REGISTRATION OF CP 70-330 SUGARCANE
(Reg. No. 49)

P. H. Dunckelman, R. D. Breaux, and H. P. Fanguy

'CP 70-330 sugarcane, a tri-species hybrid involving Saccharum officinarum L., S. spontaneum L., and S. barberi Jesweit, is a selection from the cross 'CP 61-39' × 'CP 57-614'. The cross was made at Canal Point, Fla., during the 1963 crossing season. CP 70-330 was developed through cooperative research of AR-SEA-USDA, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League.

CP 70-330 is recommended for culture on light and heavy soils in Louisiana but appears especially adapted on heavy soils. It is a high sucrose, moderately erect cultivar. It yielded significantly less cane per hectare than the leading commercial cultivar, 'CP 65-357', and equaled it in sugar/ton of cane in 46 replicated tests on light-textured soils. However, it exceeded CP 65-357 in yield of cane/ha and approximated it in sugar/ton and sugar/ha in 11 replicated tests on heavy textured soil. CP 70-330 is suited for heavy textured soils and performs well in stubble crops. CP 70-330 is non-brittle and well adapted to machine harvesting.

CP 70-330 is moderately resistant to infection with sugarcane mosaic virus and tolerant to this disease. CP 70-330 is resistant to borers (Diatraea saccharalis F.) but lacks cold tolerance.

Seedcane of CP 70-330 will be maintained by AR-SEA-USDA at the U.S. Sugarcane Field Laboratory, Houma, La.

1 Registered by the Crop Sci. Soc. Am. Contribution of AR-SEA-USDA, in cooperation with the Louisiana Agric. Exp. Stn., and the American Sugar Cane League of the USA, Inc. Accepted 25 Jan. 1979.
2 Research agronomists, U.S. Sugarcane Field Laboratory, AR-SEA-USDA, Houma, LA 70361.

REGISTRATION OF CAHABA WHITE, VANTAGE, NOVA II, AND VANGUARD VETCH
(Reg. Nos. 3, 4, 5, and 6)

E. D. Donnelly

'Cahaba White' (Reg. No. 3), 'Vantage' (Reg. No. 4), 'Nova II' (Reg. No. 5), and 'Vanguard' (Reg. No. 6) vetch (Vicia sativa L.) were released in 1977 by the Auburn University Agricultural Experiment Station. Cahaba White (tested as 73-6W), Vantage (tested as 73-6P), and Nova II (tested as L20) are advanced generation lines from (Ala. 1894) x Wulf (P.I. 121275). The latter was sent to us as V. angustifolia L., but we reclassified it V. cordata (5). The F hybrid had 93% sterile pollen (2); however, fertility was restored in V. sativa type plants in F (1). Pure line breeding was followed.

Vanguard (tested as V. sativa x V. serratifolia) is a composite of eight F lines from V. sativa (Ala. 1894) x V. narbonensis L. (P.I. 170017). The F hybrid was fertile. Pure lines breeding was followed.

During development of these four cultivars, individual plants in each generation through F were selected for vigor, cold hardiness, semiprostrate habit, and excellent lodging resistance which is comparable to McNair 1003. It is moderately resistant to those strains of powdery mildew (incited by Erysiphe graminis DC. f. sp. 1003) which currently attack Arthur but not to those to which Arthur is resistant. It has shown some tolerance to those to which Arthur is resistant. It has shown some tolerance to those to which Arthur is resistant. It is a composite of eight F lines from V. sativa (Ala. 1894) x V. narbonensis L. (P.I. 170017). The F hybrid was fertile. Pure lines breeding was followed.

Three classes of seed beyond breeder foundation, registered, and certified. Seed of these four new vetch cultivars are not damaged by the vetch bruchid (Bruchus brachialis) as are seed of (Bruchus brachialis) as are seed of V. villosa Roth. The new vetch is susceptible to root-knot nematode species: Meloidogyne spp. (Cobb & White, 1919) Chitwood, 1949; M. incognita (Kofoid, 1949; M. javanica (Treub, 1883) Chitwood. V. villosa is susceptible (4). Cahaba White, Vantage, Nova II and Vanguard generally produce herbage earlier than hairy vetch in their area of adaptation. None of these is as cold-hardy as hairy vetch are sufficiently hardy for the southern part of the USA and other areas with similar winter climates.

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REFERENCES


REGISTRATION OF ROY WHEAT
(Reg. No. 616)

C. F. Murphy

'Roy' wheat (Triticum aestivum L. em Thell.) is a soft red winter wheat developed at the Agricultural Experiment Station. Roy is a product of the cross 'Blueboy'/Coker 65-20. The criteria used was high yield, high test weight, similar to Blueboy, and excellent milling characteristics. Roy has moderate short straw, high test weight, similar to Blueboy, and excellent lodging resistance which is equal to Arthur 71. Roy yielded 16% more than 'Coker 747', 2% more than 'McNair 1003', and 37% more than 'Arthur 71.' Roy is expected to yield 10% more than 'Arthur 71' and 10% more than 'Coker 747.' Roy is expected to yield 10% more than 'Arthur 71' and 10% more than 'Coker 747.' Roy is expected to yield 10% more than 'Arthur 71' and 10% more than 'Coker 747.'