

Plant Chat

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NRCS Field Offices in North Dakota, South Dakota and Minnesota

Seed Origin

There are many parameters to consider when establishing grasses and forbs. Initially, questions of why, where, and how the planting will occur need answering. Next, the species need to be chosen. First and foremost, the species and sources or cultivars (varieties) need to be adapted to the climatic conditions where they will be seeded. In NRCS Technical Guides, there are lists of recommended species, cultivars (varieties) and sources for each species. The listed species and cultivars or sources have been evaluated and selected for their adaptability to the geographic areas' climatic conditions. Origin of a source or cultivar is closely related to adaptability. Origin is the geographic location where the seed source or plant was initially collected; where it was naturally found growing; its hometown so to speak. Origin is connected to climatic conditions such as photoperiod, moisture, and temperature and therefore related to adaptability.

Species can be adapted to a vast geographic range. Due to changes in climatic conditions across the range, not all of the sources or cultivars of the species are adapted to the entire area. The species big bluestem, for example, is native and adapted in the United States from Texas to Canada. However, cultivars or sources from Texas are not adapted to North Dakota and vice versa. Recommendations for warm-season species is that sources or cultivars should not be moved more than 300 miles north or 200 miles south of their geographic origin. Moving them further impacts things such as forage and seed production, and susceptibility to disease and winter injury.

Origin, as listed on a seed tag is NOT the same as the geographic origin described above. Origin on the seed tag refers to the location where the specific lot of purchased seed was produced. The cultivar or source is a better indicator of adaptability than the Origin listed on the tag. Origin found on the seed tag could give a clue, however, to possible new weed introductions. Some areas are known to have specific weeds not found in the location where the seed will be used.

Establishing grasses and forbs can be challenging. Selecting the best adapted seed source is a primary factor to success.



The Indiangrass cultivar 'Tomahawk' originated from plant material collected in Dickey County in ND, and Marshall and Brown counties in SD. The Indiangrass cultivar 'Holt' originated from plant material collected in Holt County, NE. Tomahawk, with a more northern origin, matures approximately 33 days earlier than Holt.

Forestburg switchgrass	Lot: 12345ZX		
Pure Seed	99.68%	Germination	96%
Other Crop Seed	0.12%	Dormant Seed	2%
Inert Matter	0.10%	Hard Seed	
Weed Seed	0.10%	Total Viable	98%
Noxious Weed Seeds: None		Date Tested	1/12/2017
		Origin:	WA
ABC Company			
567 Seed Way		Net weight:	50 pounds
Anytown, ND 58000			

Origin, as listed on the tag, indicates this lot of 'Forestburg' switchgrass seed was grown in Washington (WA). The cultivar (variety), 'Forestburg', was developed by plant breeders from native seed collections originating from Sanborn County in South Dakota. This seed would be acceptable for conservation plantings in MN, ND, and SD.

PMC Staff Retiring

The dream of retirement is finally coming true for two special folks at the Bismarck Plant Materials Center. Craig Stange will be retiring April 1, 2017 and Rachel Bergsagel will be retiring April 30, 2017.

Craig began his career with NRCS in 1977. After serving three NRCS Field Offices in Iowa, he came to Bismarck in 1992 to be the NRCS Forester for North Dakota. Upon retirement of the PMC forester, Craig was freed from his cubicle at the State Office in 2011 and moved to the PMC. At the PMC, he served as both NRCS ND Forester and PMC Forester. Craig's knowledge and love of trees, and his many contacts have been great assets to the PMC tree program. While at the PMC he has worked on finding nematode resistant pines, evaluating Douglas fir as a shelterbelt tree, seed harvest, construction of a lath house, data collection on trees at various sites, been burn boss for foundation grass fields, and a host of other activities. In his retirement Craig plans to spend time with grandkids and other family, traveling, woodworking and gardening. Thanks Craig for all you have done for the PMC! Best wishes for a long and happy retirement!

Rachel began her career with the Plant Materials Center on April 7, 1980. In those 37 years, she has worked in all aspects of PMC operations, from field to office and everything in between. Her dedicated assistance with data collection and maintenance on large grass and tree assemblies has been instrumental in new releases. She has managed all computer records for off center tree plantings, off center Field Plantings and PMC seed inventories. The beautiful layout of the many documents published by the Bismarck PMC were due to her creativity and attention to detail. In retirement, Rachel plans to spend time with grandkids, quilting, traveling, outdoor activities, and anything else that may come her way! Her great organizational skills and warm, friendly personality have been a great gift. Thank you, Rachel, for your dedicated service to the Bismarck Plant Materials Center. You will be GREATLY missed! Best wishes for a long and happy retirement!