Registration of NC 12 Tobacco
(Reg. No. 81)

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

'NC 12' (tested as NC TG-12) is a flue-cured cultivar of Nicotiana tabacum L. released cooperatively by the N. C. Agric. Exp. Stn. and ARS, USDA. It was released for seed increase in 1975 in the F3 generation and was available to growers in 1976. The source population was derived by a recurrent selection program initiated within the F3 generation of a 'Hicks Broadleaf' × 'Coker 139' cross. NC 12 was isolated in the fourth cycle of selection as a parent plant with superior cross-bred and self-progeny performance. Remnant self-seed of this heterozygous plant constituted the source material for additional selfing and pureline testing.

NC 12 was evaluated at four locations in the North Carolina Official Variety Test in 1972, 1974, and 1975. In 1973 the cultivar was grown in the Regional Small Plot Test at six locations in North Carolina, South Carolina, Virginia, and Georgia, and it met minimum standards for entry into the 1974 Regional Farm Test. Testing in 1974 was at six locations in the Regional Small Plot Test and at 10 locations in the Regional Farm Test. The Regional Flue-cured Tobacco Evaluation Committee judged that the cultivar met minimum standards for release.

Performance data of NC 12 are relative to the 'NC 95' and 'NC 2326' checks included in each test. The distinctive feature of NC 12 is its lemon-colored, thin-bodied cured leaf containing about 8% less nicotine than the checks. It produces about 2% greater yield than the checks and has broad leaves which are easy to cure. Plant height, number of leaves, and days to flower do not differ from the checks. Chemical concentrations of nicotine, soluble sugars, total nitrogen, insoluble nitrogen, and a-amino N compare favorably with the checks and the smoke quality was judged acceptable. NC 12 has resistance to black shank [Phytophthora parasitica var. nicotianae Breda de Haan, (Tucker)] and bacterial wilt (Pseudomonas solanacearum, E. F. Smith).

Foundation seed are available from the N. C. Foundation Seed Producers, Inc. Breeder seed will be maintained by the N. C. Agric. Exp. Stn.

RegISTRATION OF URQUIE WHEAT
(Reg. No. 571)

C. F. Konzak, E. Donaldson, M. A. Davis, and G. L. Rubenthaler

'Urquie' Triticum aestivum (L.) em Thell. white spring wheat was released jointly by Idaho Agric. Exp. Stns., and the ARS-USDA, in 1961. The cultivar evolved from an F3 derived from 'Twin' (ex Desm.), a white spring wheat released by the Washington State Crop Improvement Assoc. in 1950. Parentage of 'Urquie' was Twin × 'Coker 139'.

Urquie was selected from the cross 'Gaines' (Reg. No. 571) × 'Twin' under the supervision of D. F. Matzinger and was registered by the Crop Sci. Soc. Am. Information paper. Urquie was released by the USDA, the Fla. Agric. Exp. Stns., and the Fla. Sugar Cane League, Inc. It was released to the industry in 1975.

Urquie has shown cold tolerance (winter survival) distinctly superior to Marfed in fall sown tests at Pullman, Wash. It carries a type of mature plant, temperature-sensitive resistance to prevailing races of leaf rust (caused by Fusarium culmorum (W. G. Sm.) Sacc.) and powdery mildew (Erisiphe graminis D.C.) in Idaho, but is highly susceptible to stripe rust (caused by Puccinia recondita [W. G. Sm] nom. ex Desm.) in Washington. Yields of Urquie under dryland conditions have been consistently and often superior to Twin. Urquie produces a higher test weight compared with Twin and equals or exceeds that of Marfed and 'Fielder.' Urquie has milling and baking characteristics similar to Marfed and produces high-quality flour.


REGISTRATION OF URQUIE WHEAT
(Reg. No. 571)

C. F. Konzak, E. Donaldson, M. A. Davis, and G. L. Rubenthaler

'Urquie' Triticum aestivum (L.) em Thell. white spring wheat was released jointly by Idaho Agric. Exp. Stns., and the ARS-USDA, in 1961. The cultivar evolved from an F3 derived from 'Twin' (ex Desm.), a white spring wheat released by the Washington State Crop Improvement Assoc. in 1950. Parentage of 'Urquie' was Twin × 'Coker 139'.

Urquie was selected from the cross 'Gaines' (Reg. No. 571) × 'Twin' under the supervision of D. F. Matzinger and was registered by the Crop Sci. Soc. Am. Information paper. Urquie was released by the USDA, the Fla. Agric. Exp. Stns., and the Fla. Sugar Cane League, Inc. It was released to the industry in 1975.

Urquie has shown cold tolerance (winter survival) distinctly superior to Marfed in fall sown tests at Pullman, Wash. It carries a type of mature plant, temperature-sensitive resistance to prevailing races of leaf rust (caused by Fusarium culmorum (W. G. Sm.) Sacc.) and powdery mildew (Erisiphe graminis D.C.) in Idaho, but is highly susceptible to stripe rust (caused by Puccinia recondita [W. G. Sm] nom. ex Desm.) in Washington. Yields of Urquie under dryland conditions have been consistently and often superior to Twin. Urquie produces a higher test weight compared with Twin and equals or exceeds that of Marfed and 'Fielder.' Urquie has milling and baking characteristics similar to Marfed and produces high-quality flour.