REGISTRATION OF 'A6381' SOYBEAN

'A6381' Soybean [Glycine max (L.) Merr.] (Reg. no. CV-236) (PI 527703) was developed by Asgrow Seed Co., subsidiary of the Upjohn Co., Kalamazoo, MI. It is classified as early Maturity Group VI, maturing 2 d earlier than Tracy M (2). A6381 was released because of it's productivity in environments, where lodging is often severe such as Argentina. Prior to it's release in 1984, it was identified as XP6381. It was evaluated in various state experimental station trials in 1984 and 1985 in the Southern USA. It was also widely evaluated in public soybean cultivar trials in Argentina during 1987 and 1988.

A6381 is an F₅ line from the cross N72-3038 × 'Essex' (3) made in 1976 at Caruthersville, MO. N72-3038 is from the cross of D67-B5 × N64-2451 and was grown in Uniform Preliminary Group VI in 1974. D67-B5 is a phytophthora rot resistant narrow leaf type similar to 'Lee'. N64-2451 has the same parentage as 'Ransom' (1). Generations were advanced to the F₅ by single seed descent in Florida and Missouri.

A6381 has purple flowers, grey pubescence, and tan pods. Foliage is dark green. Seeds are dull yellow with buff hilum. It resembles Young in growth characteristics, averages 3 d later, 5 cm shorter, and 3 g 100 smaller seed. A6381 has the RPS,c gene for resistance to phytophthora rot [caused by Phytophthora megasperma f. sp. glycinea Kuan and Erwin]. It is resistant to root knot nematode [Meloidogyne incognita (Kofoid & White)] and Diaporthe phaseolorum (Cke. & Ell.) Sacc. Athow & Caldwell. and is resistant to bacterial pustule [caused by Xanthomonas campestris pv. phaseoli (Smith) Dye] and frogeye leaf spot (Cercospora sojina Hara). It has shown good performance of Columbia lance nematode (Hoplolaimus columbus Sherk) (6). A6785 is susceptible to soybean cyst nematode [Heterodera glycines Ichimune.]

Asgrow Seed Co. will be responsible for maintaining breeder seed.

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