REGISTRATION OF CROP CULTIVARS

Kombyne yielded 11% more than ‘UC 566’ in 6 station-years of testing (1976-77) and 21% more than Briggs in 3 station-years of testing (1976-77) under irrigation in the San Joaquin and Sacramento Valleys of California, respectively. In Arizona, Kombyne yielded 16% more than ‘Arivet’ in 6 station-years of testing (1974, 1975, and 1977). Kombyne is recommended for irrigated culture in California and Arizona.

Breeder and foundation seed will be maintained by Northrup King Co., P. O. Box 1406, Woodland, CA 95695. Application has been made to the USDA for a Plant Variety Protection Certificate.

REGISTRATION OF OTANA OATS
(Reg. No. 289)

V. R. Stewart, D. M. Wesenberg, R. M. Hayes, and F. C. Pett

‘Otana’ spring oats (Avena sativa L.), CI 9252, was developed cooperatively by ARS-USDA and the Montana and Idaho Agricultural Experiment Stations. It was released in April 1976 by the Montana Agricultural Experiment Station and ARS-USDA.

The cross of CI 5345/‘Zanster’, from which Otana was selected, was made at Aberdeen, Idaho in 1961. CI 5345 is a sister selection of ‘Basin’, CI 5346; both were selected from the cross of ‘Clinton’/2nd ‘Overland’. Zanster originated in Holland. The F₂ line that became Otana was designated 63Ab5280-7 and was initially selected in 1965 at Aberdeen. It was first tested in replicated trials in Idaho in 1967, and entered in the Uniform Northwestern States Oat Nursery in 1970. Breeder seed of Otana is a composite of 63Ab5280-7 lines that originated as F₂ plant selections.

Otana is a relatively tall, midseason, spring oat with blue-green foliage and equilateral panicles. Juvenile plant growth is erect. The leaf sheath and leaf margins are glabrous. Kernels are plump, short, creamy-white, and have mid-long rachillas. Awns usually are absent. Test weight of Otana grain is higher than that of most other cultivars when grown in its area of adaptation. Otana is superior to ‘Park’ and ‘Cayuse’ in caryopsis percentage and test weight. Kernel weight is similar to that of Park, but lower than that of Cayuse. It is intermediate to these cultivars in protein percentage and lodging resistance. It is susceptible to races of crown rust (Puccinia coronata Cda. Var. avenae Fraser and Led.) that were prevalent at Madison, Wis. in 1971-72, but it is resistant to Helminthosporium victoriae Meehan & Murphy.

Otana has averaged about 4% higher in yield than Cayuse under high rainfall conditions at Kalispell, Mont., but in all Montana trials in high rainfall areas and under irrigation it has averaged about 6% less in yield than Cayuse. In the same trials, it averaged about 10% higher in yield than Park and Basin. Averaged over 20 station-years of dryland testing in Montana, it was 14% higher than Park and 4% lower than Cayuse for yield. In 10 station-years of irrigated testing in Idaho, Otana averaged about the same as Cayuse 6% higher than Park. It averaged 8% higher in yield, but about 19% lower than Cayuse in drier southern Idaho during the same test period.

Breeder and foundation seed of Otana will be maintained by the Dep. of Plant and Soil Science, Montana State University, Bozeman, MT 59717. Limited amounts of breeder and foundation seed may also be maintained by the Tetonia Extension Center, St. Anthony, ID 83445.

REGISTRATION OF RENUMEX SAINFOIN
(Reg. No. 18)

Bill Melton

‘Renumex’ sainfoin (Onobrychis vicieifolia Scor) was released by the New Mexico Agricultural Experiment Station in 1978. The experimental designation was N. M. Reg. 223.

The variety was selected from a germplasm composite obtained from the Montana Agricultural Experiment Station and from the varieties ‘Eski’ and ‘Remont’. The breeding procedure consisted of three cycles of mass-selection followed by three cycles of phenotypic recurrent selection. Selection was for rate of regrowth after cutting, persistence, plant height and plant vigor in the spring, summer (July), and fall.

Renumex sainfoin is a regrowth type similar to ‘Eski’. Stand persistency and plant color in July were better than those of Remont or Eski in tests conducted in New Mexico. Seed yield was approximately 30% higher than Remont or significantly less than ‘Zia’ alfalfa (Medicago sativa L.). Seed of Renumex was similar to that of Eski and is adapted to the probable area of adaptation. It is well adapted to both pastures and dryland hay production.

Generations of seed increase will be breeder, registered and certified. Breeder seed will be maintained by the New Mexico Agricultural Experiment Station.

REGISTRATION OF GOSHEN PRAIRIE SANDREED
(Reg. No. 47)

J. G. Scheetz and R. G. Lohmiller

‘Goshen’ prairie sandreed (Calamovilfa longifolia Hack. Scribn.) was released in 1976 by the Soil Conservation Service, Plant Materials Center, Bridger, Mont. in cooperation with the Montana Agricultural Experiment Station and the Montana State University Agricultural Experiment Station. It is the first established variety of this species. It was increased from a collection made near Torrington, Wyoming.

1 Registered by the Crop Sci. Soc. of Am. Accepted 5 Apr. 1978.
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