

UFVS-2001 Soybean Cultivar

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ABSTRACT

The UFVS-2001 soybean cultivar was developed by the Soybean Genetic Breeding Program in the Plant Science Department at the Federal University of Viçosa, Minas Gerais, Brazil. It was released for sowing in Minas Gerais State. Flowering and maturity are, on average, at 55 and 120 days after emergence, respectively, with grain yield of 3,177 kg/ha in regions of best adaptation. It is resistant to stem canker, frogeye leaf spot, powdery mildew and bacterial pustule.

KEY WORDS: *Glycine max*, soybean, cultivar description and seed production.

INTRODUCTION

Soybean (*Glycine max* (L.) Merrill) UFVS-2001 was developed by the Soybean Genetic Breeding Program at the Plant Science Department, Federal University of Viçosa, Minas Gerais, Brazil. It is a medium maturity cultivar. It was released for sowing in Minas Gerais after field yield tests performed in the 1997/98 and 1998/99 agricultural years, under the inbred line denomination UFV89-361826T2.

PEDIGREE AND BREEDING METHOD

UFVS-2001 originated from a single plant selection in the F6 SSD population proposed by Brim (1966), obtained from the cross FT-2 (Nissei) X IAC-8 (Figure 1) and adapted to the single pod descent method (Sedyama et al., 1999). About one hundred plants were selected initially to assess the uniformity of the agronomic traits by the progeny test. Their seeds were cultivated in 2.0 m long rows, spaced at 0.70cm with 12 plants/m density. The most uniform progenies were inoculated with *Diaporthe phaseolorum* f.sp. *meridionalis*, by the toothpick method (Yorinori, 1991) and with *Cercospora sojina* Hara isolates, in a greenhouse (Yorinori, 1989). After selecting the best progeny from the yield trials, 150 plants were sampled and sowed in rows. The homogenous rows were mixed to compose the genetic seed.

PERFORMANCE

The UFVS-2001 cultivar yielded on average 2,937 kg/ha in 12 experiments carried out in the 1997/1998 and 1998/99 agricultural years in Capinópolis, Rio Paranaíba, Florestal, Uberlândia and Paracatu. This performance was 4.4% and 10.8% higher than the UFV-19 (Triângulo) and FT-Estrela cultivars, used as controls (Table 1). In four experiments carried out in Capinópolis and Rio Paranaíba in the 1997/98 and 1998/99 agricultural years, the UFVS-2001 cultivar yielded 3,177 kg/ha respectively 5.3% and 26.7% more than UFV-19 (Triângulo) and FT-Estrela used as controls.

OTHERS CHARACTERISTICS

The UFVS-2001 cultivar has determined growth habit and good resistance to lodging and pod dehiscence. It flowers at 55 days on average and reaches harvest maturity at 120 days after emergence (Sedyama et al., 2001). The average plant height was 82cm and the weight of a 100 seeds was 15.6 g. The oil and protein percentual contents are 21.63% and 38.54%, respectively. The UFVS-2001 cultivar has white colored flowers, brown pubescence and pod, bright yellow seed coat and negative peroxidase activity. It is resistant to stem canker, frogeye leaf spot, bacterial pustule and powdery mildew.

