REGISTRATION OF ‘ARID’ TALL FESCUE

‘ARID’ tall fescue (*Festuca arundinacea* Schreb.) (Reg. no. 231 (PI 509069)) was developed by the Jacklin Seed Company of Post Falls, ID, using germplasm obtained from the New Jersey Agricultural Experiment Station in August 1981. It was released by the Jacklin Seed Company in August 1986. Arid is an advanced generation synthetic cultivar selected from the progenies of 88 clones. Plants collected from old, low-maintenance turfs in Alabama, Georgia, New Jersey, North Carolina, Pennsylvania, and Virginia contributed most of the parental germplasm of Arid. Selected clones were vegetatively propagated and evaluated in field trials receiving frequent close mowing. Progenies of the most attractive clones were subsequently seeded in turf trials maintained at a 2-cm mowing height. Clones exhibiting the best general combining ability for turf performance were intercrossed in an isolated nursery.

A total of 6030 seedlings from selected plants were transferred to a second cycle clonal evaluation trial at North Brunswick, NJ. An old Kentucky bluegrass turf had been killed with glyphosate to provide a uniform, well-stabilized test area on a south-facing slope. This non-irrigated test was mowed frequently at 5 cm. During a very hot, dry period of the third summer following establishment, 88 clones were selected from this test. Selection was based on attractive appearance, medium texture, soft leaves, freedom from disease, a bright dark green color, and relative freedom from leaf roll during periods of heat and drought stress. The 88 selected clones were then intercrossed in isolation. Bulked seed from this nursery was used to establish an isolated spaced-plant nursery at Adelphia, NJ, containing 1896 plants. Unattractive plants were removed prior to anthesis. The final cycles of selection were conducted in nurseries in northern Idaho and western Oregon. Selection was based on high seed yield potential, uniform maturity, and desirable plant-type. Syn HMR was the experimental designation of Arid. The first certified seed was produced in western Oregon in 1986.

Arid is a moderately low-growing, persistent, leafy, turf-type tall fescue with a moderately dark green color, medium leaf texture, and medium high density. Arid has good heat and drought tolerance, good winterhardiness, and the ability to perform well under conditions of limited fertility. It has good seedling vigor and a moderately high seed yielding capability. Arid has the nonthatching characteristic of the improved turf-type tall fescue. It has very good cool weather color retention into late fall and early winter, and has shown improved shade tolerance. Arid is recommended for use in medium to low maintenance lawn-type turfs grown in either full sun or in light to moderate shade in regions where tall fescue plants are well adapted for turf.

Breeder seed of Arid will be maintained by the Jacklin Seed Company. Germplasm obtained from the New Jersey Agricultural Experiment Station in College Park, MD. Pollen sources used included plants selected from H75-969 (a relative to ‘Premier’ perennial ryegrass) and plants from old turfs in California, France, Maryland, and New Jersey. The remaining seven polycross combinations were included in a second cycle polycross evaluation at North Eastern Idaho and western Oregon. Selection was based on attractive appearance, medium texture, soft leaves, freedom from disease, a bright dark green color, and relative freedom from leaf roll during periods of heat and drought stress. The 88 selected clones were then intercrossed in isolation. Bulked seed from this nursery was used to establish an isolated spaced-plant nursery at Adelphi, NJ, containing 1896 plants. Unattractive plants were removed prior to anthesis. The final cycles of selection were conducted in nurseries in northern Idaho and western Oregon. Selection was based on high seed yield potential, uniform maturity, and desirable plant-type. Syn HMR was the experimental designation of Arid. The first certified seed was produced in western Oregon in 1986.