REGISTRATION OF CROP CULTIVARS

M65-295. It is classified in Maturity Group O, maturing at about the same time as ‘Swift’. It is adapted in the area between 44° and 46° N. Because of large seed size, Grande has been found useful in manufacture of certain food products.

Distinguishing characteristics of Grande are purple flowers, tawny pubescence, and light yellow seeds with dull luster and light tan hila. The plants are medium in height and have good resistance to lodging. Leaves are large and medium dark green. Seed is 35 to 40% larger than those of Swift. Both oil and protein percentages are low, relative to standard commercial cultivars. Yielding ability is similar to that of Swift. Grande is susceptible to Phytophthora, Phytophthora megasperma (Drechs.) var sojae A. A. Hildebr., rot and shows medium to high amounts of chlorosis on high lime soils.

Seed was released to certified growers in Minnesota in 1976. The Minnesota Agric. Exp. Stn. will be responsible for maintenance of breeder seed. Other information is published in Varietal Trials of Farm Crops, Misc. Rep. 24, Agric. Exp. Stn., St. Paul, MN 55108.

REGISTRATION OF NC 13 TOBACCO

D. F. Matzinger, E. A. Wernsman, and T. J. Mann

‘NC 13’ (tested as NC TG-13) is a flue-cured cultivar of Nicotiana tabacum L. released cooperatively by the North Carolina Agric. Exp. Stn. and ARS, USDA. It was released for seed increase in 1976 in the F3 generation and was available to growers in 1977. The source population for NC 13 was derived by a recurrent selection program initiated within the F2 generation of a ‘Hicks Broadleaf’ × ‘Coker 139’ cross. NC 13 was isolated in the fourth cycle of selection as a parent plant with superior half-sib and self-progeny performance. Remnant self-seed of this heterozygous plant constituted the source material for additional selfing and pure-line testing.

Performance data have been obtained from four locations per year in the North Carolina Official Variety Test in 1973, 1974, and 1976. In 1974 the cultivar was evaluated in the Regional Small Plot Test at six locations in Georgia, South Carolina, North Carolina, and Virginia. Testing in 1975 was at five locations in the Regional Small Plot Test and 11 locations in the Regional Farm Test. On 12 Dec. 1975 the Regional Flue-cured Tobacco Evaluation Committee judged that the cultivar met minimum standards for release.

NC 13 grows vigorously in plant beds, rapidly in the field, and stand establishment is excellent. It flowers 4 to 7 days later and is slightly taller than the ‘NC 95’ and ‘NC 2326’ checks. It produces two to three more leaves per plant than the checks and its leaves are extremely large, particularly near the bottom of the plant.

The cultivar has an extremely high yield potential, averaging 10 to 15% above the checks. The grade index of cured leaf quality was similar to the checks. The cured tobacco contains a large percentage of leaves that have thin body and open grain texture. The nicotine content of the leaves is equal to the checks. Nornicotine, soluble sugars, total nitrogen, and a-amino N compare favorably with the checks and the smoke quality was judged acceptable. NC 13 has a high level of resistance of the Florida 301 type to black shank [Phytophthora nicotianae Breda de Haan, (Tucker)].

Foundation seed are available from the North Carolina Foundation Seed Producers, Inc. Breeder seed will be available in the fall 1977.

REGISTRATION OF PARKER 76 WHEAT

E. G. Heyne

‘PARKER 76’, CI 17685, is a hard red winter wheat (Triticum aestivum L. em. Thell.) selected from the cross ‘Parker’ × ‘Agent’. It was developed cooperatively and jointly by the Kansas Agricultural Experiment Station and ARS, USDA.

F2 seed of Parker×4/Agent was received from the Agricultural Experiment Station in the fall of 1969. The plants were tested for seedling reaction to leaf rust [Puccinia recondita Rob. ex Desm. f. sp. tritici] races attacking genes LR5, LR9, LR10. Several of the resistant F3 plants with the F2 parent were tested for seedling reaction to leaf rust in 1968. The F1 and F2 generations of Parker×5/Agent were grown in the greenhouse and F2 plant progenies in the field in 1969-71. An increase of a single head selected in the F2 generation and was assigned the selection number KS74124.

Parker 76 retains the major leaf rust resistance (LR10 and LR24); the stem rust (P. graminis var. tritici Eriks. and Hen.); resistance of Agent (SR24); the fly (Mayetiola destructor Say) resistance of Parker. It is susceptible to bunt [Tilletia caries (Pers.) Rostr.], soilborne wheat mosaic virus, and wheat streak mosaic virus.

Quality is similar to Parker's with a medium to good mixing tolerance, and a below average loag.

Parker 76 has a winter growth habit; mid-season growth in a short to mid-tall, white, strong stem; the spike is form, mid-dense, and inclined; the glumes are mid-long, and mid-wide; the shoulders are mid-wide, square; the beaks vary from 3 to 7 mm long; the awns are 4 to 8 cm long; and kernels are red, hard, and no fusarium.

Foundation seed will be available from the North Carolina Agric. Exp. Stn.


REGISTRATION OF GENT WHEAT

(Reg. No. 588)