

# Norwest Wheat Seed Guide



Oregon State  
University





## SOFT WHITE WINTER WHEAT Norwest Duet

ADAPTATION



## Harmonize your wheat acreage



**Exceptional**  
C-stripe and good  
stripe rust tolerance



**Very good**  
winter-hardiness  
and falling numbers



**Proven performance**  
in intermediate and  
low rainfall



**A top yielder**  
in ALL WSU rainfall  
zones across 5 years

YIELD				
	BU/AC	Norwest Duet	Trial Avg.	MEAN
2021 WSU 16-20"	82			106% of mean
	77			
5-Year WSU 12-16"	102			106% of mean
	96			
3-Year UI North	111			106% of mean
	105			
5-Year WSU >20"	112			106% of mean
	106			
2021 WSU <12"	38			106% of mean
	36			
2-Year WSU 12-16"	80			105% of mean
	76			
2-Year WSU <12"	44			105% of mean
	42			
2-Year UI North	101			104% of mean
	97			

AGRONOMIC FEATURES					
	Norwest Duet	LCS Artdeco	WB 1529	SY Dayton	Jasper
Test Weight	57.5	57.5	60.3	59.3	55.6
Protein %	11.4	10.8	11.9	11.4	12.0
Winter-Hardiness	Very Good	Below Avg.	Good	Good	Very Good
Heading (Julian)	154	150	150	150	152
Plant Height (Inches)	35	29	29	30	32
Straw Strength	Good	Very Good	Very Good	Very Good	Good

2021 average | All available public and private data used in compiling scores

DISEASE TOLERANCE			
	Susceptible	Intermediate	Resistant
Stripe Rust			
Septoria			
Strawbreaker Foot Rot			
Crown Rot			
C-Stripe			
Soil-Borne Mosaic			

All available public and private data used in compiling scores

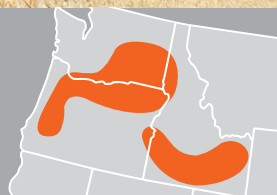
END-USE QUALITY			
Overall Quality	Baking Quality	Flour Protein	Milling Quality
Desirable	Desirable	Less Desirable	Most Desirable

Data obtained from LCS Quality Laboratory



## SOFT WHITE WINTER WHEAT Norwest Tandem

ADAPTATION



## Stronger genetics together



**Broadly adapted**  
across the PNW



**Heavy**  
test weight



**Consistent yield**  
over the years,  
top yielder in  
WSU 16-20" 5-year



**Great tolerance**  
to stripe rust

YIELD			
	BU/AC	Norwest Tandem Trial Avg.	MEAN
2021 WSU <12"	41 36	<div><div></div></div>	114% of mean
2021 OSU Low Rain	46 42	<div><div></div></div>	110% of mean
3-Year UI North	113 105	<div><div></div></div>	108% of mean
2-Year OSU Low Rain	56 53	<div><div></div></div>	106% of mean
3-Year OSU Low Rain	60 57	<div><div></div></div>	105% of mean
2021 UI North	66 63	<div><div></div></div>	105% of mean
5-Year WSU >20"	110 106	<div><div></div></div>	104% of mean
5-Year WSU 12-16"	99 96	<div><div></div></div>	103% of mean

AGRONOMIC FEATURES					
	Norwest Tandem	LCS Artdeco	WB 1529	SY Dayton	Jasper
Test Weight	57.9	57.5	60.3	59.3	55.6
Protein %	11.1	10.8	11.9	11.4	12.0
Winter-Hardiness	Good	Below Avg.	Good	Good	Very Good
Heading (Julian)	150	150	150	150	152
Plant Height (Inches)	28	29	29	30	32
Straw Strength	Very Good	Very Good	Very Good	Very Good	Good

2021 average | All available public and private data used in compiling scores

DISEASE TOLERANCE			
	Susceptible	Intermediate	Resistant
Stripe Rust	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Septoria	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Strawbreaker Foot Rot	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Crown Rot	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
C-Stripe	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Soil-Borne Mosaic	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>

All available public and private data used in compiling scores

END-USE QUALITY			
Overall Quality	Baking Quality	Flour Protein	Milling Quality
Acceptable	Most Desirable	Acceptable	Less Desirable

Data obtained from LCS Quality Laboratory





## Superior wheat quality

Limagrain Cereal Seeds is the only private breeding program with a dedicated, state-of-the-art quality lab. The LCS Quality Laboratory utilizes a comprehensive set of data, compiled over multiple years, to determine the end-use quality of all wheat varieties we release. Key attributes include:

**Baking quality**, including loaf volume, cookie diameter and dough rheology.

**Milling quality**, including flour yields and protein loss from grain to flour.

**Flour protein**, including water absorption, gluten strength and percentage of protein content.

These characteristics are weighted and combined into a single score: baking quality (30%), dough properties (20%), milling quality (40%), test weight (5%) and flour protein (5%). Overall end-use quality is classified in one of four categories:

**Most Desirable.** Elite varieties with excellent intrinsic (kernel) qualities and a superior combination of milling, baking and dough properties.

**Desirable.** High-demand varieties with strong intrinsic qualities and very good to good milling, baking and dough properties.

**Acceptable.** One or more quality parameters may have minor flaws. Overall, these varieties are acceptable to end users.

**Less Desirable.** Varieties with quality parameters that are less than adequate for current end-user standards or a single critical flaw.



## The latest technical data

To obtain the most accurate data possible, all available public and private multi-year data are used to compile agronomic, disease and yield scores. Quality data are obtained from the LCS Quality Laboratory. All agronomic, disease and yield scores published in this guide are based on the most recent data available at the time of publication (October 13, 2021). For updated PNW data and variety information, visit [LimagrainCerealSeeds.com](https://LimagrainCerealSeeds.com) year-round.

Agronomic performance, disease scores and yield performance data from universities are available in their entirety at:

**University of Idaho–Southern:**

[uidaho.edu/extension/cereals/scseidaho](https://uidaho.edu/extension/cereals/scseidaho)

**University of Idaho–Northern:**

[uidaho.edu/extension/cereals/nidaho](https://uidaho.edu/extension/cereals/nidaho)

**Oregon State University:**

[cropandsoil.oregonstate.edu/wheat/osu-wheat-variety-trials](https://cropandsoil.oregonstate.edu/wheat/osu-wheat-variety-trials)

**Washington State University:**

[smallgrains.wsu.edu](https://smallgrains.wsu.edu)

The results presented in this guide may not be an indicator of results you may obtain in your individual location, as local growing conditions – including soil type and weather – may vary. All growers are advised to evaluate data from multiple locations and years whenever possible.



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Limagrain Cereal Seeds  
is proud to partner with  
Oregon State University  
to bring PNW farmers  
exceptional, proven  
Norwest varieties.

**Get your seed today**

Find your next blockbuster variety  
[LimagrainCerealSeeds.com/PNW](http://LimagrainCerealSeeds.com/PNW)

Reserve your seed today

[LimagrainCerealSeeds.com/find-a-dealer](http://LimagrainCerealSeeds.com/find-a-dealer)

Talk to a wheat specialist  
**503.519.7075**

