REGISTRATION OF AU TRIUMPH TALL FESCUE
(Reg. No. 21)


‘AU TRIUMPH’ tall fescue (Festuca arundinacea Schreb.) was developed and released by the Alabama Agric. Exp. Stn., Auburn University. It was tested under the experimental designation AF-5 and released August 1981 under the designation AU Triumph.

AU Triumph was developed by a combination of mass and recurrent selection. Spaced plants of 121 tall fescue introductions (3 replications, 10 plants each) were evaluated 3 years for vigor, winter growth, regrowth potential, and disease resistance at the Auburn University Plant Breeding Unit, Tallassee, Alabama. To facilitate further selection, 132 individuals were cloned propagated and replicated 4 times in an isolation nursery. After 2 years of further selection, 12 genotypes from this nursery were identified as superior for the above traits. Open pollinated seed was harvested from these genotypes and equal quantities of seed from each were bulked to form an experimental population designated AF-4. These were seeded in isolation and >1000 individuals were reselected for early growth. Bulked seed from the selected AF-4 progeny formed the experimental population AF-5, or AU Triumph.

Winter forage yields of AU Triumph at six locations have averaged 80% more than Kentucky 31. Autumn forage production of AU Triumph is equal to or greater than that of Kentucky 31. AU Triumph produces somewhat less late spring forage, and matures seed about 2 weeks earlier than Kentucky 31. Total annual production of AU Triumph is equal to or greater than Kentucky 31. AU Triumph has a more open sod and is more summer dormant than Kentucky 31, thus furnishing less competition to associated clovers.

AU Triumph is less cold hardy than Kentucky 31 and has not survived winters well in Kentucky (unpublished data from T.H. Taylor, University of Kentucky). When AU Triumph is well established prior to the onset of cold weather, winter survival has been good in northern Alabama. AU Triumph is adapted in the lower part of the tall fescue belt.

The superior winter forage production of AU Triumph as compared to Kentucky 31 increased steer carrying capacity in a 2-year Alabama grazing trial, resulting in 29% increase in beef per ha on N-fertilized grass. AU Triumph has a very low infestation of Acremonium coenophialum Morgan-Jones and Gams, the fungal endophyte associated with fescue toxicity. Therefore, the higher average daily gains on AU Triumph may be in part a reflection of the purported Acremonium coenophialum-fescue relationship.

Breeder seed is being produced by Auburn University through isolation and cultural control of the original AU Triumph seed increase nursery. Breeder seed production will continue indefinitely as long as no obvious shift in the population, or decrease in stand is noted in the nursery. Surplus breeder seed will be stored under refrigeration for future use. Certified seed of AU Triumph, as well as foundation and registered seed, is being produced and marketed by International Seeds, Halsey, Oregon in the Pacific Northwest, and will be marketed by Cargill Inc., Plainview, Tex. in the grain-producing regions.

REGISTRATION OF CLEMFINE TALL FESCUE
(Reg. No. 22)

Fred B. Ledeboer, A. R. Mazur, and J. F. Pedersen

‘CLEMFINE’ tall fescue (Festuca arundinacea Schreb.) was developed from parental clones selected for persistence of North and South Carolina in 1970. Thirteen progenies were selected for best turf performance in Carolina conditions. The three parental clones were collected from a roadside in Wilmington, North Carolina, Sumter, S.C., and an overgrazed pasture near Sumter, S.C., and an overgrazed pasture near Sumter, S.C., and an overgrazed pasture near Sumter, S.C. Equal numbers of vegetative tillers from each progeny were propagated in 1976 and an isolated randomized plants was established. Undesired plants were rejected prior to anthesis. The remaining material was interpollinated to produce SYN-1 breeder seed. I was the experimental designation of Clemfine seed was produced in western Oregon in 1982.

Clemfine is a medium textured turf-type fescue that provides greater density and darker color than other cultivars. Evaluations show Clemfine has freedom for heat and drought tolerance when compared to other cultivars. It has moderately good resistance to Rhizoctonia solani Kuhn and moderate resistance to minthosporium blight incited by Helminthosporium dictyoides Drechs. Clemfine should be useful for the production of medium maintenance turf in either full sun or moderate shade in most regions where tall fescue is well adapted.

Breeder seed is maintained by Loft's Seed Inc., Bound Brook, N.J. Male fertility of Clemfine is limited to two generations of seed, one each of foundation and certified.

Application has been made for U.S. Plant Patent. 1

REGISTRATION OF MADISON OATS
(Reg. No. 303)

C. F. Murphy

‘MADISON’ oats (Avena sativa L.), C. I. 32262, a cultivar developed by the North Carolina Agric. Exp. Service. It was derived from the cross ‘Dela-69-20’. The last cross was made in 1972, and the F_6 was made in 1977.

Madison is characterized by exceptionally high protein yield potentials, an intermediate level of grain yield, very short straw, and extremely good lodging resistance. Its yield tests in North Carolina, it has yielded an average of 25% more than ‘Baron’ and 27% more than ‘Prestige’.