Registration of ‘HARBAR’ Soybean

‘HARBAR SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-300, PI 561702) was developed at the Northwest Agricultural Research Center (CIANO-INIFAP-SARH) Cd. Obregón, Sonora, Mexico. It was released as a high-yielding, stable cultivar adapted for production in northwest Mexico.

Harbar was derived from the cross ‘Cajeme’ × ‘Rad’. Cajeme is a selection from the cross N44-92 (‘Ogden’ × ‘Haberlandt’) × Lee. The percentage of Rad is unknown. Harbar originated as an F2 plant selection, was bulked in the F3 generation, and was designated II-S35-6-M. It was tested in the National Uniform Soybean Trial (North Zone) from 1985 through 1987. In these tests, Harbar averaged 6% higher in seed yield than Cajeme and was better adapted to the Yaqui and Mayo valleys of Sonora, Fuerte Valley of Sinaloa, and the soybean growing regions of Chihuahua (1).

Harbar is a Maturity Group VI cultivar similar in morphology and agronomic characteristics to Cajeme. It has a determinate growth habit, begins flowering =47 d after planting, and reaches physiological maturity in =119 d. Mature plants average 90 cm in height. It has purple flowers, tawny pubescence, and yellow seed with black or gray hila. Seed weight averages 14.9. Seed protein content averages 391 g kg−1. The check variety, II-S35-6-M, has an average protein content of 409 g kg−1 and oil content of 233 g kg−1. Harbar is resistant to both lodging and shattering.

Seed of Harbar was distributed to seed companies in Sonora in 1989. Breeder seed was distributed by Pampa-Obregón, Sonora, Mexico. Additional information on its performance and characteristics has been published (2).

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References and Notes


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Registration of ‘Pharaoh’ Soybean

‘PHARAOH’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-301, PI 548645) was developed by Southern Illinois University at Carbondale. It was released as a high yielding cultivar with resistance to soybean cyst nematode (SCN) (Heterodera glycines Ichinohe) Race 3 (7).

Pharaoh originated as an individual F7 plant selection from the F4 line LS79-W330, which was tested in the USDA Uniform Soybean Tests-Southern Region in 1982 and 1983. Pharaoh has the pedigree ‘Forrest’ (3) × V71-480. V71-480 was derived from the cross V63-76 × V66-318. V63-76 was selected from the cross ‘Hill’ (5) × D53-354. V66-318 was selected from D53-184 × J22. D53-354 and D53-184 have the pedigree D49-2525 × L46-5679. D49-2525 was derived from S-100 × CNS and was a sister line to the cultivar ‘Lee’ (4). S-100 was selected from ‘Clemson’ (2). CNS was selected from ‘Clemson’ (2). L46-5679 has the pedigree ‘Lincoln’ × ‘Richland’ (8,2). The pedigree of J22 may be L37-1355 × Arksoy 2913 (1991 update to reference 2), though this is uncertain (G.R. Buss, personal communication, 1992).

The cross was made at the University Missouri Delta Center. The F2 and subsequent generations were advanced at Southern Illinois University at Carbondale. The F3 population, as experimental line LS82-1206 in the Uniform Soybean Tests-Southern Region Preliminary Group V Test in 1985, and in the Preliminary Group V Test in 1986 and 1987. It was also tested in the Regional SCN Tests from 1986 through 1991. The seed yield of Pharaoh exceeded that of Douglas (1) by 12% on infested soils and by 6% on noninfested soils.

Pharaoh is a late Maturity Group IV cultivar that matures =5 d later than Douglas. It has a determinate growth habit, begins flowering =47 d after planting, and reaches physiological maturity in =119 d. Mature plants average 90 cm in height. It has purple flowers, tawny pubescence, and tan pods with brown hila. Seed shape is round. Seed size varies around 130 mg seed−1, as compared with 167 mg seed−1 for Douglas. The seed composition of Pharaoh averages 399 g kg−1 protein and 208 g kg−1 oil, whereas Douglas, which has a composition of 406 g kg−1 protein and 208 g kg−1 oil, has a size of 126 mg seed−1.

Pharaoh is moderately susceptible to soybean mosaic virus [Pseudovirus glycinea (Kofoid & White) Chitimj] or brown spot [Fusarium solani (Kleb.) Sacc.]. Pharaoh has a resistance to soybean stunt virus. Pharaoh has no known major genes for resistance to soybean rust [Phakopsora pachyrhizi (Sacc.) Braun], soybean anthracnose [Colletotrichum truncatum (Sacc.) Moreau], or brown spot [Fusarium solani (Kleb.) Sacc.]. Pharaoh is susceptible to soybean mosaic virus and peanut root-knot nematode [Meloidogyne incognita (Kofoid & White) Chitimj]. It is susceptible to soybean rust [Phakopsora pachyrhizi (Sacc.) Braun].

Pharaoh originated from the cross ‘Clemson’ × ‘Rad’. Cajeme is a selection from the cross ‘Hill’ (5) × D53-354. V66-318 was selected from ‘Clemson’ (2) and was a sister line to the cultivar ‘Lee’. D49-2525 was derived from the cross ‘Cajeme’ × ‘Rad’. Caesar is a cultivar similar in morphology and agronomic characteristics to Cajeme. It has a determinate growth habit, begins flowering =47 d after planting, and reaches physiological maturity in =119 d. Mature plants average 90 cm in height. It has purple flowers, tawny pubescence, and yellow seed with black or gray hila. Seed weight averages 14.9. Seed protein content averages 391 g kg−1. The check variety, II-S35-6-M, has an average protein content of 409 g kg−1 and oil content of 233 g kg−1. Pharaoh is resistant to both lodging and shattering.

Seed of Pharaoh was distributed to seed companies in Sonora in 1989. Breeder seed was distributed by Pampa-Obregón, Sonora, Mexico. Additional information on its performance and characteristics has been published (2).

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