UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE LOCKEFORD, CALIFORNIA

NOTICE OF RELEASE OF CENTRAL SIERRA 3200 GERMPLASM CALIFORNIA BROME SELECTED PLANT MATERIAL

The Natural Resources Conservation Service (NRCS) and the U.S. Department of Agriculture (USDA) announce the release of a selected ecotype of California brome (*Bromus californica* Hook. & Arn.) for the Sierra California ecoregion. Central Sierra 3200 Germplasm California brome was tested under the accession number 9083095.

This plant will be referred to as Central Sierra 3200 Germplasm California brome and is released as a selected plant material class of certified seed (natural track).

This alternative release procedure is justified because there are no existing commercial sources of California brome to supply the ecoregional demand. The potential for immediate use is high due to the strong interest in regionally adaptive native grass species.

Collection Site Information: Accession 9083095 was collected in 2006 from native plants located at Pike County Peak in Yuba County at 39° 29.526 N. latitude and 121° 12.916 W. longitude (MLRA 18d). It was growing in silty clay soils on a 10% slope with south exposure. Collection site elevation was 975 meters (3,200 feet) with an average annual precipitation of 147 centimeters (58 inches).

Description: Central Sierra 3200 Germplasm California brome is a native, cool-season, short-lived perennial bunchgrass. The base of this robust plant is open with hairy sheaths having erect stems (culms) growing up to 110 centimeters in height. Leaf blades are 0.5 to 1cm wide, lax, and spread out along stems. The inflorescence (seed head, open panicle) is 10-30 cm long, large, open, and erect to somewhat drooping. The spikelets are 5 to 7 flowered, 2 to 4 cm long, 5 to 7 mm wide and flattened. Lemmas are 1 to 1.5 cm long, flattened, keeled, and usually pubescent. The awns are 2 to 5 mm long. Seeds mature in May and June. The root system is fibrous, deep and widespread.

Method of Breeding and/or Selection: Central Sierra 3200 Germplasm California brome was evaluated at four different growing sites (Penn Valley, NRCS-Lockeford PMC, Morgan Hill, and Los Alamos) in California from Fall 2006 through Spring 2008. A total of 28 accessions of California brome were collected in May and June 2006 throughout the state of California and

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Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer).

Signatures for release of:

Central Sierra 3200 Germplasm California brome (Bromus carinatus Hook. & Arn.)

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 $Table\ 1\ .\ Plant\ Performance\ of\ Central\ Sierra\ 3200\ California\ Bromegrass\ at\ Penn\ Valley, California\ (first\ evaluation,\ May\ 2007).$

Accession	Vigor ¹	Std ² /	Ht ^{3/}	Width4/	Amt 5/
3074	7.0	87.5	11.5	35.0	No data
3075	5.8	82.5	15.8	30.0	
3076	6.8	87.5	10.3	30.0	
3077	6.8	91.3	17.5	35.0	
3078	6.8	70.8	9.3	32.5	
3079	4.8	72.5	14.0	31.3	
3080	7.0	80.0	14.5	36.3	
3081	6.0	82.5	17.1	33.8	
3082	4.3	68.0	17.3	33.5	
3083	4.8	83.8	13.3	31.3	
3084	5.8	78.8	12.8	35.0	
3085	3.3	61.3	11.0	35.0	
3086	4.3	75.0	12.3	33.8	
3087	8.3	86.4	14.0	31.2	
3088	5.0	77.5	9.0	32.5	
3089	6.5	87.5	12.0	35.0	
3090	7.5	89.5	10.9	35.0	
3091	8.2	93.0	10.4	35.6	
3092	7.3	83.8	7.5	33.8	
3093	5.1	61.2	8.3	34.4	
3094	4.0	67.5	9.0	28.8	
3095	7.5	77.5	9.3	35.0	
3096	7.0	61.3	9.8	35.2	

3088	4.5	66.3	70.0	27.5	4.5	
3089	7.3	76.3	83.5	32.3	6.5	
3090	5.0	62.5	71.3	28.8	5.0	
3091	3.8	52.1	61.3	25.1	3.7	
3092	5.0	71.3	75.5	30.0	4.8	
3093	4.2	53.7	61.7	30.6	3.7	
3094	5.5	66.3	80.5	30.0	5.0	
3095	6.0	61.3	67.5	28.8	5.8	
3096	4.7	72.1	66.6	24.5	4.8	
3097	4.4	58.8	72.6	29.5	4.4	
3098	5.3	70.0	60.8	30.0	4.8	
3099	5.3	87.5	65.3	28.8	6.3	
30100	5.0	65.0	65.3	28.8	4.5	
30101	6.0	72.5	82.5	31.3	4.3	
Mean	5.2	68.3	69.6	29.4	5.0	-0
LSD (0.05)	1.9	20.3	17.4	5.7	2.0	

¹⁻Vigor plant (vigor) (9 =best - 1 =worst); 2-Std (stand) - Estimate of percent stand; 3-Ht (height) - average plant height (in); 4-width - average plant width (in.); 5-Amt (amt. of seed) (9=most-1=least)