

Aberdeen Plant Materials Center Grass Display Nursery
2008 Evaluation Report
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The Aberdeen Plant Materials Center (PMC) Grass Display Nursery was planted August 14, 2007 in cooperation with the South Bingham Soil Conservation District. The purpose of the display nursery is to allow the public to view grasses used to conserve soil, provide forage for livestock and wildlife, habitat for wildlife and to improve water quality. The nursery includes 65 accessions showcasing released grasses (and some currently under testing and evaluation) of over 30 species suited for reclamation, restoration or irrigated pasture plantings in the Aberdeen PMC service area. The display is divided into three sections according to moisture needs reflecting natural precipitation ranges; 12 inches or less, 12 to 16 inches, and 16 inches or greater. Each plot is 7 feet wide by 70 feet long. Covar sheep fescue separates the precipitation regimes and the western wheatgrass plots from adjacent plots due to the rate of spread by western wheatgrass. Surrounding borders were seeded with Covar sheep fescue using a broadcast seeder. Plots are irrigated to enhance display.

Stand emergence was rated on August 30 2007, sixteen days after planting. The accompanying table summarizes the initial establishment evaluations. Plots were rated visually on a scale of 1 best and 9 worst and accessions of the same species were rated against each other.

Arlington blue wildrye, Regar meadow brome, Potomac orchardgrass, STF43 tall fescue and BG24T perennial ryegrass had the best stand emergence in the >16 inch annual precipitation block. In the 12-16 inch annual precipitation block, Bromar mountain brome, Largo tall wheatgrass, Trailhead basin wildrye, Reliant intermediate wheatgrass, Black Sheep sheep fescue, Pryor slender wheatgrass and 9076517 western wheatgrass had the best emergence. Bozoisky II Russian wildrye, SERDP Snake River wheatgrass, Goldar bluebunch wheatgrass, Hycrest II crested wheatgrass, Mountain Home Sandberg bluegrass and Toe Jam Creek bottlebrush squirreltail had the best stand emergence ratings in the < 12 inch annual precipitation block.

The plots were evaluated a second time on July 3, 2008. Stands were rated 1 best and 9 worst and accessions of the same species were rated against each other. Plant height was also recorded. Elkton blue wildrye, Cache meadow brome, Potomac orchardgrass and Arkplus tall fescue had the best stands within the > 16 inch annual precipitation block. Bromar mountain brome, Jose tall wheatgrass, Rush intermediate wheatgrass, Covar sheep fescue, Pryor slender wheatgrass and Rosana western wheatgrass had the best stands in the 12- 16 inch annual precipitation block. In the < 12 inch annual precipitation block, Bozoisky II Russian wildrye, SERDP Snake River wheatgrass, P-7 bluebunch wheatgrass, Douglas crested wheatgrass, Hycrest crested wheatgrass, Vavilov II Siberian wheatgrass, Bannock thickspike wheatgrass, High Plains Sandberg bluegrass and Toe Jam Creek bottlebrush squirreltail had the best stands. Cache meadow brome, Himag tall fescue, Bromar mountain brome and Rush intermediate wheatgrass were the tallest accessions.

