | 19.0 | 10.35 | 12.56 |
| MEAN: | | 111.8 | 7.5 | 30.5 | 77.5 | | 84.9 | 10.6 | 4.49 | 12.90 |
| CHECK'S MEAN: | | 110.4 | 7.4 | 31.5 | 80.0 | | 82.5 | 11.7 | 5.81 | 13.23 |
| CV % | | | | | | | | | | |
| LSD (.05) | | | | | | | | | | |
| Observations: | | | | | | | | | | |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>David Hole, Justin Clawson</i> | | | | Location: Logan, UT | | | | No. of Reps: 3 | | | |
|---|--------------|--------------|------------|----------------------------|--------------|--------------|-------------|-------------------------------|---------|--------|--|
| Harvest Plot Area (sq.ft.): 45 | | | | Seed Date: 4/4/2018 | | | | Harvest Date: 8/2/2018 | | | |
| Ent # | Entry | YIELD | | Test Wt. | | HEADING | HEIGHT | | LODGING | PLUMP | |
| | | Bu/A | Mg/ha | lbs./Bu | kg/m3 | (Julian) | in. | cm | 0-10 | >2.4mm | |
| 1 | Steptoe | 112.3 | 7.558 | 53.2 | 689.5 | 158.0 | 24.0 | 61.0 | | | |
| 2 | Baronesse | 106.0 | 7.132 | 54.0 | 699.8 | 162.0 | 23.0 | 58.4 | | | |
| 3 | Harrington | 100.6 | 6.769 | 52.2 | 676.5 | 163.0 | 24.0 | 61.0 | | | |
| 4 | AC Metcalfe | 94.6 | 6.366 | 53.9 | 698.5 | 164.0 | 25.0 | 63.5 | | | |
| 5 | 08ARS116-91 | 100.7 | 6.777 | 54.1 | 701.1 | 162.0 | 23.0 | 58.4 | | | |
| 6 | 08ARS028-20 | 100.2 | 6.744 | 53.0 | 686.9 | 164.0 | 22.0 | 55.9 | | | |
| 7 | 10ARS191-3 | 95.8 | 6.450 | 53.9 | 698.5 | 171.0 | 22.0 | 55.9 | | | |
| 8 | 11ARS162-4 | 87.7 | 5.900 | 52.5 | 680.4 | 169.0 | 22.0 | 55.9 | | | |
| 9 | 11WA-107.58 | 101.3 | 6.815 | 56.3 | 729.6 | 165.0 | 24.0 | 61.0 | | | |
| 10 | 11WA-107.43 | 91.0 | 6.125 | 55.1 | 714.1 | 166.0 | 20.0 | 50.8 | | | |
| 11 | 13WAM-101.2 | 88.5 | 5.956 | 54.1 | 701.1 | 172.0 | 23.0 | 58.4 | | | |
| 12 | 13WAM-149.2 | 95.1 | 6.403 | 54.9 | 711.5 | 167.0 | 22.0 | 55.9 | | | |
| 13 | 13WAM-135.26 | 104.4 | 7.027 | 56.3 | 729.6 | 163.0 | 21.0 | 53.3 | | | |
| 14 | HO515-510 | 102.7 | 6.914 | 55.3 | 716.7 | 159.0 | 24.0 | 61.0 | | | |
| 15 | HO515-555 | 100.8 | 6.782 | 54.9 | 711.5 | 159.0 | 25.0 | 63.5 | | | |
| 16 | 2B11-4949 | 104.9 | 7.058 | 53.8 | 697.2 | 162.0 | 23.0 | 58.4 | | | |
| 17 | 2B13-6991 | 95.3 | 6.413 | 54.8 | 710.2 | 163.0 | 21.0 | 53.3 | | | |
| 18 | 2IM14-7765 | 95.6 | 6.435 | 51.2 | 663.6 | 166.0 | 24.0 | 61.0 | | | |
