REGISTRATION OF 'BORDER' OATS

'BORDER' spring oats (Avena sativa L.) (Reg. no. 314, PI 467882) was developed cooperatively by USDA-ARS and the Idaho and Wyoming Agricultural Experiment Stations and released in 1982 by the Wyoming Agricultural Experiment Station and USDA-ARS. Border is from a cross of 'Otana'/Coker X848-1-1-2/'Cayuse' made at Aberdeen, ID in 1971. The F₁ line that became Border was selected at Aberdeen in 1974 and tested as 74Ab2300. It was first tested in replicated trials in Idaho in 1975, entered in the Uniform Northwestern States Oat Nursery in 1977, and in Wyoming trials in 1978.

Border is a midseason spring oat with good lodging resistance. Juvenile plant growth is erect and panicles are equalateral. Leaf sheath, leaf margins, and culm internodes are glabrous. Kernels are plump and creamy-white with mid-long rachillas. The kernels are similar to Otana in color and shape, but awns frequently occur on primary kernels of Border, whereas awns are usually absent in Otana.

Border was similar to Cayuse and 2.6 kg/hl lower than Otana in test weight when tested in the irrigated and dryland Uniform Northwestern States Oat Nursery locations in 1977 to 1981. It averaged 2.5-cm shorter than Cayuse and about 1.3-cm shorter than Otana, and headed 1 or 2 days later than Cayuse. Border is similar to Cayuse in caryopsis percentage and protein content. In 4 yr of irrigated tests in the Uniform Northwestern States Oat Nursery, Border yielded 1% more than Cayuse and 7% more than Otana. In similar tests on dryland, Border yielded 102% of Cayuse and 109% of Otana.

Breeder and foundation seed is available from the Seed Certification Manager, Sheridan Research and Extension Center, P.O. Box 2005, Sheridan, WY 82801.

B. J. KOLP AND D. M. WESENBERG (1)

References and Notes
1. Professor of plant breeding, Plant Sci. Dep., College of Agric., Univ. of Wyoming, P.O. Box 3354, Univ. Station, Laramie, WY 82071; and research agronomist, USDA-ARS, Univ. of Idaho Aberdeen Res. and Ext. Ctr., P.O. Box 4A, Aberdeen, ID 83210, Wyoming Agric. Exp. Stn. research paper no. 1333. Registration by the Crop Sci. Soc. of Am. Accepted 30 May 1986.

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REGISTRATION OF 'KENOAT' WINTER OAT

'KENOAT', CI 9136, is a winter oat cultivar (Avena sativa L.) (Reg. no. 315) developed by the Department of Agronomy, University of Kentucky, and released in 1981. The exact pedigree of Kenoat is not known. Kenoat originated from crosses between Ky. Composite 1 and CI 4897 ('S.172'), an introduction from Wales. Ky. Composite 1 was a composite of crosses between CI 4897 and a number of winter-hardy selections from the Kentucky oat breeding program. Bulked progenies of a single panicle from a plant selected in the F₁ generation were used for evaluation and seed increases of Kenoat.

The juvenile growth of Kenoat is prostrate. Plants are midseason in maturity, mid tall (80 to 100 cm), and produce many tillers. Culms are midsize, stiff, and glabrous at nodes, with a purple color present, especially when plants are stressed. Leaf sheaths are green with wax-coating, and a non-hairy ligule is present. The leaves are midwide and erect, with noncillicate margins. Peduncles are midsize, straight, and fully exerted. The panicles of Kenoat are equalateral, erect, and midsize, with a lower whorl of branches arising at the normal rachis node. The rachis is straight and nodes usually number six to seven; branches are midlong and ascending. Spikelets are numerous, usually two flowered, and spikelet and floret separation is by fracture. Glumes are 15- to 20-mm long, 5- to 8-mm wide, 8- to 10-veined, green, and waxy. The grains of Kenoat are slender, first lemmas light red to ivory, midlong (10 to 13 mm), glabrous, and paleas are greyish-white; basal hairs are absent. Awns are absent to many, and usually short with a dark base. Second lemma awns are absent and second floret rachilla segments are glabrous and midlong.

Kenoat was released in Kentucky to provide a high-yielding winter oat cultivar with excellent winterhardiness. Kenoat was evaluated in state yield trials in Kentucky from 1971 to 1981 and in the Uniform Northern Winter Oat Nursery under the designation KY 67-695 from 1973 to 1980. In these tests, it surpassed all other winter oat cultivars for winter survival. In Kentucky, Kenoat is 2 days earlier in heading than 'Compact', equal in height to 'Walken', and lodges somewhat more than either of these cultivars. Its yield performance has been equivalent to that of Compact and Walken. Kenoat also has excellent grain test weight and brighter grain color than other oat cultivars grown in Kentucky.

Kenoat will not be protected under the Plant Variety Protection Act. Seed classes designated by the Kentucky Agricultural Experiment Station are breeder, foundation, registered, and certified. Breeder and foundation seed of Kenoat will be maintained by the Kentucky Foundation Seed Project, Department of Agronomy, University of Kentucky, Lexington, KY 40546-0091.

V. C. FINNKR, D. A. VAN SANFORD, AND C. R. TUTT (1)

References and Notes
1. Professor emeritus, assistant professor, and research specialist, Dep. of Agronomy, Univ. of Kentucky, Lexington, KY 40546-0091. The investigation reported in this paper (no. 86-3-5) is in connection with a project of the Kentucky Agric. Exp. Stn. and is published with the approval of the director. Registration by the Crop Sci. Soc. of Am. Accepted 30 June 1986.

REGISTRATION OF 'CP 75-1082' SUGARCANE

'CP 75-1082' sugarcane (a complex trispecies hybrid of Saccharum officinarum L., S. spontaneum L., and S. barberi Jeswiet) (Reg. no. 69) was developed through cooperative research by the USDA-ARS, the Institute of Food and Agricultural Sciences of the University of Florida, and the Florida Sugar Cane League, and released in 1984. CP 75-1082 was selected from progeny of the cross, 'CP 68-1067'(1) × CP 70-1133(2), which was made at Canal Point, FL, in November 1973. CP 75-1082 was released primarily because of its resistance to sugarcane rust (caused by Puccinia melanocephala H. Syd. & P. Syd.) and smut (caused by Ustilago scitaminea Sydow). It also has adequate resistance, for production in Florida, to sugarcane mosaic virus; leaf scald (caused by Xanthomonas albilineans (Ashby) Dow); and eye spot [caused by Bipolaris sacchari (Butler) Shoemaker]. In 22 replicated yield trials (eight plant cane, seven first ratoon, and seven second ratoon), CP 75-1082 produced an average of 18% more cane per hectare than 'CP 63-588'(3), the standard cultivar in these tests. Sampling in the last 2 weeks in October, indicated no difference in sucrose content between CP 75-1082 and the check cultivar. However, at late harvest, CP 75-1082 had only 97% of the sucrose content of CP 63-588. CP 75-1082