Aberdeen Plant Materials Center 2007 Grass Display Nursery

| VARIETY | COMMON NAME | SCIENTIFIC NAME | STAND EMERGENCE 8/30/07 ^{1/} | STAND RATING 7/3/08 ^{2/} | PLANT HEIGHT (cm) |
|--|-------------------------|--------------------------------|---|---|-------------------------|
| > 16 inches annual precipitation | | | | | |
| ELKTON | blue wildrye | <i>Elymus glaucus</i> | 2 | 1 | 80 |
| ARLINGTON | blue wildrye | <i>Elymus glaucus</i> | 1 | 2 | 75 |
| CACHE* | meadow brome | <i>Bromus biebersteinii</i> | 2 | 1 | 100 |
| REGAR* | meadow brome | <i>Bromus biebersteinii</i> | 1 | 2 | 95 |
| LINCOLN* | smooth brome | <i>Bromus inermis</i> | 3 | 5 | 98 |
| 9092261 | prairie junegrass | <i>Koeleria macrantha</i> | 5 | 4 | 60 |
| LATAR* | orchardgrass | <i>Dactylis glomerata</i> | 2 | 2 | 85 |
| POTOMAC* | orchardgrass | <i>Dactylis glomerata</i> | 1 | 1 | 85 |
| HIMAG* | tall fescue | <i>Festuca arundinacea</i> | 3 | 2 | 102 |
| ARKPLUS* | tall fescue | <i>Festuca arundinacea</i> | 2 | 1 | 95 |
| STF 43* | tall fescue | <i>Festuca arundinacea</i> | 1 | 3 | 90 |
| GARRISON* | creeping foxtail | <i>Alopecurus arundinaceus</i> | 4 | 2 | 85 |
| BG 24T* | perennial ryegrass | <i>Lolium perenne</i> | 1 | 3 | 65 |
| 12 – 16 inches annual precipitation | | | | | |
| BROMAR | mountain brome | <i>Bromus marginatus</i> | 1 | 1 | 100 |
| GARNET | mountain brome | <i>Bromus marginatus</i> | 2 | 2 | 85 |
| LARGO* | tall wheatgrass | <i>Thinopyrum ponticum</i> | 1 | 2 | 90 |
| JOSE* | tall wheatgrass | <i>Thinopyrum ponticum</i> | 2 | 1 | 80 |
| ALKAR* | tall wheatgrass | <i>Thinopyrum ponticum</i> | 3 | 3 | 80 |
| MUSTANG* | altai wildrye | <i>Leymus angustus</i> | 2 | 4 | 70 |
| SHOSHONE | beardless wildrye | <i>Leymus triticoides</i> | 8 | 4 | 70 |
| TRAILHEAD | basin wildrye | <i>Leymus cinereus</i> | 1 | 3 | 40 |
| MAGNAR | basin wildrye | <i>Leymus cinereus</i> | 2 | 3 | 40 |
| MANSKA* | pubescent wheatgrass | <i>Thinopyrum intermedium</i> | 3 | 4 | 80 |
| MANIFEST* | intermediate wheatgrass | <i>Thinopyrum intermedium</i> | 4 | 3 | 85 |
| RELIANT* | intermediate wheatgrass | <i>Thinopyrum intermedium</i> | 1 | 2 | 90 |
| RUSH* | intermediate wheatgrass | <i>Thinopyrum intermedium</i> | 2 | 1 | 105 |
| NEWHY* | hybrid wheatgrass | <i>Elymus hoffmanii</i> | 3 | 3 | 85 |
| PAIUTE* | orchardgrass | <i>Dactylis glomerata</i> | 3 | 3 | 65 |
| DURAR* | hard fescue | <i>Festuca trachyphylla</i> | 3 | 3 | 50 |
| BLACKSHEEP* | sheep fescue | <i>Festuca ovina</i> | 1 | 2 | 55 |
| COVAR* | sheep fescue | <i>Festuca ovina</i> | 2 | 1 | 65 |
| FIRST STRIKE | slender wheatgrass | <i>Elymus trachycaulus</i> | 2 | 2 | 85 |
| PRYOR | slender wheatgrass | <i>Elymus trachycaulus</i> | 1 | 1 | 90 |
| COPPERHEAD | slender wheatgrass | <i>Elymus trachycaulus</i> | 3 | 3 | 75 |
| SAN LUIS | slender wheatgrass | <i>Elymus trachycaulus</i> | 4 | 4 | 60 |
| SHERMAN | big bluegrass | <i>Poa ampla</i> | 2 | 2 | 60 |
| 9076517 | western wheatgrass | <i>Pascopyrum smithii</i> | 1 | 3 | 65 |
| ARRIBA | western wheatgrass | <i>Pascopyrum smithii</i> | 3 | 2 | 75 |
| ROSANA | western wheatgrass | <i>Pascopyrum smithii</i> | 2 | 1 | 80 |
| < 12 inches annual precipitation | | | | | |
| BOZOISKY II* | Russian wildrye | <i>Psathrostachys juncea</i> | 1 | 1 | 75 |
| BOZOISKY * | Russian wildrye | <i>Psathrostachys juncea</i> | 3 | 3 | 70 |
| MANKOTA* | Russian wildrye | <i>Psathrostachys juncea</i> | 2 | 2 | 70 |
| SERDP | Snake River wheatgrass | <i>Elymus wawawaiensis</i> | 1 | 1 | 80 |
| SECAR | Snake River wheatgrass | <i>Elymus wawawaiensis</i> | 2 | 2 | 75 |
| GOLDAR | bluebunch wheatgrass | <i>Pseudoroegneria spicata</i> | 1 | 3 | 65 |
| P-7 | bluebunch wheatgrass | <i>Pseudoroegneria spicata</i> | 2 | 1 | 85 |
| ANATONE | bluebunch wheatgrass | <i>Pseudoroegneria spicata</i> | 3 | 2 | 70 |
| WHITMAR | beardless wheatgrass | <i>Pseudoroegneria spicata</i> | 4 | 4 | 70 |
| EPHRAIM* | crested wheatgrass | <i>Agropyron cristatum</i> | 3 | 3 | 60 |
| FAIRWAY* | crested wheatgrass | <i>Agropyron cristatum</i> | 4 | 4 | 60 |
| DOUGLAS* | crested wheatgrass | <i>Agropyron desertorum</i> | 5 | 1 | 95 |
| ROADCREST* | crested wheatgrass | <i>Agropyron cristatum</i> | 6 | 2 | 80 |

