

**UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH SERVICE**

**in cooperation with**

**STATE AGRICULTURAL EXPERIMENT STATIONS**

**Report on Hard Red Spring Wheat Varieties Grown in Cooperative Plot and  
Nursery Experiments in the Spring Wheat Region in 2013**

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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. It contains preliminary data which have not been sufficiently confirmed to justify general release, and interpretations may be modified after additional experimentation. Confirmed results will be published through established channels. This report is primarily a tool for use by cooperators and their official staffs, and for those persons having direct and special interest in the development of agricultural research programs.

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Agricultural Research Service  
U.S. Department of Agriculture  
Midwest Area  
St. Paul, Minnesota  
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## 2013 HARD RED SPRING WHEAT UNIFORM REGIONAL NURSERY REPORT

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## COOPERATING AGENCIES, STATIONS, AND PERSONNEL FOR THE 2013 HRSWURN

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## **Entering Lines with Protected or Patented Genes into the Hard Red Spring Wheat Uniform Regional Nursery**

Transgenic wheat lines may be considered for the nursery program ONLY if they have been granted permanent non-regulated status. Non-regulated status is granted only after the originator files a formal petition to de-regulate a line with APHIS. However, ultimately the decision whether to include or exclude such germplasm will reside with individual location cooperators.

## U.S. SPRING WHEAT PRODUCTION, 2013

***SPRING WHEAT (OTHER THAN DURUM):*** Growers produced an estimated 533.5 million bushels of spring wheat. This production estimate is approximately 1.6 percent lower than year 2012 production. Yield averaged over 47 bushels per acre, an increase of approximately 2 bushels per acre from year 2011. Area harvested totaled approximately 11.3 million acres, which is approximately 6% lower than the acreage harvested in 2012.

### Spring Wheat Production Statistics, 2011-2013\*

	Acres Harvested (x1000)			Production (x1000 Bushels)			Yield (Bushels/Acre)		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Minnesota	1,500	1,310	1,160	69,000	74,670	66,120	46	57	57
Montana	2,400	2,900	2,830	74,400	95,700	104,710	31	33	37
North Dakota	5,500	5,700	5,060	167,750	256,500	235,290	30.5	45	46.5
South Dakota	1,220	1,020	1,165	37,820	41,820	51,260	31	41	44
USA	12,079	12,055	11,334	455,188	541,959	533,529	37.7	45	47.1

\* Source: National Agricultural Statistics Service: (<http://quickstats.nass.usda.gov>) on 2-07-14.

## 2013 NURSERY DESCRIPTION AND SUMMARY

The Hard Red Spring Wheat Uniform Regional Nursery (HRSWURN) was planted for the 83rd year in 2013. The nursery contained 29 entries submitted by 7 different scientific or industry breeding programs, and 5 checks (Table 1). Trials were conducted as randomized complete blocks with three replicates except where noted. The HRSWURN was planted at 13 locations in 4 different states in the USA (MN, ND, SD, MT), and two Canadian provinces (Manitoba and Saskatchewan). All locations provided data included in this report (Figure 1, Table 2). Data summaries for each of these locations are presented in individual tables. For each location summary, entries are listed in descending order of yield. Overall means across locations for a set of core traits are summarized in Table 16, and yield rankings for individual locations are found in Table 17. Entries were also evaluated for various diseases at different locations; these can be found by looking at individual location data summaries. Leaf rust and stem resistance was evaluated in St. Paul, MN, and stripe rust evaluations were completed at two field locations in WA. These rust data are presented in Tables 18-20. Entries were evaluated in *Fusarium* head blight nurseries at Crookston and St. Paul, MN; these results are provided in Tables 21 and 22. Molecular marker genotyping for select traits was also performed; this information is presented in Table 23. The highest average yielding location was Langdon, ND, with 93 Bu/Ac, while the lowest yielding location was Selby, SD, with 41.2 Bu/Ac.

**Figure 1. Hard Red SpringWheat Uniform Regional Nursery Reporting Locations, 2013**

