tilago avenue (Pers.) Rostr.] but has been susceptible to smut in Minnesota tests. Horicon has been intermediate for reaction to the barley yellow dwarf virus in screening tests at Urbana, IL, but had good tolerance under severe natural infection in the 1986 Madison nursery.

Allowable classes of certified seed of Horicon are breeder, foundation, and certified. Breeder seed of Horicon will be maintained by the Department of Agronomy, University of Wisconsin—Madison. Application for Plant Variety Protection with the Wisconsin Agricultural Experiment Station as owner, has been submitted.

R. A. FORSBERG,* M. A. BRINKMAN, R. A. BUNCH, AND R. D. DUERST (9)

References and Notes
9. R.A. Forsberg, M.A. Brinkman, and R.D. Duerst, Dep. of Agronomy, Univ. of Wisconsin–Madison, 1575 Linden Dr., Madison, WI 53706; and R.A. Bunch, The Almangum Seed Co., P.O. Box 1766, Nysa, OR 97913. Registration by CSSA. Accepted 30 Nov. 1990. *Corresponding author.


REGISTRATION OF ‘APACHE’ TALL FESCUE

‘APACHE’ TALL FESCUE (*Festuca arundinacea* Schreb.) (Reg. no. CV–43, PI 538246) was developed by Pure-Seed Testing, Inc., Hubbard, OR, in cooperation with the New Jersey Agricultural Experiment Station. Apache was released by Turf-Seed, Inc., of Hubbard, OR, in September 1985. Pure-Seed 5M4 was the experimental designation of Apache. First certified seed was produced in western Oregon in 1984.

Apache is an advanced generation synthetic cultivar resulting from three cycles of recurrent phenotypic selection. Six clones of turf-type tall fescue selected from old turf areas in New Jersey (three), Illinois (one), and Georgia (two) were interpollinated in isolation. Seedlings from these crosses were moved to spaced-plant nurseries to initiate cycles of recurrent selection for improved resistance to leaf spot incited by *Drechslera dictyoides* Shoemaker and crown rust incited by *Puccinia coronata* Corda, darker green color, lower growth habit, improved seed yield, and uniform medium-late maturity. Each cycle of selection was followed by progeny testing in closely mowed turf trials near Hubbard, OR, and at the New Jersey Agricultural Experiment Station. Seven clones were selected as the parents of Apache after the third cycle of selection.

Apache is an attractive, moderately low-growing, turf-type tall fescue capable of producing a vigorous, dense turf with a medium dark green color (Royal Horticultural Chart 136A). Apache is 4 d later maturing than ‘Olympic’ and 10 d later than ‘Kentucky 31’. This cultivar has shown improved resistance to leaf spot, brown patch (incited by *Rhizoctonia solani* Kühn) and crown rust.

Apache has very good heat, cold, wear, and shade tolerance. A unique characteristic of Apache is a stiff foliage in spaced-plant nurseries and seeded rows, prior to head emergence, with a more vertical leaf orientation than other turf-type tall fescue cultivars. Apache is adapted to the transition zone (from Missouri to Virginia) and also the Southwestern, North Central, and Northeast areas of the USA where turf-type tall fescues are used.

Breeder seed of Apache is maintained by Pure-Seed Testing, Inc. Seed production is limited to two generations of increase from breeder seed, one each of foundation and certified.

United States Plant Variety Protection Certificate no. 8400143 has been issued for Apache tall fescue.

W. A. MEYER,* C. A. ROSE-FRICKER, AND C. R. FUNK (1)

References and Notes
1. W. A. Meyer and C.A. Rose-Fricker, Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, OR 97032; and C.R. Funk, Crop Science, Dep., New Jersey Agric. Exp. Stn., Cook College, Rutgers Univ., New Brunswick, NJ 08903. Publication no. D-15166-8-90, New Jersey Agric. Exp. Stn. Some of this work was conducted as part of New Jersey Agric. Exp. Stn. project no. 15166, supported by New Jersey Agric. Stn. funds, other grants, and gifts. Additional support was received from the U.S. Golf Association, the Golf Course Superintendents Association of America, and the New Jersey Turfgrass Association. Appreciation is expressed to all participants in the National Turfgrass Evaluation Program for their contributions in the evaluation of Apache tall fescue. Registration by CSSA. Accepted 31 Dec. 1990. *Corresponding author.


