

Table 1. Origin and agronomic characteristics of hard red spring wheat varieties in Minnesota in single-year (2025) and multiple-year comparisons.

Entry	Origin¹	Legal Status	Desired Stand (Plants/Acre)²	Days to Heading³	Height (Inches)	Straw Strength⁴
AP Dagr	2025 AgriPro/Syngenta	PVP (94) (pending)	1.3	62.2	30.1	5
AP Elevate	2024 AgriPro/Syngenta	PVP (94)	1.3	62.3	31	4
AP Iconic	2025 AgriPro/Syngenta	PVP (94) (pending)	1.3	61.6	33.1	4
AP Murdock	2020 AgriPro/Syngenta	PVP (94)	1.3	59.9	30.6	5
AP Smith	2021 AgriPro/Syngenta	PVP (94)	1.3	62.7	29.7	3
Ascend-SD	2021 SDSU	PVP (94)	1.3	62.6	34.6	5
Brawn-SD	2022 SDSU	PVP (94)	1.3	60.9	33	5
CAG Ceres	2024 Champions Alliance Group Inc	PVP (94) (pending)	1.3	59.1	32.5	4
CAG Recoil	2022 Champions Alliance Group Inc	PVP (94)	1.5	65.5	31.1	4
CP3099A	2020 CROPLAN	PVP (94) (pending)	1.3	65.8	34.8	4
CP3530	2022 CROPLAN	PVP (94) (pending)	1.3	62.5	34	5
CP3555	2024 CROPLAN	PVP (94) (pending)	1.3	61	31.5	5
CP3678	2024 CROPLAN	PVP (94) (pending)	1.3	63.8	31.7	4–5
CP3915	2019 CROPLAN	PVP (94) (pending)	1.3	61.6	31.8	4
Driver	2019 SDSU	PVP (94)	1.3	62.5	33	4
Dyna-Gro 8582	2024 Nutrien Ag Solutions	PVP (94) (pending)	1.5	57.8	30.9	3
Dyna-Gro Ambush	2017 Nutrien Ag Solutions	PVP (94) (pending)	1.5	58.6	32	5
Dyna-Gro Ballistic	2018 Nutrien Ag Solutions	PVP (94) (pending)	1.5	61.7	33.7	5
Dyna-Gro Commander	2019 Nutrien Ag Solutions	PVP (94) (pending)	1.5	58.6	32.1	4
Dyna-Gro Rocker	2023 Nutrien Ag Solutions	PVP (94)	1.5	64.1	33.2	6
Enhance-SD	2024 SDSU	PVP (94) (pending)	1.3	58.8	33.5	4
LCS Ascent	2022 Limagrain Cereal Seeds	PVP (94)	1.3	58.5	31	5
LCS Boom	2023 Limagrain Cereal Seeds	PVP (94)	1.3	58.1	30.8	4
LCS Buster	2020 Limagrain Cereal Seeds	PVP (94)	1.3	65	33.7	5
LCS Cannon	2018 Limagrain Cereal Seeds	PVP (94)	1.3	57.3	30.8	4
LCS Dual	2021 Limagrain Cereal Seeds	PVP (94)	1.3	60.7	32.3	3
LCS Hammer AX⁵	2022 Limagrain Cereal Seeds	PVP (94)	1.3	60.5	30.2	3
LCS Rimfire	2025 Limagrain Cereal Seeds	PVP (94) (pending)	1.3	59.1	29.3	5–6
LCS Trigger	2016 Limagrain Cereal Seeds	PVP (94)	1.3	65.8	32.9	5

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Linkert	2013 MN	PVP (94)	1.3	61	30.8	2
MN-Rothsay	2022 MN	PVP (94)	1.3	64.5	29.8	3
MN-Torgy	2020 MN	PVP (94)	1.3	60.8	31.9	4
MS Charger	2023 Meridian Seeds, LLC	PVP (94)	1.3	60.5	30.5	5
MS Cobra	2022 Meridian Seeds, LLC	PVP (94)	1.3	60.4	30.2	5
MS Nova	2023 Meridian Seeds, LLC	PVP (94) (pending)	1.3	58.4	30.7	4
ND Horizon	2025 NDSU	PVP (94) (pending)	1.3	61.1	31.1	4
ND Stampede	2024 NDSU	PVP (94) (pending)	1.3	60.7	32.1	4
ND Thresher	2023 NDSU	PVP (94) (pending)	1.3	64.1	31.5	5
PFS Muffins	2026 Peterson Farms Seed	PVP (94) (pending)	1.3	61.7	30.7	4
PFS Rolls	2025 Peterson Farms Seed	PVP (94) (pending)	1.3	61.7	32.8	4
Shelly	2016 MN	PVP (94)	1.3	63.1	30.9	5
SY 611 CL2^a	2019 AgriPro/Syngenta	PVP (94)	1.3	60.7	29.5	4
SY Valda	2015 AgriPro/Syngenta	PVP (94)	1.3	61.1	31.5	5
TCG-Arsenal	2024 21st Century Genetics	Patent pending	1.3	64.7	31.5	3–4
TCG-Badlands	2023 21st Century Genetics	Patent pending	1.3	60.5	30.3	4
TCG-Wildcat	2020 21st Century Genetics	Patented, PVP (94)	1.3	61.9	32.1	3
TCG-Zelda	2023 21st Century Genetics	Patent pending	1.3	60.2	30.2	4
TW Olympic	2022 Thunder Seed	PVP (94)	1.3	62	31.9	5
TW Trailfire	2024 Thunder Seed	PVP (94)	1.3	58.2	31.7	6
WB9479	2017 WestBred	Patented, PVP (94)	1.3	58.6	29.7	3
WB9590	2017 WestBred	Patented, PVP (94)	1.3	58.3	28.6	3
Mean				61.2	31.5	

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¹ Abbreviations: MN = Minnesota Agricultural Experiment Station; NDSU = North Dakota State University Research Foundation; SDSU = South Dakota Agricultural Experiment Station

² Our standard seeding rate is designed to achieve a desired stand of 1.3 million plants/acre, assuming a 10% stand loss and adjusting for the germination percentage and seed weight of each variety.

³ Heading is Days after planting. 2025 data from Crookston, Lamberton, Roseau, St. Paul, and Waseca.

⁴ 1-9 scale in which 1 is the strongest straw and 9 is the weakest. Based on 2016-2025 data. The rating of newer entries may change by as much as one rating point as more data are collected.

⁵ LCS Hammer AX has tolerance to Agressor AX® herbicide.

⁶ SY 611 CL2 has tolerance to Beyond® herbicide.