| 19 | 2IM14-7830 | 100.0 | 6.726 | 53.5 | 693.4 | 164.0 | 21.0 | 53.3 | | | |
| 20 | 2IM14-8212 | 89.6 | 6.027 | 52.9 | 685.6 | 164.0 | 20.0 | 50.8 | | | |
| 21 | CDC Bow | 88.8 | 5.975 | 52.7 | 683.0 | 167.0 | 24.0 | 61.0 | | | |
| 22 | CDC Fraser | 94.6 | 6.365 | 52.4 | 679.1 | 168.0 | 23.0 | 58.4 | | | |
| 23 | 2ND32529 | 102.4 | 6.893 | 54.6 | 707.6 | 162.0 | 24.0 | 61.0 | | | |
| 24 | 2ND32829 | 101.9 | 6.859 | 54.3 | 703.7 | 156.0 | 22.0 | 55.9 | | | |
| 25 | MT124112 | 98.1 | 6.602 | 55.1 | 714.1 | 158.0 | 23.0 | 58.4 | | | |
| 26 | MT124128 | 98.5 | 6.629 | 57.1 | 740.0 | 157.0 | 23.0 | 58.4 | | | |
| 27 | MT124069 | 92.3 | 6.212 | 54.6 | 707.6 | 166.0 | 27.0 | 68.6 | | | |
| 28 | MT124134 | 100.8 | 6.782 | 56.5 | 732.2 | 158.0 | 23.0 | 58.4 | | | |
| 29 | UTSB10905-72 | 120.2 | 8.090 | 54.0 | 699.8 | 157.0 | 26.0 | 66.0 | | | |
| 30 | UTSB11301-1 | 118.3 | 7.959 | 54.2 | 702.4 | 161.0 | 29.0 | 73.7 | | | |
| MEAN: | | 99.4 | 6.7 | 54.2 | 702.2 | 163.1 | 23.2 | 59.0 | | | |
| CHECK'S MEAN: | | 103.4 | 7.0 | 53.3 | 691.1 | 161.8 | 24.0 | 61.0 | | | |
| CV % | | 7.6 | | | | | | | | | |
| LSD (.05) | | 13.7 | | | | | | | | | |
| Observations: | | 3 | | | | | | | | | |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Michael McKay</i> | | | | Location: Moses Lake, WA | | | | | | | | No. of Reps: 3 | |
|----------------------------------|--------------|--------------|------------|---------------------------------|--------------|---------------|-------------|----------------|--------------|--------------|-------------|-----------------------|--|
| Harvest Plot Area (sq.ft.): | | | | Seed Date: | | | | | | | | Harvest Date: | |
| | | YIELD | | Test Wt. | | HEIGHT | | LODGING | PLUMP | PLUMP | THIN | Protein | |
| Ent # | Entry | Bu/A | Mg/ha | lbs./Bu | kg/m3 | in. | cm | 0-10 | >2.4mm | >2.2mm | <2.2mm | % | |
| 1 | Step toe | 97.2 | 6.537 | 44.8 | 580.6 | 29.7 | 75.4 | 0.3 | 85.7 | 9.0 | 5.31 | 10.20 | |
| 2 | Baronesse | 106.1 | 7.136 | 49.0 | 635.5 | 33.3 | 84.7 | 2.7 | 97.4 | 1.9 | 0.73 | 12.46 | |
| 3 | Harrington | 83.7 | 5.628 | 45.1 | 584.1 | 32.3 | 82.1 | 7.3 | 95.5 | 2.9 | 1.69 | 14.63 | |
| 4 | AC Metcalfe | 96.0 | 6.453 | 48.6 | 629.4 | 34.0 | 86.4 | 3.0 | 95.6 | 3.1 | 1.27 | 13.80 | |
| 5 | 08ARS116-91 | 107.8 | 7.248 | 47.6 | 617.3 | 32.7 | 83.0 | 3.7 | 87.7 | 8.8 | 3.56 | 12.92 | |