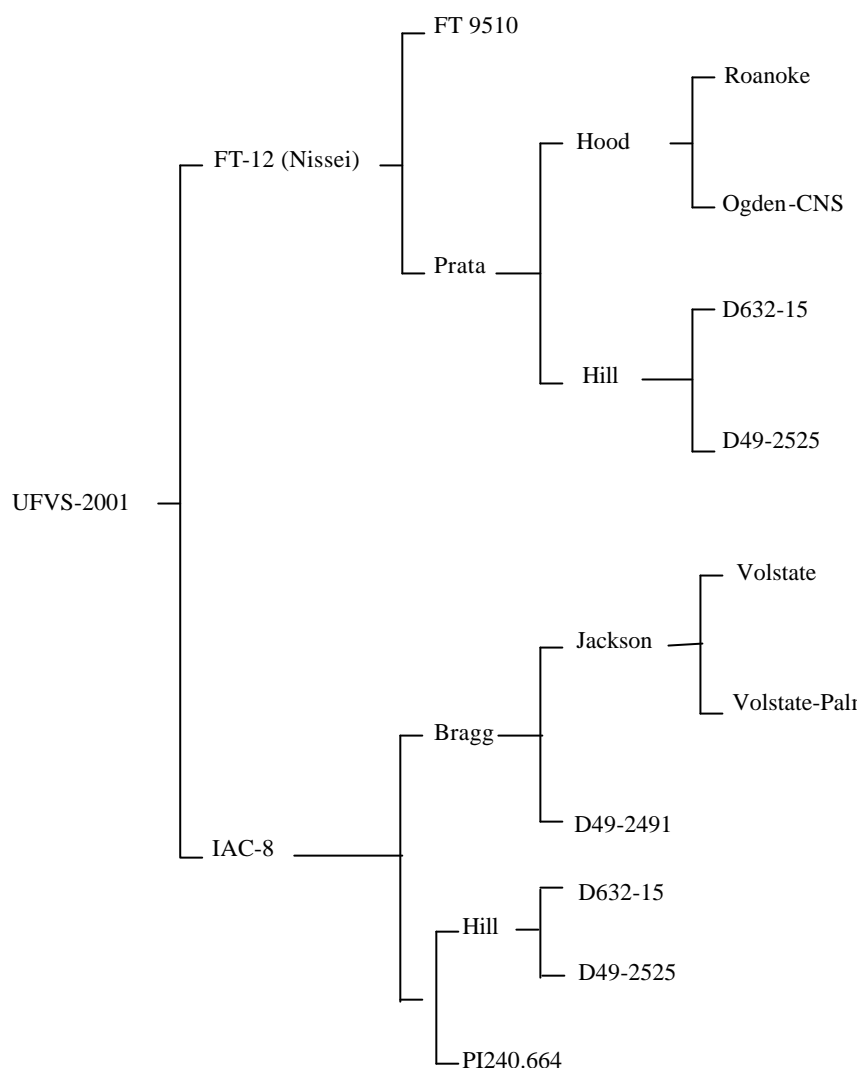


Figura 1 – UFVS-2001 pedigree.

PEDIGREE SEED MAINTENANCE AND DISTRIBUTION

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The UFVS-2001 seed is maintained by the Federal University of Viçosa, Plant Science

Table 1 – The average grain yield, relative yield and number of bags/ha, obtained in experiments carried out in Capinópolis, Rio Paranaíba, Florestal, Uberlândia and Paracatu, Minas Gerais, in the 1997/98 and 1998/99 agricultural years.

Cultivar	Grain yield (kg/ha)	Relative yield (%)	Number of bags/ha (60kg/bag)
UFVS-2001	2,937	110.8	48.9
UFV-19 (Triângulo)	2,821	106.4	47.0
FT-Estrela	2,651	100.0	44.2

Table 2 – The average grain yield, relative yield and number of bags/ha, obtained in Capinópolis and Rio Paranaíba, Minas Gerais, in the 1997/98 and 1998/99 agricultural years.

Cultivar	Grain yield (kg/ha)	Relative yield (%)	Number of bags/ha (60kg/bag)
Capinópolis			
UFVS-2001	3,426	125.9	57.1
UFV-19 (Triângulo)	3,334	122.5	55.6
FT-Estrela	2,722	100.0	45.4
Rio Paranaíba			
UFVS-2001	2,928	127.8	48.8
UFV-19 (Triângulo)	2,753	120.0	45.9
FT-Estrela	2,295	100.00	38.2
Capinópolis and Rio Paranaíba Mean			
UFVS-2001	3,177	126.7	53.0
UFV-19 (Triângulo)	3,044	121.4	50.7
FT-Estrela	2,508	100.0	41.8

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