Breeders seed will be maintained by the Michigan Foundation Seed Association, 2905 Jolly Rd., Mason, MI 48884. Seed production under certification will proceed from breeder through foundation and certified classes.

REGISTRATION OF DIPLOMAT PERENNIAL RYEGRASS

(Reg. No. 48)

K. J. McVeigh, W. K. Dickson, F. B. Ledeboer, and C. R. Funk

'DIPLOMAT' perennial ryegrass (Lolium perenne L.) is a 26-clonal synthetic cultivar developed by Lofts Pedigreed Seed, Inc. from germplasm obtained from the New Jersey Agric. Exp. Stn. The parental clones were selected from a population of turf-type perennial ryegrasses, which included derivatives of clones selected in old turf areas in the northeastern U. S. and progenies of intercrosses between certain of these clones. The first certified seed of this cultivar was harvested in 1976. Lofts Syn D was the experimental designation of Diplomat.

Diplomat is an attractive, moderately dark green, turf-type cultivar that produces a leafy, persistent turf of greater density, finer texture and a slower rate of vertical growth than many other perennial ryegrasses. It has disease resistance characterized by moderately good resistance to both the late fall and winter brown blight disease incited by Helminthosporium siccans Drechsler and the large brown patch disease incited by Rhizoctonia solani Kuhn. Diplomat has good seedling vigor and establishes well on a wide range of soils. Like other perennial ryegrasses, it performs best in a cool, moist, maritime climate or during cool, moist seasons. Summer performance can be expected to be only moderately good in areas having prolonged hot, humid summers.

Diplomat has better mowing qualities than common perennial ryegrasses and is superior in most available turf-type ryegrasses. Diplomat is well suited for fall overseeding of dormant bermedagrass (Cynodon dactylon L. (Pers.)) golf greens, tees, fairways and lawns.

None of the parental clones of Diplomat carry the genetic factor for fluorescent seedlings, and occurrence of fluorescent seedlings within the cultivar indicates contamination. Seed propagation of Diplomat is limited to two generations of increase from breeder seed -- one each of foundation and certified.

Breeders seed is maintained by Lofts Pedigreed Seed, Inc. with the cooperation of the New Jersey Agric. Exp. Stn., United States Plant Variety Protection Certificate No. 7400055 has been issued for Diplomat.

REGISTRATION OF DOWLING SOYBEANS

(Reg. No. 66)

J. P. Graigmiles, E. E. Hartwig, and J. W. Sij

'DOWLING' soybeans [Glycine max (L.) Merr.] originated as an F2 line developed from a bulk population of 'Semmes' X PI 200492. The cross was made at Stoneville, Mississippi. The F2 and F3 populations were grown at Stoneville, F4, F5, and F6 bulk populations were grown at Beaumont, Texas, on low-lying, slowly drained clay. Semmes contributed adaptation to the low-lying, slowly drained clay, while PI 200492 contributed later maturity, more vigorous growth, and resistance to soybean rust (Phakopsora pachyrhizi Syd.). Dowling was identified as Ts73-16 prior to release. It is classified as group VIII maturity, averaging 2 days later in maturity than 'Cobb' at Beaumont. Dowling's area of best adaptation is considered to be the prairie soils of the Texas Gulf Coast.

Dowling has white flowers, grey pubescence, and tan pod walls. Seeds are dull yellow with buff hilla and an average 14g/100 seeds. It is resistant to phytophthora rot (Phytophthora megasperma Drechs. var. sojae) A. A. Hildebert, bacterial pustule (Xanthomonas oryzae (F. F. Wang & Foster) L. H. Edwards, H. Pass, H. C. Young, Jr., and F. B. Ledeboer), and powdery mildew Erysiphe graminis Pers. f. sp. tritici Erk., & E. Henn.), and powdery mildew (Erysiphe graminis DC. ex Merat f. sp. tritici em Marchal). It is susceptible to soil-borne mosaic virus (WSMV), a disease that frequently causes serious damage in the western part of the Hard Red Winter Wheat Region.

Dowling was evaluated as Oklahoma selection OK66V2829 in the Southern Regional Performance Nursery in 1973-75; in Collaborative Large Scale Milling and Baking Tests in 1973-74; and in Oklahoma tests since 1973. The cultivar has a useful level of tolerance to WSMV and field tests suggest it has above average drought tolerance. Dowling is similar to Scout 66 in most agronomic and quality characteristics. It appears to have slightly weaker straw than Scout 66. Like Scout 66, it has some resistance to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici Erk.), stem rust (Puccinia graminis Pers. f. sp. tritici Erk., & E. Henn.), and powdery mildew (Erysiphe graminis DC. ex Merat f. sp. tritici em Marchal). It is susceptible to soil-borne mosaic virus and greenbugs (Schizaphis graminis Rondani). In Oklahoma tests during the past 5 years (1973-77), Doll has

REGISTRATION OF RALL WHEAT

(Reg. No. 605)

E. L. Smith, L. H. Edwards, H. Pass, H. C. Young, Jr., and D. C. Abbott

'RALL', CI 17578, is a hard red winter wheat (Triticum aestivum L. em Thell.) which was developed jointly by State and Federal personnel at Stillwater, Oklahoma and released in 1976. Rall resulted from a single plant selection from the cultivar 'Scout'. The plant selection leading to Rall was made in the Oklahoma Agricultural Experiment Station in 1964. The selection was made on the basis of a tolerant reaction to wheat streak mosaic virus (WSMV), a disease that frequently causes serious damage in the western part of the Hard Red Winter Wheat Region.

Rall was evaluated as Oklahoma selection OK66V2829 in the Southern Regional Performance Nursery in 1973-75; in Collaborative Large Scale Milling and Baking Tests in 1973-74; and in Oklahoma tests since 1973. The cultivar has a useful level of tolerance to WSMV and field tests suggest it has above average drought tolerance. Rall is similar to 'Scout' 66 in most agronomic and quality characteristics. It appears to have slightly weaker straw than Scout 66. Like Scout 66, it has some resistance to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici Erk.), stem rust (Puccinia graminis Pers. f. sp. tritici Erk., & E. Henn.), and powdery mildew (Erysiphe graminis DC. ex Merat f. sp. tritici em Marchal). It is susceptible to soil-borne mosaic virus and greenbugs (Schizaphis graminis Rondani). In Oklahoma tests during the past 5 years (1973-77), Rall has
