normally heads about 3 days later. It is not recommended for nonirrigated production in low rainfall areas.

Klages averaged 8.7 and 10.1% higher than 60Ab1810 and Piroline, respectively, in yield in seven station-years (1971 to 1973) of testing under irrigation at Aberdeen, Twin Falls, and Tetonia. In the 1972 Western Two-Row Barley Nursery grown at 19 stations, Klages exceeded 60Ab1810 in average yield by 2.5% and exceeded Piroline, 'Vanguard,' and 'Shabet' by 3.6, 4.5, and 5.1%, respectively.

Klages averaged 80.9% malt extract in the Western Two-Row Barley Nursery at 11 stations in 1972, compared with 78.2% for Piroline. Fine-coarse difference for Klages averaged 1.9%, compared with 2.8% for Piroline. Klages and Piroline averaged about the same in diastatic power, and 41.1 and 30.4 (20° Units), respectively, in alpha amylase.

Plant scale evaluations of malting and brewing quality of 60Ab1810 were initiated in 1970 in cooperation with the MBIA. 60Ab1810 was classified as acceptable for malting and brewing by industry members of the MBIA in 1972. Available 1971 and 1972 quality data show essentially identical malting quality characteristics for Klages and 60Ab1810.

The cultivar is named in honor of the late Dr. Karl H. Klages, Head of the University of Idaho Department of Agronomy from 1936 to 1962.

Breeder and foundation seed will be maintained by the Tetonica Branch Experiment Station, P.O. Box 72, St. Anthony, ID 83445.

REGISTRATION OF CASCADE CHEWINGS FESCUE

(Reg. No. 9)

R. V. Frakes

‘CASCADE’ chewings fescue (Festuca rubra var. Commutata Gaud.) was released in 1966 by the Oregon Agricultural Experiment Station. Established seed fields of chewings fescue, tracing to a New Zealand source, served as the original material. Seed from 16 seed fields were examined for chewings fescue seed characteristics. Equal amounts of seed from 12 of the fields were used to establish the basic seed source of Cascade.

Cascade is a noncreeping turf-type cultivar with dark green color and fine-leaf texture. The variety performs as the original Oregon chewings ecotype in that it responds similarly to fertility, clipping height, and turf management as other red and chewings fescues.

Breeder seed is maintained by the Oregon Agricultural Experiment Station from a block consisting of 1,016 plants established from seed. Seed production includes one generation each of breeder, foundation, registered, and certified classes.

REGISTRATION OF OTO INDIAGRASS

(Reg. No. 32)

L. C. Newell

The Nebraska Agricultural Experiment Station, Agricultural Research Service, USDA sponsored the development and release of ‘Oto’ indiangrass (Sorghastrum nutans) in 1964. The forage cultivar resulted from cooperation between the University of Nebraska, the Nebraska Agricultural Experiment Station, and the Nebraska Agricultural Experiment Station and the Agricultural Research Service, USDA.

Oto traces to nursery selections from a large number of seed collections of indiangrass obtained in 1953-54 from natural grasslands of southern Nebraska and eastern Colorado. Oto derives its name from the Oto Indians who occupied the area south of the Platte River in Nebraska. Oto is from the intercrossing of 100 leafy, late-maturing clones from 15 accessions. The seed increase in each entry was designated breeder seed. The parent clones then were selected and bred true for brown-glummed seed strains of indiangrass, bluestems (Andropogon gerardii), and big bluestem (Andropogon gerardii) were included in replicated 12 counties from 1961 to 1969. Oto excelled in yield and gave large forage yields, especially on thin soil sites where soil moisture and length of season were limiting.

Oto indiangrass is a perennial warm-season grass. Its maximum vegetative growth in mid to late summer is stemmed and leafy in solid stands, but robust harvest in wide-spaced cultivated rows. Individual plants may exceed 50 cm in basal spread and 1.5 m in height. Long and bright green to dull green in color, it is relatively soft in anthesis, contracting after pollination into dark-brown heads. Maturity of forage and seed occurs in the season, with seed harvests at early flowering and the area south of the Platte River in Nebraska. It was developed from the intercrossing of 100 leafy, late-maturing clones from 15 accessions. The seed increase in each entry was designated breeder seed. The parent clones then were selected and bred true for brown-glummed seed strains of indiangrass, bluestems (Andropogon gerardii), and big bluestem (Andropogon gerardii) were included in replicated 12 counties from 1961 to 1969. Oto excelled in yield and gave large forage yields, especially on thin soil sites where soil moisture and length of season were limiting.

Oto indiangrass is a perennial warm-season grass. Its mature growth is stemmed and leafy in solid stands, but robust harvest in wide-spaced cultivated rows. Individual plants may exceed 50 cm in basal spread and 1.5 m in height. Long and bright green to dull green in color, it is relatively soft in anthesis, contracting after pollination into dark-brown heads. Maturity of forage and seed occurs in the season, with seed harvests at early flowering and the area south of the Platte River in Nebraska.

Oto is used primarily in mixed stands of grasses, in which it plays a dominant role in forage plantings. It is especially recommended for milo and late-summer harvest in wide-spaced cultivated rows. Individual plants may exceed 50 cm in basal spread and 1.5 m in height. Long and bright green to dull green in color, it is relatively soft in anthesis, contracting after pollination into dark-brown heads. Maturity of forage and seed occurs in the season, with seed harvests at early flowering and the area south of the Platte River in Nebraska.

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