| 6 | 08ARS028-20 | 102.7 | 6.906 | 48.7 | 630.7 | 29.0 | 73.7 | 0.3 | 85.0 | 9.8 | 5.29 | 12.88 | |
| 7 | 10ARS191-3 | 108.3 | 7.280 | 48.3 | 626.4 | 32.0 | 81.3 | 1.3 | 93.5 | 4.6 | 1.90 | 13.29 | |
| 8 | 11ARS162-4 | 79.6 | 5.354 | 45.1 | 584.1 | 35.3 | 89.7 | 4.0 | 93.5 | 4.5 | 1.93 | 14.13 | |
| 9 | 11WA-107.58 | 128.4 | 8.634 | 50.5 | 654.9 | 34.0 | 86.4 | 0.0 | 92.5 | 5.1 | 2.35 | 12.69 | |
| 10 | 11WA-107.43 | 117.8 | 7.923 | 49.7 | 644.5 | 31.7 | 80.4 | 0.0 | 90.1 | 6.5 | 3.38 | 14.11 | |
| 11 | 13WAM-101.2 | 105.0 | 7.063 | 49.2 | 638.1 | 29.3 | 74.5 | 0.7 | 96.2 | 2.8 | 1.08 | 12.76 | |
| 12 | 13WAM-149.2 | 102.2 | 6.873 | 49.5 | 642.0 | 31.3 | 79.6 | 4.0 | 97.4 | 1.9 | 0.68 | 12.36 | |
| 13 | 13WAM-135.26 | 108.9 | 7.324 | 49.8 | 645.4 | 29.7 | 75.4 | 3.0 | 94.8 | 3.5 | 1.74 | 13.19 | |
| 14 | HO515-510 | 111.9 | 7.527 | 49.8 | 645.0 | 34.0 | 86.4 | 0.3 | 91.4 | 5.8 | 2.79 | 12.34 | |
| 15 | HO515-555 | 104.5 | 7.031 | 49.0 | 635.5 | 31.0 | 78.7 | 0.3 | 95.1 | 3.5 | 1.39 | 12.56 | |
| 16 | 2B11-4949 | 104.6 | 7.036 | 47.7 | 617.8 | 29.0 | 73.7 | 2.3 | 97.8 | 1.7 | 0.52 | 14.61 | |
| 17 | 2B13-6991 | 108.1 | 7.267 | 47.8 | 619.1 | 31.7 | 80.4 | 0.7 | 96.0 | 2.8 | 1.19 | 13.49 | |
| 18 | 2IM14-7765 | 116.6 | 7.844 | 45.7 | 591.8 | 33.3 | 84.7 | 0.0 | 93.8 | 4.1 | 2.17 | 13.53 | |
| 19 | 2IM14-7830 | 125.0 | 8.409 | 48.6 | 630.3 | 32.0 | 81.3 | 0.3 | 90.4 | 6.5 | 3.10 | 13.17 | |
| 20 | 2IM14-8212 | 109.4 | 7.356 | 46.8 | 607.0 | 31.3 | 79.6 | 3.3 | 95.6 | 3.1 | 1.23 | 12.47 | |
| 21 | CDC Bow | 112.4 | 7.557 | 49.5 | 641.1 | 36.0 | 91.4 | 0.3 | 95.4 | 3.4 | 1.12 | 12.07 | |
| 22 | CDC Fraser | 102.2 | 6.871 | 47.9 | 620.8 | 35.0 | 88.9 | 1.7 | 97.1 | 1.9 | 0.94 | 13.70 | |
| 23 | 2ND32529 | 109.7 | 7.375 | 49.3 | 638.5 | 36.3 | 92.3 | 1.7 | 95.7 | 3.1 | 1.29 | 11.93 | |
| 24 | 2ND32829 | 96.2 | 6.472 | 47.1 | 610.8 | 34.3 | 87.2 | 4.7 | 93.1 | 4.8 | 2.03 | 11.29 | |
| 25 | MT124112 | 108.7 | 7.313 | 48.7 | 631.2 | 35.3 | 89.7 | 0.0 | 87.9 | 8.1 | 3.98 | 12.27 | |
| 26 | MT124128 | 105.4 | 7.085 | 50.0 | 648.0 | 31.7 | 80.4 | 0.0 | 93.1 | 4.9 | 2.02 | 12.79 | |
| 27 | MT124069 | 89.7 | 6.035 | 48.1 | 622.9 | 33.0 | 83.8 | 4.3 | 97.4 | 1.7 | 0.89 | 13.63 | |
| 28 | MT124134 | 101.1 | 6.797 | 49.5 | 642.0 | 28.7 | 72.8 | 0.0 | 94.5 | 4.0 | 1.47 | 12.39 | |
