



## Foundation Seed Production at PMC

Spring conditions were favorable for above average cool-season grass production in 2024. Timely rains provided ample moisture prior to the installation of the irrigation system at the end of May. Warm-season grass yields in 2023 and 2024 were similar. Seed was harvested from 15 foundation seed production fields (1-2 acre in size). Harvest season began the first week of July and concluded the first week of October. A new production field of Tober Germplasm Virginia Wildrye, seeded in August of 2023, produced 918 pounds of uncleaned seed on 0.75 acres. Cool-season grass harvests were generally above average for most species.

Prescribed burns were completed on warm-season grass production fields on May 21, 2024. The burns were completed later than normal, raising concern for several of the warm-season grass fields that had already broken dormancy. However, yield and harvest date were unaffected for a solid, established stand of 'Pierre' sideoats grama that had plants in the 2-3 leaf stage prior to the burn.

In attempt to reduce the amount of tillage in foundation seed production, solid seeded fields (7.5 inch row spacing) have been established. Due to grower demand, a solid field of 'Manifest' intermediate wheatgrass was seeded in August of 2021. A production field seeded in rows (42 inch spacing) exists as well. Table 1 provides a yield comparison from the past 3 years.

**Table 1.** *Yield Comparison of Solid and Row seeding of 'Manifest' Intermediate Wheatgrass*

Harvest Year	Rows * (bulk pounds/acre)	Solid ** (bulk pounds/acre)
2022	391	603
2023	260	165
2024	292 (estimate)	107 (estimate)

\*Row seeded in 2006  
\*\*Solid seeded in 2021

Seed yields have remained consistent in the field with continuously tilled rows, while the solid seeding has dropped off significantly in the 2024 season. Similar trends have been observed in other rhizomatous, cool-season species such as western wheatgrass. Solid seeding has provided quick establishment with little weed competition, although it greatly reduced stand longevity for seed production.

### Reduced Germination in 'Tomahawk' Indiangrass

Beginning in 2019, low germination test results have been a common theme for 'Tomahawk' Indiangrass foundation seed lots. Field records have not indicated any significant management changes. If you are currently growing Indiangrass, we are seeking input related to germination trends you may be observing.

## Foundation Seed Availability

Foundation or Selected Class seed is available in 2025 for most of the Bismarck Plant Materials Center (PMC) grass releases. In Table 2 are the anticipated amounts of grass seed available in 2025. Currently, cleaning of seed harvested in 2024 and retesting of germination for carryover seed is underway. Therefore, the PLS pounds found in Table 2 are only rough estimates. Efforts are made to distribute the available seed of a release to multiple seed growers.

Forb seed is not available in 2024. If you are interested in the PMC's releases of narrow-leaved purple coneflower, purple prairie clover, stiff sunflower, or Maximilian sunflower please let us know so future production of these species can be assessed.

**Table 2.** *Estimated Amounts of Foundation Grass Seed Available in 2025.*

Cultivar	Species	Available Inventory Rough Estimate (PLS)pounds
Badlands Ecotype	little bluestem	450
Itasca Germplasm	little bluestem	70
Bad River Ecotype	blue grama	750
Bison	big bluestem	600
Bonilla	big bluestem	200
Bounty Germplasm	big bluestem	150
Dacotah	switchgrass	900
Forestburg	switchgrass	950
Pierre	sideoats grama	900
Red River Germplasm	prairie cordgrass	15
Tomahawk	Indiangrass	150
Lodorm	green needlegrass	300
Mandan*	Canada wildrye	WY Seed Certification
Rodan	western wheatgrass	250
Tober Germplasm	Virginia wildrye	1900
Mankota	Russian wildrye	Contact PMC
Manska	pubescent wheatgrass	350
Manifest	intermediate wheatgrass	600
Nordan	crested wheatgrass	300
Reliant	intermediate wheatgrass	Not available

For availability of 'Mandan' Canada wildrye please contact Wyoming Seed Certification Service, 307-754-9815 or [wyseedcert@uwyo.edu](mailto:wyseedcert@uwyo.edu). The Wyoming Seed Certification Program is growing and distributing foundation seed of 'Mandan' Canada wildrye through an agreement with the Bismarck PMC. This provides opportunity for larger foundation seed production fields of 'Mandan' Canada wildrye. As a result, more foundation seed should be available to seed producers.

## How to Order Seed

If you would like to request seed, please contact Edward Bahm, Plant Materials Specialist ([edward.bahm@usda.gov](mailto:edward.bahm@usda.gov)) or via phone at (701) 989-6122 or the PMC (Lucas or Nancy) at (701) 250-4330. Requests will be processed in the order that they are received, so ordering early will be beneficial. If you would like to be put on a waiting list for any releases that are unavailable in 2025, please contact Ed Bahm.

Once your order is confirmed, you will get a notice from the PMC listing the seed you have requested and the cost of each lot. You will then receive an invoice from North Dakota Foundation Seedstocks. You will make payment to them. Payment is required before seed will be shipped.

## Seed Certification

The PMC strongly encourages growers to produce certified seed. The process involves field inspection and seed testing. Contact the Seed Certification Program in your State for details. Each plant release was selected and developed to have unique and specific traits and adaptability. Certification maintains integrity of these releases and offers customers products that meet specific germination and purity standards.

In recent years, some PMC releases followed a different method of development than the usual cultivar. These releases are eligible for certification as a Selected Class (green tag) rather than the usual Certified Class (blue tag). Releases on the attached Price List that have Ecotype or Germplasm in their name are eligible for Selected Class tagging. All other releases are true cultivars and are eligible for Certified tags.

### Who We Are

*The Bismarck Plant Materials Center (PMC), established in 1954, is one of 25 PMC's operated by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). It serves the States of Minnesota, North Dakota, and South Dakota. It is the mission of the Plant Materials Program to develop plant materials and plant science technology for the conservation of our natural resources.*

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**Plant Materials website:**

<https://www.nrcs.usda.gov/plant-materials/ndpmc>

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