

BRS Rosa soybean cultivar

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Introduction

"Rosa" soybean cultivar was developed by a modified pedigree selection from the cross "FT Guaira" X "FT Estrela", made at Soybean Research Center, Londrina, PR, Brazil. It is recommended for planting in the states of "Goiás", "Distrito Federal", "Minas Gerais" and "Mato Grosso". It was extensively evaluated under the experimental designation BR 95-15305. 'Rosa has determinate growth habit and is an early maturity cultivar.

Main characteristics and descriptors

Genealogy: "FT Guaira" x "FT Estrela"

Indication: MG, GO, DF and MT

Growth habit: determinate

Average number of days to flowering: 54

Average number of days to maturity: 112

Height of insert of the first pod (cm): 15

Resistance to lodging: good

Flower color: purple

Pubescence Color: brown

Pod color: brown

Hylum color: black

100-seeds weight: 17g

Reaction to the peroxidase: positive



Reaction to the main diseases

Reaction to stem cancer (*Diaporthe phaseolorum f.sp. Meridionalis*): resistant

Reaction to frog-eye leaf spot (*Cercospora sojina*): resistant

Reaction to powdery mildew (*Microspora diffusa* Cke. & Pk.): tolerant

Reaction to Root-knot nematodes: susceptible

Grain yield and other traits

BRS Rosa was evaluated on the VCU (value of cultivation and use) trials from 1998/1999 season to 1999/2000 season. Cultivar "Rosa" out-yielded the cultivars checks in states of "Goiás", "Mato Grosso", "Minas Gerais", "Distrito Federal" and Brazilian Cerrado (Tables 1, 2, 3 and 4).

Table 1. Average grain yield and other traits of "BRS Rosa" and check cultivars across 18 locations, in states of "Goiás" and "Distrito Federal", over 1998/1999 and 1999/2000 seasons. "Embrapa Cerrados", "Brasília", DF, 2001.

Cultivar	Plant Height (cm)	Days to maturity	Grain yield	
			(kg/ha)	Relative (%)
BRS Rosa	76	112	3164	132
FT 2000	88	112	2914	121
Emgopa 316	88	111	2845	118
M-SOY 6101	75	119	2784	116
Emgopa 302	86	106	2404	100

Table 2. Average grain yield and other traits of "BRS Rosa" and check cultivars across 8 locations, in the "Mato Grosso", over 1998/1999 and 1999/2000 seasons. "Embrapa Cerrados", "Brasília", DF, 2002.

Cultivar	Plant Height (cm)	Days to maturity	Grain yield	
			(kg/ha)	Relative (%)
BRS Rosa	70	104	2935	111
Emgopa 316	83	102	2827	107
Emgopa 302	78	98	2648	100

Table 3. Average grain yield and other traits of "BRS Rosa" and check cultivars across 7 locations, in the "Minas Gerais", over 1998/1999 and 1999/2000 seasons. "Embrapa Cerrados", "Brasília", DF, 2002.

Cultivar	Plant Height (cm)	Days to maturity	Grain yield	
			(kg/ha)	Relative (%)
BRS Rosa	74	119	3274	117
Emgopa 316	82	117	3012	107
Emgopa 302	80	100	2808	100

Table 4. Average grain yield and other traits of "BRS Rosa" and check cultivars across 33 locations, in the Brazilian Cerrado, over 1998/1999 and 1999/2000 seasons. "Embrapa Cerrados", "Brasília", DF, 2002.

Cultivar	Plant Height (cm)	Days to maturity	Grain yield	
			(kg/ha)	Relative (%)
BRS Rosa	73	112	3124	119
Emgopa 316	84	110	2895	110
Emgopa 302	81	101	2620	100

Suggestion for cultivation

Rosa is best adapted for planting in November at a plant population of 300,000 to 350,000 plants/ha. Rosa is an excellent option of an early maturity soybean cultivar.