

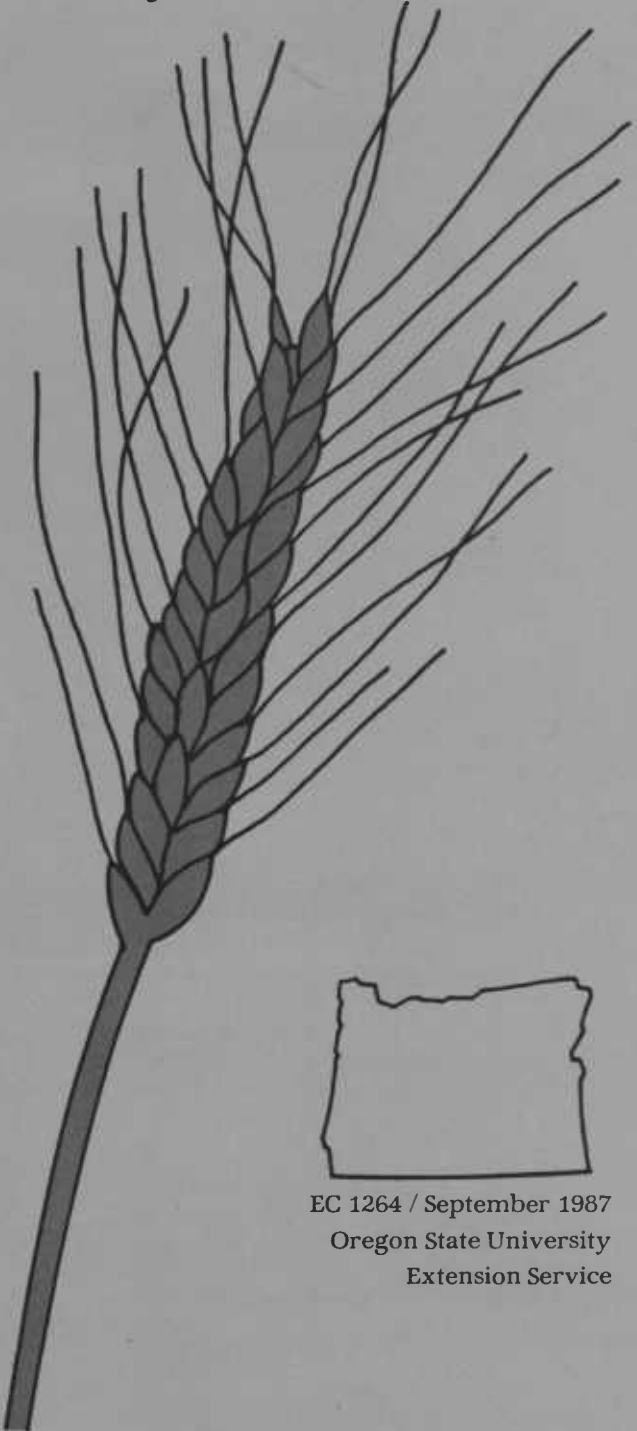
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Oregon Cereal Variety Profile

# Oveson

*A Soft White Winter Wheat*



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## Oveson

### *A Soft White Winter Wheat*

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Oveson is a common soft white winter wheat released by Oregon State University in 1987. It is an awned, medium-tall, semidwarf with white chaff. In yield, it's generally similar to or lower than Stephens, Hill 81, and other commonly grown varieties; but it offers a slightly different disease-resistance package.

OSU's purpose in this release is to give growers another choice in varieties, which should reduce the risk of widespread losses resulting from disease outbreak in any one variety.

### Areas of adaptation

Oveson has been tested under a range of environmental conditions and appears to be best adapted in areas that show higher yields or have lighter soils. Winterhardiness is less than that of Stephens, so Oveson is not recommended for areas where extreme winterhardiness is required.

Oveson is moderately resistant to Cephalosporium stripe and is susceptible to dwarf smut and snow mold. It's not recommended for areas where these diseases are constant problems.

### Yield

Yield data are shown in table 1. Yields in low-yielding environments have been less than those of Stephens and Malcolm, but similar to those of Hill 81 and Daws. Over 11 site-years of testing in high-yielding, dryland environments and under irrigated production in Pendleton, Summerville, and Hermiston, Oveson yields have been superior to those of Daws, but not significantly different from those of other commonly grown varieties.

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Over 48 site-years of testing across Oregon, Oveson yields are statistically superior to those of Daws, similar to or less than those of Hill 81 and Stephens, and less than those of Malcolm.

### Agronomic characteristics

Table 2 summarizes data for these characteristics:

**Maturity.** Oveson is a mid- to late-season variety. It heads 4 to 5 days later than Stephens and 1 to 2 days later than Hill 81.

