

2024 First Stripe Rust Forecast for the Eastern Pacific Northwest

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Based on the weather data of the November and December 2023, stripe rust in the 2024 wheat growing season is predicted to be in the range of severe epidemic level (40-60% yield loss on susceptible varieties). Using different forecast models based on the 2023 November and December weather data, yield loss of highly susceptible winter wheat varieties in the 2024 crop season is predicted to be in the range of 29 to 54% with an average of **42%**. The predicted severe epidemic level is attributed to the relatively high temperatures in November and December. Based on such level of potential yield loss on susceptible wheat, commercially grown varieties are predicted to have **0 to 27%** yield losses depending upon the level of resistance or susceptibility of individual varieties. Based on the forecast, fields grown with moderately susceptible (MS, ratings 6 and 7) or susceptible (S, ratings 8 and 9) winter wheat varieties may need the early fungicide application at the time of herbicide application. Resistant (ratings 1 and 2) and moderately resistant (ratings 3 and 4) spring wheat varieties should be selected to plant, and variety with MS and S ratings (6 – 9) should be avoided. See the Seed Buying Guide of wheat varieties or the stripe rust ratings below (**Table 1** and **Table 2**).

Table 1. Stripe rust ratings of winter wheat varieties

Rating	Varieties (Soft white, Hard red, Club, Hard White)
R (1,2)	aMaze, AP Dynamic, AP Exceed, AP Iliad, AP Octane , Appleby CL+, ARS Castella , ARS Crescent , ARS-Selbu 2.0 , Bobtail, Bruehl , Cameo , Cara , Chukar , Farnum , Inspire, Jameson, Jasper, Kairos , LCS Artdeco , LCS Biancor , LCS Blackjack , LCS Drive , LCS Evina , LCS Hulk , LCS Jefe , LCS Rocket , LCS Shark , LCS Shine , LCS Sonic , LCS Yeti , LCS Zoom , Legion, Madsen, M-Press, Nimbus, Nixon, Norwest 553 , Norwest Duet , Norwest Tandem , OR2x2 CL+, Resilience CL+, Rosalyn, Sockeye CL+, Sprinter , SY Assure, SY Banks, SY Clearstone CL2 , SY Dayton, SY Ovation, SY Raptor, VI Bulldog, VI Frost, VI Presto CL+, WB1529, WB1604, WB1720, WB4311 , WB4510CLP , WB4623CLP
MR (3,4)	AP Redeye , AP Venom , ARS Selbu, Coda , LCS Ghost , LCS Helix AX , Masami, Mela CL+, Millie, Pritchett , Stingray CL+, TMC M-Pire, UI Bronze Jade , UI-WSU Huffman, WB1376CLP, WB1621, Whetstone
M (5)	AP503 CL2 , AP Badger, Guardian , GS Bounty, LCS Aymeric , Mary, ORCF102, Otto, Piranha CL+, Puma, Stephens, SY107, SY Command, SY Touchstone , UI Castle CL+, UI Sparrow, WB1783, WB4394
MS (6,7)	AP700 CL, AP Legacy, Canvas , Curiosity CL+, Devote, Eltan, Irv, Keldin , LCS Fusion AX , Milestone , Purl, Scorpio , Sequoia , UI Palouse CL+, WB1532, Whistler , Xerpha
S (8,9)	Battle AX , Brawl CL Plus , CP7010, CP7909, LCS Jet , ORCL103, Snowmass 2.0, UI Magic CL+, VI Voodoo CL+ , WB4303 , WB Rimrock

Table 2. Stripe rust ratings of spring wheat varieties

Rating	Varieties (Soft white, Hard red, Club, Hard White)
R (1,2)	Alum , AP Octane , AP Renegade , Chet, CP3055, CP3066, CP3099A, CP3119A, CPX39120 , Dayn, Espresso , Glee , Hale , JD , Melba , Seahawk, SY Basalt, SY Gunsight, SY Teton, Tekoa, TMC2021, TMC Lochaven, WB6121, WB7202CLP , WB9636 , WB9662 , WQL008, WQL195, YSC-605
MR (3,4)	Cabernet , CP3322, Diva, Hedge CL+ , LCS Iron , Net CL+ , Roger , Ryan, SY Coho, SY Selway, SY Steelhead , UI Platinum, UI Stone, SY Saltese, WB9668 , UI Cookie, YSC-603
M (5)	AP Coachman, AP Venom , Buck Pronto , Bullseye , Louise, WB6341, Whit
MS (6,7)	AP Mondovi CL2, Hollis , Jefferson , Jefferson HF , LCS Luna , Kelse , WB9303 , WB9623
S (8,9)	Babe , CP3530 , SY605 CL2 , WB1035 CL+, WB6211CLP