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WASHINGTON AGRICULTURAL RESEARCH CENTER
WASHINGTON STATE UNIVERSITY
PULLMAN, WASHINGTON 99164-6240

and

IDAHO AGRICULTURAL EXPERIMENT STATION
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**RELEASE OF 'BEAR' (WA11045-87), A NEW TWO-ROW
SPRING HULLESS BARLEY CULTIVAR**

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

Bear is a selection from the cross 'Scout' x WA8893-78. WA8893-78 is from the cross 'Klages' 2 x WA8537-68. The cross was made at Washington State University in the Department of Crop and Soil Sciences in 1983, and the selection (F₃ head row) was made in 1987. Bear was tested under the line designation WA11045-87. Bear was tested in Washington State 5 years (1991-95, 18 location-years) and in Idaho State 2 years (1994-95, 10 location-years). Nutritional quality trails with swine (mobile nylon bag technique and starter pigs) were conducted cooperatively with the WSU Department of Animal Sciences.

Bear has produced significantly and consistently higher yields than 'Condor' and Scout. The yield of Bear was 113% of Condor and 117% of Scout over 5 years of trials at Pullman (1991-95) and 105% of Condor over 13 locations in eastern Washington in 1995. Bear out yielded Condor in each of the four production zones in the 1995 trials. Bear yielded 136% of Condor and 100% of Scout and 'Phoenix' over 4 location years (1994-95) in northern Idaho. Bear yielded 117% of 'Merlin' and 129% of 'Shonkin' over 6 locations in 1995 in southern Idaho. The test weight of Bear has ranged from 57 to 60 lb/bu and is typically a little lower than that of Condor and a little higher than that of Scout. Heading date is similar among these three cultivars. Plant height of Bear is similar to that of Condor and shorter than that of Scout. It has about the same medium to high lodging resistance as that of Condor and a little greater than that of Scout. Few disease symptoms have been noted for Bear and the other hulless cultivars in tests in eastern Washington.

Nutritional quality of Bear appears to be good based on a starter pig trial. It had a higher average daily gain and gain/feed ratio than Condor. Based on mobile nylon bag dry matter digestibility and digestible energy Bear was rated excellent compared to hulled 2- and 6-row types. It is expected to be used for livestock feed and potentially for human food.

Bear is a two-rowed, mid-season, medium height spring food/feed barley. It has relatively long, lax, slightly nodding heads. The awns are long and rough. The glumes have short hairs. The

kernels thresh free (are hullless), and therefore, have no rachillas. The kernels are relatively small (similar to Condor), have a narrow crease and taper slightly more at the distal end. The aleurone is white.

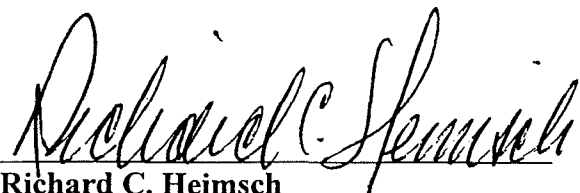
Breeder's seed was produced in 1995 in Washington from head rows. Foundation Seed was produced in Washington in 1996. Breeder's and Foundation Seed of Bear will be maintained by the Washington State Crop Improvement Association. The proposed date of release of Bear is 1 March 1997. Each agency involved in the agreement may make appropriate news releases subsequent to this date.



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2/11/97

Date



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2/10/97

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