

# Factsheet: Saskatchewan Forage Variety Demonstration Trial



## Objective:

This project was intended to demonstrate and compare new varieties of economically important grass and legume species used in Saskatchewan and to provide reliable and independent performance information for Saskatchewan producers, seed companies and plant breeders.

## Methodology:

Plots were seeded in Swift Current, Scott, Melfort and Saskatoon. The plots were seeded in May or June of 2017. Soil test were taken and fertilizer was applied as needed. Seeding rates were based off of provincial recommendations. 16 legume varieties and 24 grass varieties were planted.

**Table 1:** Different Varieties of Grasses and Legumes tested

Entry	Species	Name of Variety	Entry	Species	Name of Variety
1	Meadow Bromegrass	Fleet (check)	1	Alfalfa	Beaver (check)
2		AC Armada (Check)	2		Rangelander (Check)
3		AC Admiral	3		AC Grazeland (Check)
4		S9549	4		Unicorn
5	Hybrid Bromegrass	AC Knowles (check)	5		Octane
6		AC Success	6		Foothold
7		S9547	7		Phabulous
8		S9570	8		Tango
9		S9576	9		AC Totem
10	Smooth Bromegrass	Carleton (check)	10		Equinox
11	Intermediate wheatgrass	Chief (check)	11		Runner
12	Pubescent wheatgrass	Greenleaf	12		AC Yellowhead
13	Crested wheatgrass	Kirk (check)	13	Cicer milkvetch	Oxley II (check)
14		AC Goliath (Check)	14		AC Veldt
15		AC Newkirk		15	Sainfoin
16	S9580		16	AC Mountainview	
17	Festulolium	Fojtan			
18		Spring Green			
19	Orchardgrass	Kay (check)			
20		Killarney			
21		Arctic			
22	Tall Fescue	Courtenay (check)			
23		Payload			
24		Cow Girl			

The full report is available at [www.warc.ca](http://www.warc.ca). The first two years of the project were funded by the Saskatchewan Ministry of Agriculture's Agricultural Demonstration of Practices and Technologies (ADOPT) program under the Canada-Saskatchewan Growing Forward Agreement. The final two years were funded through the Ministries Strategic Field Program under the Canada Agriculture Partnerships Agreement. WARC Project # 38-17



## Key Findings:

- In many cases the old check cultivars performed as well or better than other cultivars.
- Some of the new cultivars performed well at some sites but were not consistent over the four-year period.
- There were no clear winners for alfalfa variety performance, different varieties performed differently at each site.
- Despite some fairly severe winter conditions most of the alfalfa varieties survived.
- Regrowth on some of the alfalfa looked very promising for the first year or two but did not persist beyond that point.
- AC Yellowhead, the only yellow flowering alfalfa, generally had low yield at most sites.
- Cicer and Sainfoin had good establishment in most locations but were highly variable. High coefficients of variation may be statistical which is not uncommon with few treatments because there are lower degrees of freedom.
- Festulolium, a combination of perennial rye grass and meadow fescue, had low survival at Scott and Saskatoon. At Melfort and Swift Current it survived but yields were low.
- Crested Wheatgrass establishment was poor at Melfort and Scott despite good establishment for other species.
- Tall fescue establishment was generally poor at most sites.
- The CVs for orchard grass and tall fescue were generally high possibly due to establishment issues.
- Some of new meadow brome lines show promise but data was inconsistent between sites.
- A couple of the hybrid bromegrass lines seemed to perform well at drier sites.

### 2017 Establishment



### 2019



**Figure 1:** Photos of establishment and in 2 years later at the Saskatoon site

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