**Height.** Oveson and Hill 81 are similar in height. Both are 2 to 3 inches taller than Stephens or Daws. Oveson is just slightly taller than Malcolm. Oveson's lodging resistance is superior

to that of Hill 81 but less than that of Stephens. The variety can be grown under above-average fertility conditions.

**Test weight.** On average, Oveson test weights have been similar to or higher than those of Stephens. Its test weight average over 44 test sites is 58.3 lb per bushel.

**Disease resistance.** Oveson is resistant to stripe rust. Its genetic source of resistance is different from that of other commonly grown varieties. It has moderate resistance to common bunt and Cephalosporium stripe, is moderately susceptible to Pseudocercospora foot rot (straw breaker), and is susceptible to leaf rust, stem rust, and dwarf bunt.

Table 1.—Yield data (in bushels per acre) for Oveson and other commonly grown soft white winter wheats over several sites

Variety	Corvallis 1983-85	High- yield dry land <sup>a</sup> 1983-86	Low- yield dry land <sup>b</sup> 1983-86	Irrigated sites <sup>c</sup> 1983-86	Pendleton 1983-86	Powell Butte 1986	Average over all sites
Daws	97	72	45	88	79	127	66
Hill 81	106	78	44	95	82	138	69
Malcolm	105	79	50	95	83	140	72
Oveson	89	82	45	95	81	126	69
Stephens	101	76	50	94	81	138	71
PLSD (5%) <sup>d</sup>	NS	5	2	NS	NS	—	2
No. of site-years	3	11	21	8	4	1	48

<sup>a</sup>Flora, Holdman, La Grande, Weston.

<sup>b</sup>Arlington, Condon, Echo, Heppner, Lexington, Moro, Pilot Rock.

<sup>c</sup>Pendleton, Summerville, and Hermiston.

<sup>d</sup>Protected least significant difference. Varieties must be different in yield by at least the amount shown. Lesser differences in yield are not statistically significant. NS = non-significant (none of the differences are statistically significant).

Table 2.—Agronomic characteristics for Oveson and other commonly grown soft white winter wheats

Variety	Winter survival <sup>a</sup>	June heading date	Plant height (in)		Bu wt (lb)		Disease reactions <sup>b</sup>		
			low-yield sites	high-yield sites	low-yield sites	high-yield sites	Rust stripe/ leaf/stem	Foot rot	Cephalos- porium stripe
Daws	8	6	27	31	59.3	58.8	MR/MS/S	MS	MS
Hill 81	7	8	28	34	59.2	58.6	MR/MR/S	S	MR
Malcolm	5	5	28	32	58.9	57.8	MR/MR/S	MS	MS
Oveson	4	9	29	33	58.0	58.7	R/S/S	MS	MR
Stephens	5	4	27	31	58.0	57.3	R/MS/S	MR	S
No. of site-years	—	9	26	18	26	18	—	—	—

<sup>a</sup>1 = poor, 5 = adequate, 10 = superior under Oregon conditions.

<sup>b</sup>R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, T = tolerant.

Do not grow Oveson where extreme winterhardiness or resistance to dwarf bunt, Cephalosporium stripe, or snow mold is required.

### Production considerations

Production practices for Oveson are similar to those for other common soft white winter wheats. Seed size is between those of Stephens and Hill 81, except under irrigated conditions, when it tends to be heavier than Stephens. Oveson, Malcolm, and Daws are similar in seed size. Average seeds per pound for Daws, Hill 81, Malcolm, Oveson, and Stephens over 26 sites are 12,800, 14,700, 12,400, 12,500, and 11,800, respectively.

To obtain equivalent plant populations, seed Oveson at a poundage rate between those of Stephens and Hill 81. Another consideration in determining desired plant population is that Oveson's tillering capacity appears to be slightly greater than that of other common varieties.

### Quality considerations

Oveson has satisfactory milling and baking quality. When grown under dry-land conditions, its flour yield, milling score, and cake volume have been slightly less than those of other commonly grown varieties. Other characteristics are similar.

When grown under irrigation, Oveson's flour yield, flour ash, milling score, cookie diameter, and cake volume have been slightly greater than those of other common varieties. Protein content across environments has tended to be lower than those of Daws, Hill 81, Malcolm, and Stephens.

### Breeding history

Oveson was bred by Charles Rohde, cereal breeder at Oregon State University's Columbia Basin Agricultural Research Center, Pendleton. It was named in honor of Merrill Oveson, superintendent of the Pendleton Experiment Station from 1948 to 1966.

Oveson is the progeny of crosses made among Hyslop, Yayla, Cerco, and a Washington experimental line. The final cross was made in 1976. It was tested under the experimental number OR7996.

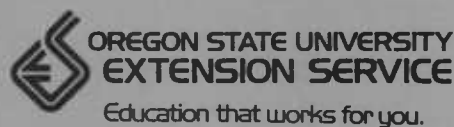
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