REGISTRATION OF CP 72-370 SUGARCANE
(Reg. No. 57)

H.P. Fanguy and R.D. Breaux

‘CP 72-370’ sugarcane, a tri-species hybrid involving Saccharum officinarum L., S. spontaneum L., and S. barberi J. Esset, is a selection from the cross ‘CP 61-37’ × ‘CP 52-68.’ The cross was made at Canal Point, Fla., during the 1967 crossing season. CP 72-370 was developed through cooperative research of AR-SEA-USDA, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League.

CP 72-370 is recommended for culture on light and heavy soils in Louisiana. It is a high-sucrose, moderately erect cultivar. It equaled the leading commercial cv., ‘CP 65-357,’ in yields of sugar/ha and sugar per ton of cane in 68 replicated tests. CP 72-370 also equaled CP 65-357 in overall yield of cane/ha for a three-crop cycle, but with a significantly lower yield of cane in the plant crop on light soils. Yields of sugar/ha on heavy soils were equal to that of CP 65-357. CP 72-370 is not brittle and is well adapted to machine harvesting.

CP 72-370 is moderately susceptible to infection with sugarcane mosaic virus and susceptible to infection with ratoin stunting disease. Preliminary data indicate that the cultivar is resistant to infection with sugarcane rust (caused by Puccinia melanocephala H. & P. Syd.) and smut (caused by Ustilago scitaminea Syd.). CP 72-370 is moderately resistant to borer (Diaatra saccharalis F.), equaling CP 65-357. Preliminary data indicate that CP 72-370 has moderate resistance to post-freeze deterioration.

Seedcane of CP 72-370 will be maintained by AR-SEA-USDA, at the U.S. Sugarcane Field Laboratory, Houma, Louisiana.

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REGISTRATION OF NC 82 TOBACCO¹
(Reg. No. 84)

G. R. Gwynn

‘NC 82’ is a flue-cured tobacco (Nicotiana tabacum L.) developed and released cooperatively by AR-SEA-USDA and the North Carolina Agric. Res. Serv. It was tested as line 2082 in the North Carolina Official Variety Test in 1973, 1975, and 1978; in the Flue-Cured Regional Small Plot Test in 1974, 1975, 1977, and 1978; and in the Flue-Cured Regional Farm Test in 1975 and 1978. It was also tested in the North Carolina Official Variety Test after its release as NC 82 in 1979 and 1980. NC 82 was a breeding line in the FL 19 group of inbreds developed by F. C. Dietrich.

NC 82 is highly resistant to black shank (Phytophthora parasitica f. nicotianae (Breda de Haan) Fer. syr.), Fusarium wilt (caused by Fusarium oxysporum (Schlecht) W. & G. R. O. Smith), and resistant to bacterial wilt (caused by Xanthomonas campestris pv. nicotianae (A. e. M. K.) E. F. G. Smith), Fusarium root rot [caused by Thielavopsis basicola (Kuhn) Syd.] and root rot [caused by Pseudomonas solanacearum (S. L.) Clay.] NC 82 has the highest price per pound at $1.54 and the highest grade and quality index. In the 1980 Official Variety Test, NC 82 had the highest price per pound at $1.54 and the highest grade and quality index at 49. It has met the chemical, physical, and smoking standards as developed and administered by the American Tobacco Quality - Variety Committee. NC 82 has had the highest price per pound at $1.54 and the highest grade and quality index at 49. It has met the chemical, physical, and smoking standards as developed and administered by the American Tobacco Quality - Variety Committee.

NC 82 is highly resistant to black shank, Fusarium root rot, and the entire flue-cured production area but should be used extremely early because cold conditions can induce premature flowering.

Breeder seed of NC 82 will be maintained by the Tobacco Research Laboratory, Foundation for Research and Education, North Carolina State Univ., Raleigh, NC 27650.

REGISTRATION OF CANUCK
(Reg. No. 646)

R. M. De Pauw and D. S. McKee

‘Canuck,’ hard red spring wheat (Triticum aestivum L. em Thell.), was developed by the Genet. Agric. Res. Station, Agriculture Canada, Swift Current, Sask., and has received license number 1533 in Canada in 1977.

Canuck was selected from a cross between a sowfly resistant line from ‘Mida’/‘Cadet’ and a hard red spring wheat. It was developed using a modified pedigree breeding system and tested in the Western Bread Wheat Cooperative Variety Tests.

Breeder seed was developed by bulking the entire plant rows. In 109 station-years of tests in Western Canada during the period 1968 to 1973, Canuck averaged 9% higher grain yield than ‘Cypress’ and 10% less than ‘Neepawa.’ Canuck has a much lower tendency to be a serious pest of wheat, Canuck averages 10% higher grain yield than ‘Cypress’ and 10% less than ‘Neepawa.’ In the drier prairie period 1968 to 1973, Canuck averaged 9% higher grain yield than ‘Neepawa’ and 9% less than ‘Cypress.’ Canuck is highly resistant to black shank (caused by Stagonospora nodorum Berk. and Br.) and smut (caused by Ustilago tritici E. F. G. Smith).

Cross of ‘Virginia 21’ × ‘Bottom Special’ × ‘Canthatch’ × ‘Tallow’ × selected lines from the ‘Woodworth’ × ‘Bottom Special’ cross of ‘Virginia 21’ × ‘Bottom Special’ × ‘Canthatch’ × ‘Tallow’ × selected lines from the ‘Woodworth’ × ‘Bottom Special’ selection from the cross ‘CP 61-37’ × ‘CP 52-68.’ The cross was made at Canal Point, Fla., during the 1967 crossing season. CP 72-370 was developed through cooperative research of AR-SEA-USDA, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League.

CP 72-370 is recommended for culture on light and heavy soils in Louisiana. It is a high-sucrose, moderately erect cultivar. It equaled the leading commercial cv., ‘CP 65-357,’ in yields of sugar/ha and sugar per ton of cane in 68 replicated tests. CP 72-370 also equaled CP 65-357 in overall yield of cane/ha for a three-crop cycle, but with a significantly lower yield of cane in the plant crop on light soils. Yields of sugar/ha on heavy soils were equal to that of CP 65-357. CP 72-370 is not brittle and is well adapted to machine harvesting.

CP 72-370 is moderately susceptible to infection with sugarcane mosaic virus and susceptible to infection with ratoin stunting disease. Preliminary data indicate that the cultivar is resistant to infection with sugarcane rust (caused by Puccinia melanocephala H. & P. Syd.) and smut (caused by Ustilago scitaminea Syd.). CP 72-370 is moderately resistant to borer (Diaatra saccharalis F.), equaling CP 65-357. Preliminary data indicate that CP 72-370 has moderate resistance to post-freeze deterioration.

Seedcane of CP 72-370 will be maintained by AR-SEA-USDA, at the U.S. Sugarcane Field Laboratory, Houma, Louisiana.

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²Research agronomists, U.S. Sugarcane Field Laboratory, AR-SEA-USDA, Houma, LA 70361.