| 29 | UTSB10905-72 | 111.5 | 7.497 | 46.9 | 608.3 | 33.3 | 84.7 | 1.0 | 91.6 | 5.6 | 2.73 | 11.26 | |
| 30 | UTSB11301-1 | 113.6 | 7.638 | 47.8 | 619.1 | 30.3 | 77.0 | 0.0 | 96.8 | 2.4 | 0.84 | 11.03 | |
| MEAN: | | 105.8 | 7.1 | 48.2 | 624.7 | 32.4 | 82.2 | 1.7 | 93.6 | 4.4 | 2.02 | 12.80 | |
| CHECK'S MEAN: | | 95.7 | 6.4 | 46.9 | 607.4 | 32.3 | 82.1 | 3.3 | 93.5 | 4.2 | 2.25 | 12.77 | |
| CV % | | 12.3 | | 2.9 | | | | | | | | | |
| LSD (.05) | | 21.4 | | 2.3 | | | | | | | | | |
| Observations: | | 3 | 3 | 3 | 3 | | | | | | | | |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Murphy, Wood</i> | | | | Location: Pullman, WA | | | | | | No. of Reps: 3 | |
|---------------------------------|--------------|--------------|------------|------------------------------|--------------|----------------|---------------|-------------|--------------|-----------------------|----------------|
| Harvest Plot Area (sq.ft.): | | | | Seed Date: | | | | | | Harvest Date: | |
| | | YIELD | | Test Wt. | | HEADING | HEIGHT | | PLUMP | THIN | Protein |
| Ent # | Entry | Bu/A | Mg/ha | lbs./Bu | kg/m3 | (Julian) | in. | cm | >2.4mm | <2.2mm | % |
| 1 | Steptoe | 120.5 | 8.104 | 49.4 | 640.2 | 173.3 | 32.0 | 81.3 | 94.7 | 3.00 | 9.00 |
| 2 | Baronesse | 133.1 | 8.951 | 53.9 | 698.5 | 176.0 | 32.3 | 82.0 | 95.7 | 3.00 | 9.40 |
| 3 | Harrington | 120.2 | 8.083 | 53.4 | 692.1 | 175.7 | 33.3 | 84.6 | 97.7 | 2.00 | 10.10 |
| 4 | AC Metcalfe | 123.6 | 8.312 | 54.1 | 701.1 | 176.0 | 36.2 | 91.9 | 98.0 | 2.00 | 10.70 |
| 5 | 08ARS116-91 | 130.9 | 8.803 | 53.9 | 698.5 | 175.3 | 32.0 | 81.3 | 96.3 | 3.00 | 10.90 |
| 6 | 08ARS028-20 | 131.7 | 8.857 | 53.8 | 697.2 | 177.0 | 32.7 | 83.1 | 97.3 | 2.00 | 10.10 |
| 7 | 10ARS191-3 | 132.7 | 8.924 | 53.3 | 690.8 | 176.0 | 32.5 | 82.6 | 95.0 | 3.00 | 9.90 |
| 8 | 11ARS162-4 | 121.2 | 8.151 | 51.6 | 668.7 | 176.0 | 34.2 | 86.9 | 94.7 | 3.00 | 9.40 |
| 9 | 11WA-107.58 | 124.9 | 8.400 | 54.6 | 707.6 | 176.0 | 32.2 | 81.8 | 97.3 | 2.00 | 9.60 |
| 10 | 11WA-107.43 | 128.8 | 8.662 | 54.3 | 703.7 | 176.3 | 30.5 | 77.5 | 97.7 | 2.00 | 9.80 |
| 11 | 13WAM-101.2 | 134.3 | 9.032 | 52.9 | 685.6 | 176.7 | 29.5 | 74.9 | 93.7 | 3.00 | 9.50 |
| 12 | 13WAM-149.2 | 123.6 | 8.312 | 54.6 | 707.6 | 176.3 | 32.8 | 83.3 | 98.7 | 1.00 | 9.80 |
