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'COWLEY' a Blackberry for the Rio Grande Valley

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ABSTRACT

One objective of research at Rio Farms, Inc. is development of "new crops" for the Rio Grande Valley. Consistent with this objective, a blackberry (Rubus L. subgenus Eubatus) study was initiated in 1990. The discovery of 'Cowley' blackberry has been one accomplishment of this research initiative. This cultivar produced the highest yields and earliest mature berries among eight cultivars compared for yield and earliness.

RESUMEN

Uno de los objetivos de la investigación que se realiza en Rio Farms, Inc. es el desarrollo de "cultivos nuevos" para el Valle del Río Grande. Consistentemente con este objetivo, en 1990 se inició un estudio sobre zarzamora (Rubus spp L. subgenus Eubatus). El descubrimiento de la zarzamora 'Cowley' ha sido un logro de esta iniciativa de investigación. Entre ocho cultivares comparados en cuanto a rendimientos y precociadad, este cultivar presentó los más altos rendimientos y produjo bayas de maduración más temprana.

ORIGIN

'Cowley' was collected by Mr. Fred Gibson (deceased) and is of uncertain origin. Mr. Gibson of McAllen, Texas, observed the plant to be different and propagated it at his home. He gave material to W.R. Cowley, formerly Weslaco A&M Research Station Superintendent, who generously donated material to Rio Farms, Inc. when Rio Farms, Inc. began the blackberry project in 1990.

DESCRIPTION

'Cowley' is very early, productive cultivar with strong, vigorous, thorny canes. 'Cowley' yielded more than all other varieties in a study at Monte Alto in the first year after stand establishment and only 'Rosborough' and 'Brazos' made comparable yields the second year (Table1). However, in both years 'Cowley' was the earliest variety in the study. The harvest period for 'Cowley' in the Rio Grande Valley lasts about 35 days beginning in mid-April.

'Cowley' plants are extremely vigorous and produce shoots freely from root cuttings. Stand establishment from root cuttings has been better than all other varieties observed on the highly alkaline, calcareous soil at Monte Alto (Table 2). The soil in the study was a Hidalgo sandy clay loam with a pH of 7.8.

'Cowley' is erect in growth habit. It is more erect than 'Brazos' and not quite as erect as 'Cherokee'. 'Cowley' has about the same thorniness as 'Brazos'; however, the individual thorns are shorter.

The fruit of 'Cowley' are large. They are larger than 'Brazos', 'Rosborough', 'Cherokee', 'Choctaw' and 'Cheyenne' grown at Monte Alto (Table 3). The relative fruit size of 'Choctaw' is larger than 'Cherokee' and 'Cheyenne' and about the same as 'Choctaw'. This is consistent with data in variety releases of Moore et al. (2, 3, 4, 5). In a fruit quality evaluation, 'Cowley' rated third in overall acceptance of the seven varieties evaluated. 'Choctaw' was first, followed by 'Brazos'. The overall acceptance was based on flavor, color, appearance and texture.

More detailed comparisons of 'Cowley' with other blackberry varieties can be found in Lukefahr and Scott, 1994.

AVAILABILITY

'Cowley' is being released as a public variety. A list of nurseries selling 'Cowley' blackberry can be obtained from Rio Farms, Inc.., Rt. 1, Box 326, Monte Alto, Texas 78538.

Table 1. Total production in kilograms per hectare and percent of total production harvested by mid-May.

Variety	Total production (kg/ha) [z] 1992	1993	Percent harvested by mid-May 1992	1993
Cowley	5,965 a	9,958 a	91.7	71.6
Rosborough	4,276 b	8,719 a	57.3	29.2
Brazos	1,270 e	4,651 b	75.0	60.3
Womack	1,943 de	4,651 b	68.8	50.0
Choctaw	2,597 cd	3,745 bc	84.3	50.6
Cherokee	2,587 cd	2,493 c	45.5	17.9
Cheyenne	3,014 bc	1,851 c	20.5	11.3

[z] Yields followed by the same letter are not significantly different using LSD at P=0.05.

LITERATURE CITED

Lukefahr, M.J. and A.W. Scott, Jr. 1994. Blackberry evaluation and production. Subtropical Plant 46:

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Table 2. Stand establishment, as percentage of root cuttings producing plants. Root cuttings were planted January 18, 1991 (Hidalgo sandy clay loam) on test plots at Rio Farms, Inc.

	Percent establishment days after planting		
Variety	30	44	58
Cowley	25	78	89
Rosborough	14	45	65
Brazos	14	55	65
Womack	8	24	32
Choctaw	6	25	33
Cherokee	14	48	61
Cheyenne	20	58	70
Shawnee	8	33	43

Table 3. Average fruit weight of selected blackberry cultivars grown at Rio Farms, Inc., 1992

Variety	Fruit size (g/fruit)
Cowley	6.2
Rosborough	4.3
Brazos	4.1
Womack	6.6
Choctaw	5.0
Cherokee	4.2
Cheyenne	5.2