| VARIETY | COMMON NAME | SCIENTIFIC NAME | STAND EMERGENCE 8/30/07 ^{1/} | STAND RATING 7/3/08 ^{2/} | PLANT HEIGHT (cm) |
|--|--------------------------|--|---|---|-------------------------|
| < 12 inches annual precipitation continued | | | | | |
| HYCREST II* | crested wheatgrass | <i>Agropyron cristatum X desertorum</i> | 1 | 2 | 60 |
| HYCREST* | crested wheatgrass | <i>Agropyron cristatum X desertorum</i> | 2 | 1 | 65 |
| NORDAN* | crested wheatgrass | <i>Agropyron desertorum</i> | 7 | 3 | 60 |
| P-27* | Siberian wheatgrass | <i>Agropyron fragile</i> | 3 | 3 | 60 |
| VAVILOV II* | Siberian wheatgrass | <i>Agropyron fragile</i> | 2 | 1 | 80 |
| VAVILOV* | Siberian wheatgrass | <i>Agropyron fragile</i> | 1 | 2 | 75 |
| CRITANA | thickspike wheatgrass | <i>Elymus lanceolatus</i> | 3 | 2 | 60 |
| BANNOCK | thickspike wheatgrass | <i>Elymus lanceolatus</i> | 1 | 1 | 75 |
| SODAR | streambank wheatgrass | <i>Elymus lanceolatus</i> | 2 | 3 | 50 |
| MOUNTAIN HOME | Sandberg bluegrass | <i>Poa secunda</i> | 1 | 2 | 25 |
| HIGH PLAINS | Sandberg bluegrass | <i>Poa secunda</i> | 2 | 1 | 40 |
| TOE JAM CREEK | bottlebrush squirreltail | <i>Elymus elymoides</i> ssp. <i>californicus</i> | 1 | 1 | 40 |
| 9019219 | bottlebrush squirreltail | <i>Elymus elymoides</i> ssp. <i>elymoides</i> | 2 | 2 | 35 |

* NON-NATIVE

^{1/} Stand emergence rated 1 best, 9 worst. Accessions within a species rated against each other.

^{2/} Stand rated 1 best, 9 worst. Accessions within a species rated against each other.