| 13 | 13WAM-135.26 | 138.5 | 9.314 | 54.3 | 703.7 | 175.7 | 30.2 | 76.7 | 97.0 | 2.00 | 9.50 |
| 14 | HO515-510 | 143.2 | 9.630 | 53.5 | 693.4 | 176.3 | 33.7 | 85.6 | 98.3 | 1.00 | 9.80 |
| 15 | HO515-555 | 128.3 | 8.628 | 54.2 | 702.4 | 176.7 | 31.2 | 79.2 | 96.7 | 3.00 | 10.10 |
| 16 | 2B11-4949 | 135.7 | 9.126 | 53.5 | 693.4 | 176.3 | 30.8 | 78.2 | 97.7 | 1.00 | 10.00 |
| 17 | 2B13-6991 | 131.3 | 8.830 | 53.1 | 688.2 | 175.0 | 32.5 | 82.6 | 97.3 | 2.00 | 11.00 |
| 18 | 2IM14-7765 | 141.8 | 9.536 | 51.5 | 667.4 | 176.7 | 32.2 | 81.8 | 95.7 | 3.00 | 9.50 |
| 19 | 2IM14-7830 | 148.3 | 9.973 | 52.9 | 685.6 | 176.7 | 31.0 | 78.7 | 98.7 | 1.00 | 10.20 |
| 20 | 2IM14-8212 | 134.7 | 9.059 | 52.9 | 685.6 | 175.7 | 31.5 | 80.0 | 96.7 | 3.00 | 9.80 |
| 21 | CDC Bow | 125.5 | 8.440 | 52.8 | 684.3 | 175.7 | 35.0 | 88.9 | 97.7 | 2.00 | 10.60 |
| 22 | CDC Fraser | 117.1 | 7.875 | 52.1 | 675.2 | 176.3 | 32.7 | 83.1 | 97.7 | 2.00 | 10.40 |
| 23 | 2ND32529 | 114.6 | 7.707 | 51.1 | 662.3 | 175.3 | 34.7 | 88.1 | 96.7 | 3.00 | 9.20 |
| 24 | 2ND32829 | 129.3 | 8.695 | 51.3 | 664.8 | 174.0 | 32.2 | 81.8 | 98.0 | 1.00 | 9.70 |
| 25 | MT124112 | 121.5 | 8.171 | 53.5 | 693.4 | 175.7 | 32.7 | 83.1 | 98.3 | 1.00 | 9.60 |
| 26 | MT124128 | 116.8 | 7.855 | 54.1 | 701.1 | 175.0 | 32.0 | 81.3 | 98.3 | 1.00 | 10.30 |
| 27 | MT124069 | 112.0 | 7.532 | 52.6 | 681.7 | 177.0 | 32.7 | 83.1 | 97.0 | 2.00 | 10.40 |
| 28 | MT124134 | 111.6 | 7.505 | 53.9 | 698.5 | 175.3 | 31.8 | 80.8 | 97.7 | 2.00 | 10.00 |
| 29 | UTSB10905-72 | 153.6 | 10.330 | 50.4 | 653.2 | 174.3 | 39.2 | 99.6 | 95.7 | 3.00 | 9.30 |
| 30 | UTSB11301-1 | 132.2 | 8.890 | 50.5 | 654.5 | 174.7 | 36.3 | 92.2 | 97.3 | 1.00 | 9.40 |
| MEAN: | | 128.7 | 8.7 | 52.9 | 686.0 | 175.8 | 32.7 | 83.2 | 97.0 | 2.11 | 9.90 |
| CHECK'S MEAN: | | 124.4 | 8.4 | 52.7 | 683.0 | 175.3 | 33.5 | 85.0 | 96.5 | 2.50 | 9.80 |
| CV % | | 5.5 | | 0.6 | | 0.3 | 5.0 | | 1.1 | 52.33 | 5.02 |
| LSD (.05) | | 9.7 | | 0.5 | | 0.8 | 2.2 | | 1.5 | 1.51 | 0.68 |
| Observations: | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Andrea Pierson, Carrie Eberle</i> | | | | Location: Powell, WY | | | | No. of Reps: 3 | | | |
|--|--------------|--------------|------------|-----------------------------|--------------|-------------|-------------|-----------------------|-------------|-------------|-------------|
