REGISTRATION OF CROP CULTIVARS

REGISTRATION OF BATES OATS¹
(Reg. No. 286)

Dale Sechler and J. M. Pochlman²

'Bates', CI 9211, is a spring oat (Avena sativa L.) selected in Missouri and released jointly by the Missouri and Nebraska Agricultural Experiment Stations. It originated from a single F₃ plant selection made in a space planted population of the cross 'Pettis' × 'Florida 500'. Bates was tested in state and regional trials as Missouri Selection 06072. It was grown in the Uniform Early Oat Nursery from 1973 through 1975.

Bates tillers well and has medium green, relatively drooping leaves. The panicle is medium sized, equilateral in shape, and light green in color at heading. When ripe, both the panicle and straw turn to a deep yellow color. Bates is slightly variable in plant height and in color change in the ripening process. Genetic characters not considered in the selection process may be variable when Bates is grown in another environment.

Compared with Pettis, in Missouri over the past 3 years, Bates has averaged 2 days later in maturity, 10 cm shorter in height, 7% less in lodging, 1 kg/ha heavier in test weight, and 445 kg/ha higher in grain yield. Bates is more resistant than Pettis to the barley yellow dwarf virus (BYDV) disease, crown rust (Puccinia coronata f. sp. avenae (Cda.) Fraser and Led.), and smut (Ustilago avenae (Pers.) Rostr.). Kernel type of Bates is similar to that of Pettis, but it is slightly lighter in color and higher in oil.

Bates should be well adapted in the southern part of the spring oat region and is recommended in those areas where Pettis has been grown successfully.

Seed classes of Bates will include breeder, foundation, registered, and certified. Foundation seed was distributed in 1977. Breeder seed will be maintained by the Missouri Agricultural Experiment Station, Columbia, MO 65201.

² Professors, Dep. of Agronomy, Univ. of Missouri, Columbia, MO 65201.

REGISTRATION OF CEAL OATS¹
(Reg. No. 287)

R. L. Taylor²

'Ceal' (Avena sativa L.), CI 9162, is a spring oat developed cooperatively by the Alaska Agricultural Experiment Station and the SEA-USDA. Ceal was selected from the cross 'Climax'/ 'Eaton', made at the Matanuska Research Farm in 1951. Climax, CI 9161, probably of Swedish origin, has been grown in Alaska for many years. Ceal has been tested in Alaska as 5511-51-7-185 since it was selected as a progeny row in 1955.

An early-maturing, midtall, white-glumed oat, Ceal's principal performance comparisons have been in the Matanuska Valley in southcentral Alaska. Here, in 15 seasons, it has produced an average grain yield of 2,692 kg/ha, 8% below that of 'Golden Rain', a longtime recommended oat cultivar for this area. Compared to Golden Rain, Ceal has averaged 5.8 days earlier in maturity, 11.4 cm shorter in height, and is superior in resistance to lodging. It was, however, 4% lower in test weight and 445 kg/ha higher in grain yield. Bates is more resistant to lodging. It was, however, 4% lower in test weight and 445 kg/ha higher in grain yield. Bates is more resistant to lodging.

Ceal is recommended for grain production in areas where early maturity is required. It should be used as a component in oat-alfalfa mixture. Ceal is not recommended as a component in oat-pea mixture.

Ceal was released to seed producers in 1972. Breeder, foundation, and certified seed are recognized. Breeder seed will be maintained by the Alaska Agricultural Experiment Station, Palmer, AK 99645.

¹ Registered by the Crop Sci. Soc. of Am. Accepted 17 Feb. 1978.
² Professor, Dep. of Agronomy, Univ. of Illinois, and research plant pathologist, SEA-USDA, Urbana, IL 61801.

REGISTRATION OF CHINOOK ORCHARD GRASS¹
(Reg. No. 775)

R. L. Taylor²

'Chinook' orchard grass (Dactylis glomerata L.) was developed jointly by the Missouri Agricultural Experiment Station and SEA-USDA. Foundation seed was distributed in 1975, and certified seed growers in Illinois and other north central states have been recognized. Breeder seed is maintained by the Missouri Agricultural Experiment Station, Urbana, Ill.

² Professor, Dep. of Agronomy, Univ. of Illinois, and research plant pathologist, SEA-USDA, Urbana, IL 61801.