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UNIVERSITY OF IDAHO
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and

OREGON AGRICULTURAL EXPERIMENT STATION
OREGON STATE UNIVERSITY
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**RELEASE OF 'WASHFORD' (WA7999-88), A NEW SIX-ROW
SPRING FORAGE (HOODED) BARLEY CULTIVAR**

The Washington Agricultural Research Center, the Idaho Agricultural Experiment Station, and the Oregon Agricultural Experiment Station jointly announce the release of Washford barley to farmers and seedsmen for commercial production. Washford was developed by the Washington Agricultural Research Center.

Washford is a selection from the cross 'Belford' x 'Columbia.' Belford is a 6-row, hooded, hay-type barley and Columbia is a semi-dwarf, awned 6-row feed barley. The cross was made at Washington State University in the Department of Crop and Soil Sciences in 1984, and the selection (F₅ head row) was made in 1987. Washford was tested under the line designation WA7999-88. Washford was tested at Pullman for 6 years (1989, 1991-95) for forage as well as grain yield and other agronomic traits. Washford was tested at Powell Butte, Oregon in 1995 for forage yield and agronomic traits. Nutritional quality tests were conducted cooperatively with the WSU Department of Animal Sciences.

Harvested at the grain soft-dough stage, Washford produced 13% (7% in Oregon) more wet weight than Belford and 15% more dry weight. It also produced 24% more wet weight and 15% more dry weight than 'Stepford.' Washford produced 22% more seed than Belford and 12% more than Stepford. All yield results have been consistent across tests. Washford is shorter than Belford by 8% (10% in Oregon) and similar to Stepford. It has greater lodging resistance than both other varieties (4, 8, 16% lodging for Washford, Stepford, Belford in Washington). Under irrigated conditions in Oregon, Washford was 12% lodged vs. 57% for Belford. All agronomic data are averages over 6 years of tests at Pullman. Few disease symptoms have been noted on the forage barleys. However, Washford has shown some susceptibility to loose smut caused by *Ustilago nuda*. There is limited quality data, but in one trial at Pullman, acid detergent fiber of hay (at soft dough stage) was 28.3 and 27.0% for Washford and Belford, respectively. Protein was 9.5 and 10.4% for Washford and Belford, respectively. In vitro dry matter disappearance

was 62.9 and 63.5% for Washford and Belford, respectively. Washford is expected to be used primarily for hay, but also other forage uses for ruminant livestock. It should supplant Belford. Washford is a 6-rowed, hooded, mid-season, relatively tall feed barley. Hoods replace the awns and glumes have short hairs. The relatively large tapering kernels have prominent lemma veins, short rachilla hairs, and narrow to broad crease. The aleurone is colorless.

Breeder's seed was produced in 1995 in Washington from head rows. Foundation Seed will be produced in Washington in 1996. Breeder's and Foundation Seed will be maintained by the Washington State Crop Improvement Association. The proposed date of release of Washford is 1 July 1996. Each agency involved in the agreement may make appropriate news releases subsequent to this date.

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