| Harvest Plot Area (sq.ft.): | | | | Seed Date: | | | | Harvest Date: | | | |
| Ent # | Entry | YIELD | | Test Wt. | | HEIGHT | | LODGING | PLUMP | PLUMP | THIN |
| | | Bu/A | Mg/ha | lbs./Bu | kg/m3 | in. | cm | 0-10 | >2.4mm | >2.2mm | <2.2mm |
| 1 | Steptoe | 140.2 | 9.428 | 47.9 | 620.8 | 34.3 | 87.1 | 5.0 | 90.3 | 5.0 | 4.7 |
| 2 | Baronesse | 124.9 | 8.400 | 51.7 | 670.0 | 37.3 | 94.7 | 3.3 | 92.3 | 4.3 | 3.4 |
| 3 | Harrington | 109.2 | 7.344 | 49.3 | 638.9 | 38.7 | 98.3 | 8.0 | 77.7 | 10.0 | 12.3 |
| 4 | AC Metcalfe | 121.5 | 8.171 | 51.2 | 663.6 | 39.3 | 99.8 | 6.3 | 91.7 | 5.0 | 3.3 |
| 5 | 08ARS116-91 | 126.6 | 8.514 | 51.1 | 662.3 | 35.3 | 89.7 | 4.0 | 89.0 | 5.7 | 5.3 |
| 6 | 08ARS028-20 | 156.8 | 10.545 | 50.6 | 655.8 | 36.7 | 93.2 | 3.7 | 92.7 | 4.3 | 3.0 |
| 7 | 10ARS191-3 | 135.2 | 9.092 | 52.1 | 675.2 | 42.7 | 108.5 | 6.0 | 92.0 | 4.3 | 3.7 |
| 8 | 11ARS162-4 | 127.2 | 8.554 | 49.9 | 646.7 | 37.7 | 95.8 | 3.7 | 90.3 | 5.0 | 4.7 |
| 9 | 11WA-107.58 | 143.6 | 9.657 | 53.3 | 690.8 | 26.3 | 66.8 | 3.3 | 95.7 | 2.3 | 2.0 |
| 10 | 11WA-107.43 | 148.4 | 9.980 | 52.1 | 675.2 | 35.3 | 89.7 | 3.0 | 93.7 | 3.7 | 2.6 |
| 11 | 13WAM-101.2 | 135.3 | 9.099 | 50.5 | 654.5 | 35.7 | 90.7 | 4.3 | 93.0 | 3.7 | 3.3 |
| 12 | 13WAM-149.2 | 126.0 | 8.474 | 49.7 | 644.1 | 31.7 | 80.5 | 7.0 | 86.3 | 7.0 | 6.7 |
| 13 | 13WAM-135.26 | 76.2 | 5.124 | 52.7 | 683.0 | 34.0 | 86.4 | 7.3 | 91.7 | 3.3 | 5.0 |
| 14 | HO515-510 | 133.5 | 8.978 | 51.1 | 662.3 | 38.3 | 97.3 | 5.3 | 88.0 | 6.7 | 5.3 |
| 15 | HO515-555 | 140.7 | 9.462 | 50.9 | 659.7 | 33.7 | 85.6 | 2.3 | 90.7 | 4.7 | 4.6 |
| 16 | 2B11-4949 | 144.9 | 9.745 | 50.3 | 651.9 | 35.3 | 89.7 | 4.0 | 90.3 | 5.0 | 4.7 |
| 17 | 2B13-6991 | 146.3 | 9.839 | 50.6 | 655.8 | 35.7 | 90.7 | 3.7 | 93.0 | 3.7 | 3.3 |
| 18 | 2IM14-7765 | 138.9 | 9.341 | 50.3 | 651.9 | 37.7 | 95.8 | 4.0 | 93.3 | 3.7 | 3.0 |
| 19 | 2IM14-7830 | 148.3 | 9.973 | 50.8 | 658.4 | 35.0 | 88.9 | 4.3 | 91.0 | 4.7 | 4.3 |
| 20 | 2IM14-8212 | 133.1 | 8.951 | 50.5 | 654.5 | 35.0 | 88.9 | 3.3 | 91.7 | 4.7 | 3.6 |
| 21 | CDC Bow | 135.0 | 9.079 | 51.8 | 671.3 | 35.7 | 90.7 | 2.0 | 96.0 | 2.0 | 2.0 |
| 22 | CDC Fraser | 132.7 | 8.924 | 50.7 | 657.1 | 39.3 | 99.8 | 2.0 | 95.3 | 2.7 | 2.0 |
