REGISTRATION OF HOUNDOG TALL FESCUE

'HOUNDOG' tall fescue (Festuca arundinacea Schreb.) (Reg. no. 28) was developed and released by International Seeds, Inc. of Halsey, OR. The New Jersey Agricultural Experiment Station provided some of the germplasm used in the development of this cultivar. Houndog is an advanced generation synthetic cultivar selected from the progeny of seven clones. The progeny of one clone designated as LPK-1, selected from a shaded lawn in Lexington, KY, provided approximately 50% of the parental germplasm of Houndog. This clone received pollen from a diverse group of turf-type tall fescue plants selected from 'Rebel' and from old turfs located in Alabama, Georgia, Kentucky, New Jersey, North Carolina, Pennsylvania, and Texas. The remaining one-half of the parental germplasm was derived from tillers selected from six attractive turf plots chosen from a closely mowed lawn trial located near Halsey. These six turf plots were each established from the progeny of single spaced-plants selected for dark green color, good density, fine leaves, and freedom from disease. Four of the above spaced-plant selections were derived from the germplasm source Rutgers T-1, pollinated with selections from 'Missouri 96'. The other two clones were selected from the progeny of a plant selected from an old turf in Knoxville, Tennessee, pollinated with Rutgers T-1. Intercross competition in closely-mowed turf trials was used to eliminate poorly adapted segregates and help identify germplasm with improved turf performance. ISI-791 was the experimental designation of Houndog. The first certified seed was produced in western Oregon in 1982.

Houndog is a leafy, persistent, turf-type tall fescue capable of producing an attractive, moderately dense turf with excellent tolerance of heat, drought and moderate shade. The turf is darker green, finer in texture, and has a slower rate of vertical growth compared with 'Kentucky 31' tall fescue. Houndog has shown good winterhardiness and good summer performance in New Jersey turf trials. This cultivar has exhibited improved resistance to the large brown patch disease caused by Rhiococtonia solani Kuhn, and many races of crown rust incited by Puccinia coronata Corda. It has very good resistance to the netblotch disease caused by Helminthosporium dactyliodes Drechs. Houndog is well adapted to a wide range of soil types. Fertility requirements are substantially lower than the amounts needed for good performance of Kentucky bluegrass (Poa pratensis L.) and the improved turf-type perennial ryegrasses (Lolium perenne L.). Houndog should be useful for the production of a medium low maintenance turf in either full sun or in light to moderate shade in most regions where tall fescue is adapted for turf use. It has medium maturity in seed production and a high seed yield potential. Breeder seed is produced by International Seeds, Inc. Propagation of seed should be limited to two generations of increase from breeder seed, one generation each of foundation and certified.

United States Plant Variety Protection Certificate no. 8500011 has been issued for Houndog tall fescue.

G. W. PEPIN, K. J. McVEIGH, AND C. R. FUNK (1)

REGISTRATION OF WC-C75 PEARL MILLET

'WC-C75' grain cultivar of pearl millet [Pennisetum americanum (L.) Leeke] (Reg. no. 95) was developed through recurrent selection using the 'World Composite' at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). It was tested in India by the Ministry of Agriculture, Government of India and was released by them as WC-C75 on 29 May 1982. WC-C75, also named as ICMV-1 by ICRISAT, averaged 98% of the grain yield of the widely grown hybrid 'BJ104' in 140 replicated tests conducted by the All India Millets Improvement Project from 1977 to 1981(1). A semi-early cultivar, WC-C75 matures about 4 days later than BJ 104 but gives 20% more dry fodder, valued as animal feed after grain harvest. WC-C75 has good resistance to downy mildew caused by Sclerophora graminicola (Sacc.) Schroet (2.4% incidence in the 1977-1981 trials compared to 9.7% for BJ 104), and while still moderately susceptible to ergot caused by Claviceps fusiformis Loveless, it is much less vulnerable than any existing hybrid to epidemics of this disease. WC-C75 is medium height (185-210 cm) with robust stems, flowering in 48 to 51 days, maturing in 80 to 85 days. Anther color is mixed, cream and purple, heads are medium long (22-28 cm), cylindrical to slightly tapering, compact, non-bristled, with short pale glumes. Grain is bold, 7 to 8 g/1000 seeds, obovate, slate gray in color with a vitreous endosperm. Grain protein is average for pearl millet (9.5% in 32 tests). Seed dormancy and tolerance to mold damage when ripening in humid conditions is superior to BJ 104.

The World Composite random mating parental population of WC-C75 was constituted in Nigeria in 1971 at the Institute for Agricultural Research, Ahmadu Bello University, from derivatives of numerous crosses between world wide sources of pearl millet germplasm and Nigerian early maturing landraces locally known as "gero". Bulk seed of the World Composite was supplied to ICRISAT in 1973. Full-sib recurrent selection was conducted on the World Composite. In 1975 441 full-sib families derived from selected, heterozygous plants in the previous generation, were tested at Coimbatore, (South India), Hisar, north India

REGISTRATION OF CROP CULTIVARS 199

Breeder seed will be maintained by the South Carolina Agric. Exp. Stn., Pee Dee Res. and Education Center, P. O. Box 271, Florence, SC 29503.

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References and Notes
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