REGISTRATION OF ‘AURORA’ HARD FESCUE

‘AURORA’ HARD FESCUE (*Festuca longifolia* Thuill) (Reg. no. CV–44, PI 538247) was developed through the cooperative efforts of Pure-Seed Testing, Inc., of Hubbard, OR, and the New Jersey Agricultural Experiment Station. It was released in September 1985 by Turf-Seed, Inc., Hubbard, OR. Aurora had the experimental designations AHE-10 and AHE-80.

Aurora is an advanced generation synthetic cultivar resulting from an extensive population improvement program. Parental germplasm of Aurora traces to 17 attractive powdery mildew (*Erysiphe graminis* DC.) resistant plants selected from old turfs of the northeastern United States and to the cultivars ‘Biljart’ and ‘Scaldis’. Three cycles of recurrent phenotypic selection were made selecting plants with improved turf density and quality, reduced vertical growth, high seed yield, and overall attractiveness. One hundred seventy-five high seed yielding clones were allowed to interpollinate to produce breeder seed of Aurora hard fescue. Certified seed of Aurora became available following the 1985 harvest.

Aurora is an early maturing, hard fescue with a medium, dark green color. It is a low-growing, turf-type cultivar capable of producing an attractive, dense, fine-textured turf. Extensive tests have shown Aurora to have good turf quality across the USA where hard fescues are used. Aurora has shown improved resistance to dollar spot (caused by *Sclerotinia homoeocarpa* F.T. Bennett), red thread (caused by *Laetisaria fuciformis* L.) (McAlpine) Burdsall), leaf rust (caused by *Puccinia coronata* Corda, darker green color, lower growth habit, improved seed yield, and uniform medium-late maturity. Each cycle of selection was followed by progeny testing in closely mowed turf trials near Hubbard, OR, and at the New Jersey Agricultural Experiment Station. Seven clones were selected as the parents of Apache after the third cycle of selection.

Apache is an attractive, moderately low-growing, turf-type tall fescue capable of producing a vigorous, dense turf with a medium dark green color (Royal Horticultural Chart 136A). Apache is 4 d later maturing than ‘Olympic’ and 10 d later than ‘Kentucky 31’. This cultivar has shown improved resistance to leaf spot, brown patch (incited by *Rhizoctonia solani* Kühn) and crown rust.

Apache has very good heat, cold, wear, and shade tolerance. A unique characteristic of Apache is a stiff foliage in spaced-plant nurseries and seeded rows, prior to head emergence, with a more vertical leaf orientation than other turf-type tall fescue cultivars. Apache is adapted to the transition zone (from Missouri to Virginia) and also the Southwestern, North Central, and Northeast areas of the USA where turf-type tall fescues are used.

Breeder seed of Apache is maintained by Pure-Seed Testing, Inc. Seed production is limited to two generations of increase from breeder seed, one each of foundation and certified.

United States Plant Variety Protection Certificate no. 8400143 has been issued for Apache tall fescue.

W. A. MEYER,* C. A. ROSE-FRICKER, AND C. R. FUNK (1)

References and Notes
1. W. A. Meyer and C.A. Rose-Fricker, Pure-Seed Testing, Inc., P.O. Box 449, Hubbard, OR 97032; and C.R. Funk, Crop Science, Dep., New Jersey Agric. Exp. Stn., Cook College, Rutgers Univ., New Brunswick, NJ 08903. Publication no. D-15166-8-90, New Jersey Agric. Exp. Stn. Some of this work was conducted as part of New Jersey Agric. Exp. Stn. project no. 15166, supported by New Jersey Agric. Stn. funds, other grants, and gifts. Additional support was received from the U.S. Golf Association, the Golf Course Superintendents Association of America, and the New Jersey Turfgrass Association. Appreciation is expressed to all participants in the National Turfgrass Evaluation Program for their contributions in the evaluation of Apache tall fescue. Registration by CSSA. Accepted 31 Dec. 1990. *Corresponding author.