| 23 | 2ND32529 | 133.2 | 8.958 | 50.4 | 653.2 | 34.0 | 86.4 | 5.0 | 94.0 | 2.3 | 3.7 |
| 24 | 2ND32829 | 79.7 | 5.360 | 47.3 | 613.0 | 36.7 | 93.2 | 5.0 | 91.3 | 4.3 | 4.4 |
| 25 | MT124112 | 131.6 | 8.850 | 50.6 | 655.8 | 33.3 | 84.6 | 2.0 | 96.3 | 1.7 | 2.0 |
| 26 | MT124128 | 109.3 | 7.350 | 50.2 | 650.6 | 31.0 | 78.7 | 3.3 | 95.7 | 2.0 | 2.3 |
| 27 | MT124069 | 123.5 | 8.305 | 51.1 | 662.3 | 34.3 | 87.1 | 6.0 | 93.3 | 3.7 | 3.0 |
| 28 | MT124134 | 142.6 | 9.590 | 50.6 | 655.8 | 33.3 | 84.6 | 2.0 | 96.0 | 1.7 | 2.3 |
| 29 | UTSB10905-72 | 147.2 | 9.899 | 49.2 | 637.6 | 36.3 | 92.2 | 3.7 | 94.3 | 3.0 | 2.7 |
| 30 | UTSB11301-1 | 155.0 | 10.424 | 49.4 | 640.2 | 35.3 | 89.7 | 2.3 | 95.0 | 2.7 | 2.3 |
| MEAN: | | 131.6 | 8.8 | 50.6 | 655.6 | 35.5 | 90.2 | 4.2 | 92.1 | 4.1 | 3.86 |
| CHECK'S MEAN: | | 124.0 | 8.3 | 50.0 | 648.3 | 37.4 | 95.0 | 5.7 | 88.0 | 6.1 | 5.93 |
| CV % | | 15.1 | | 2.5 | | 13.1 | | 49.0 | 3.3 | 34.4 | |
| LSD (.05) | | 27.1 | | 1.7 | | 6.4 | | 2.8 | 4.2 | 1.9 | |
| Observations: | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

2018 Western Regional Spring Barley Nursery

| Cooperator: <i>Aaron Beattie</i> | | Location: Saskatoon, Saskatchewan, Canada No. of Reps: 3 | | | | | | | | | |
|---------------------------------------|--------------|--|------------|-------------|-------------------|--------------|-------------------------------|-------------|-------------|--------------|--|
| Harvest Plot Area (sq.ft.): 48 | | Seed Date: 5/1/2018 | | | | | Harvest Date: 9/5/2018 | | | | |
| Ent # | Entry | YIELD | | Test Wt. | | HEADING | HEIGHT | | PLUMP | THIN | |
| | | Bu/A | Mg/ha | lbs./Bu | kg/m ³ | (Julian) | in. | cm | >2.4mm | <2.2mm | |
| 1 | Steptoe | 65.6 | 3.530 | 54.4 | 705.0 | 187.0 | 24.3 | 61.6 | 98.8 | 1.2 | |
| 2 | Baronesse | 100.2 | 5.390 | 53.7 | 696.0 | 192.0 | 24.3 | 62.9 | 93.1 | 2.3 | |
| 3 | Harrington | 95.5 | 5.140 | 55.2 | 716.0 | 192.0 | 24.3 | 64.2 | 90.2 | 2.9 | |
| 4 | AC Metcalfe | 81.4 | 4.380 | 54.2 | 703.0 | 191.0 | 24.3 | 68.0 | 94.9 | 1.4 | |
| 5 | 08ARS116-91 | 94.8 | 5.100 | 54.5 | 706.0 | 190.0 | 24.3 | 59.7 | 90.6 | 2.2 | |
| 6 | 08ARS028-20 | 97.2 | 5.230 | 55.5 | 719.0 | 194.0 | 24.3 | 59.7 | 93.6 | 1.8 | |
| 7 | 10ARS191-3 | 121.2 | 6.520 | 55.5 | 719.0 | 193.0 | 24.3 | 68.6 | 90.2 | 3.2 | |
