

**FACT SHEET**

**OSB74133/M33  
Selection ORS2  
Spring Feed Barley**

**Proposed name: Maranna**

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**Description**

ORS2 is a six-row spring feed barley. It is a short-statured, lodging-resistant selection with smooth awns and a semi-lax spike. The grain has a white aleurone.

**Pedigree and history**

ORS2 was developed from a cross of OSB74133 and M33. OSB74133 is a spring six-row germplasm of Coast type developed at Oregon State University. M33 is a Manchurian-group spring six-row germplasm developed at the University of Minnesota. The initial cross was made by Mary Verhoeven. Progeny were advanced in a modified pedigree system by Mary Verhoeven and Ann Corey. An F<sub>4</sub>-derived line was evaluated at multiple testing sites in Oregon prior to submission to the Western Regional Spring Barley Nursery (WRSBN) in 1990. ORS2 was tested in the WRSBN for three years. In the spring of 1992, 1,000 head rows were planted at Corvallis. These head rows were phenotypically uniform and were harvested in bulk as Breeder's seed.

The proposed name - Maranna - was selected to honor Mary Verhoeven and Ann Corey, as both were instrumental in the development of this variety.

**Area of adaptation**

ORS2 is adapted to irrigated spring barley production areas throughout the Pacific Northwest. It is targeted for high input, lodging-prone environments. As a smooth awned, white aleurone type, it could serve as an alternative to Gustoe.

**Disease reaction**

ORS2, like all currently grown spring barley varieties, is susceptible to barley stripe rust, race 24.

**Yield and agronomic traits**

The yield, test weight, and heading date of ORS2 are comparable to those of commonly grown spring barley varieties in Oregon and the Pacific Northwest (Tables 1, 2, and 3).

ORS2 is shorter and more lodging resistant than Steptoe. ORS2 is somewhat taller than Gustoe, a variety which is too short for many growing conditions.

### Quality

ORS2 is a feed barley. Animal feeding trials have not been conducted. The balance of protein and carbohydrate (Table 3) would suggest that it would be an appropriate feed barley.

Table 1. Agronomic data: ORS-2 and check varieties. Oregon environments.

	Yield (lbs/acre)	Test weight (lbs/bu)	Lodging %
ORS-2	6170 (11)*	49.5 (6)	13 (3)
Steptoe	5366 (11)	50.2 (6)	38 (3)
Russell	5387 (7)	52.2 (6)	24 (3)
Morex	4904 (7)	51.4 (4)	41 (3)
Gustoe	58435 (6)	50.0 (5)	0 (3)
BA2601	4980 (4)	49.5 (2)	25 (3)

\*(0) = number of station years

Table 2. Agronomic data: ORS-2 and check varieties. Western Regional Spring Barley Nursery (34 station years) (1990 - 1991).

	Yield (lbs/acre)	TW (lbs/bu)	Heading date	Height (in)	Percent plump	Lodging %
ORS-2	5223	48.9	179	28	72	17
Steptoe	5156	48.5	174	33	83	34
Morex	4228	50.5	175	37	79	48
Exp. $\bar{x}$	4236	50.4	177	32	76	31

Table 3. Agronomic data for ORS-2 and checks.  
All locations of Western Regional Spring Barley Nursery (1990-1992): 48 Station years.

Variety	Yield lbs/A	TW lbs/bu	Ht in	Head Julian	% Plump	% Thin	% Ldg
ORS-2	5206	49.7	27	175	74	8	12
Steptoe	5183	49.0	32	171	83	7	39
Morex	4299	50.6	36	171	81	6	46
Nursery Average	4852	50.6	32	174	80	8	29

Table 4. Malting quality of ORS-2

Year	Location	Agency	Protein	Extract	F-C	visc.	S/T	DP	$\alpha$
90	Klamath	GW	12.0	79.5	1.0	1.49	47.3	121	66.9
90	Columbia Basin	GW	11.9	79.5	1.5	1.49	47.4	121	66.8
		GW	13.1	78.8	1.5	1.51	46.9	159	68.5
		GW	13.5	80.4	1.5	1.52	45.8	166	70.3
89	Madras	CCRU	13.8	76.5	3.2	-	37.0	122	43.5
88	Madras	CCRU	13.8	76.7	3.3	-	33.7	186	35.6
87	Klamath	AB	11.0	78.5	1.8	1.47	50.1	139	48.8
86	Corvallis	CCRU	10.8	77.1	1.8	-	41.7	110	39.0
86	Madras	CCRU	13.3	79.1	3.9	-	44.0	100	35.0
Average			12.6	78.5	2.2	1.50	43.8	136	52.7