| 8 | 11ARS162-4 | 88.7 | 4.770 | 52.9 | 686.0 | 193.0 | 24.3 | 66.1 | 94.4 | 2.4 | |
| 9 | 11WA-107.58 | 94.1 | 5.060 | 53.0 | 687.0 | 191.0 | 24.3 | 64.8 | 98.4 | 0.2 | |
| 10 | 11WA-107.43 | 95.2 | 5.120 | 55.0 | 713.0 | 192.0 | 24.3 | 63.5 | 95.3 | 0.6 | |
| 11 | 13WAM-101.2 | 100.6 | 5.410 | 54.0 | 700.0 | 194.0 | 24.3 | 59.7 | 95.8 | 1.2 | |
| 12 | 13WAM-149.2 | 93.1 | 5.010 | 55.0 | 713.0 | 192.0 | 24.3 | 62.2 | 96.7 | 1.0 | |
| 13 | 13WAM-135.26 | 96.1 | 5.170 | 55.6 | 720.0 | 191.0 | 24.3 | 57.8 | 94.1 | 1.0 | |
| 14 | HO515-510 | 99.3 | 5.340 | 54.4 | 705.0 | 189.0 | 24.3 | 64.8 | 92.3 | 2.4 | |
| 15 | HO515-555 | 88.5 | 4.760 | 54.9 | 711.0 | 193.0 | 24.3 | 63.5 | 94.9 | 0.6 | |
| 16 | 2B11-4949 | 82.5 | 4.440 | 54.4 | 705.0 | 192.0 | 24.3 | 57.8 | 89.4 | 3.2 | |
| 17 | 2B13-6991 | 91.1 | 4.900 | 55.0 | 713.0 | 189.0 | 24.3 | 62.9 | 91.9 | 1.6 | |
| 18 | 2IM14-7765 | 88.3 | 4.750 | 51.9 | 672.0 | 193.0 | 24.3 | 65.4 | 96.8 | 0.6 | |
| 19 | 2IM14-7830 | 99.1 | 5.330 | 54.6 | 707.0 | 192.0 | 24.3 | 62.9 | 89.3 | 4.6 | |
| 20 | 2IM14-8212 | 81.6 | 4.390 | 55.3 | 717.0 | 189.0 | 24.3 | 61.0 | 95.3 | 1.2 | |
| 21 | CDC Bow | 83.5 | 4.490 | 54.6 | 707.0 | 195.0 | 24.3 | 67.3 | 96.0 | 0.6 | |
| 22 | CDC Fraser | 88.1 | 4.740 | 55.0 | 713.0 | 195.0 | 24.3 | 66.7 | 96.7 | 0.8 | |
| 23 | 2ND32529 | 87.5 | 4.710 | 53.6 | 695.0 | 189.0 | 24.3 | 64.2 | 98.4 | 0.2 | |
| 24 | 2ND32829 | 86.8 | 4.670 | 51.9 | 672.0 | 187.0 | 24.3 | 64.2 | 97.4 | 0.8 | |
| 25 | MT124112 | 83.8 | 4.510 | 53.8 | 697.0 | 190.0 | 24.3 | 59.7 | 97.9 | 0.4 | |
| 26 | MT124128 | 82.3 | 4.430 | 56.3 | 729.0 | 187.0 | 24.3 | 60.4 | 98.4 | 0.2 | |
| 27 | MT124069 | 100.2 | 5.390 | 53.9 | 699.0 | 193.0 | 24.3 | 66.0 | 92.3 | 2.8 | |
| 28 | MT124134 | 83.3 | 4.480 | 53.6 | 695.0 | 187.0 | 24.3 | 63.5 | 97.4 | 0.2 | |
| 29 | UTSB10905-72 | 96.1 | 5.170 | 52.4 | 679.0 | 189.0 | 24.3 | 69.9 | 99.4 | 0.6 | |
| 30 | UTSB11301-1 | 84.9 | 4.570 | 53.8 | 697.0 | 192.0 | 24.3 | 63.5 | 99.8 | 0.2 | |
| MEAN: | | 91.0 | 4.9 | 54.3 | 703.2 | 191.0 | 24.3 | 63.4 | 95.0 | 1.4 | |
| CHECK'S MEAN: | | 85.7 | 4.6 | 54.4 | 705.0 | 190.5 | 24.3 | 64.2 | 94.2 | 1.9 | |
| CV % | | | 7.9 | | | 0.5 | | 2.5 | 3.2 | 78.25 | |
| LSD (.05) | | | 0.8 | | | 2.0 | | 3.8 | 0.0 | 0.00 | |
| Observations: | | 3 | 3 | | | 3 | 3 | 2 | 1 | 1 | |