REGISTRATION OF ‘UI 906’ BLACK BEAN

‘UI 906’ black bean (Phaseolus vulgaris L.) (Reg. no. CV-94, PI 549091) was developed by the Idaho Agricultural Experiment Station at the Kimberly Research and Extension Center, Kimberly, ID, and was released in 1988. UI 906 was an F₂ selection made by John Kolar in 1984 from the 1981 cross ‘Midnight’/07055 F₂. The pedigree of 07055 is PI 209621/2/R75/RR27/797/3 F₅/‘Aurora’. The breeding lines used to develop 07055 had high levels of root rot tolerance [caused by Rhizoctonia solani Kühn, Fusarium solani (Mart.) Sacc. f. sp. phaseoli (Burkholder) W.C. Snyder & H.N. Hans, and/or Pythium spp.]

UI 906 was grown at Kimberly, ID in 1985 to 1987, and at both Kimberly and Parma, ID, in 1988 and 1989. Yield trials in New York were at one location in 1986 (1) and three locations in 1987 (2), and at two locations in Michigan in 1988 (3) and six locations in 1989 (4). Midnight and UI 906 yields were equivalent in Idaho, but in New York and Michigan a longer growing season permitted Midnight to reach its full yield potential. Under these conditions, UI 906 yielded less than Midnight. In tests at 16 locations in the Cooperative Dry Bean Nursery (5), in 1989, seed yield was 9% higher than Midnight. UI 906 is particularly well suited to short growing seasons found in the Pacific Northwest, North Central States, and Central Canada.

UI 906 has an upright short vine (Type IIA) growth habit. Maturity ranges from 78 to 114 d, with a mean of 92 d. In Idaho, it matures ~6 d earlier than Midnight. UI 906 has smaller seed than other black bean cultivars, with a mean of 17.3 g 100 seed⁻¹ vs. 18.3 g 100 seed⁻¹ for Midnight. The seed coat possesses a dull luster, as is desirable in this market class.

Tests for resistance to bean common mosaic virus (BCMV) were performed at Prosser, WA, by Matt Silbernagel in 1987 and at Kimberly Research Center in 1989. UI 906 was resistant to the NY-15 and NL-4 races of BCMV, but exhibited necrotic tip kill when inoculated with the NL-5 or NL-8 races of BCMV. This hypersensitive response is conferred by the I gene.

Field infection of beet curly top virus indicated that UI 906 is moderately susceptible to this disease. Disease incidence was intermediate to that of susceptible cranberry and resistant pinto beans, suggesting that UI 906 had resistance to some strains of beet curly top virus. Data from 1988 Uniform Dry Bean Rust Nursery in Maryland and Michigan indicated that UI 906 was susceptible to bean rust [Uromyces appendiculatus (Pers.:Pers.) Unger] races in Maryland, but resistant to highly resistant to the races found in Michigan. In the 1989 Cooperative Dry Bean Nursery, UI 906 showed moderate resistance to bean rust races in Nebraska.

Breeder seed is maintained at the University of Idaho Kimberly Research and Extension Center, 3793 North 3000 East, Kimberly, ID 83341. Small quantities of seed for breeding and experimental purposes may be obtained from the Director of the Idaho Agricultural Experiment Station. This cultivar is protected under Title V of the Plant Variety Protection Act.

REGISTRATION OF ‘SUNLAND’ TRITICALE

‘SUNLAND’ triticale (× Triticosecale (Reg. no. CV-11, PI 550576) was cooperatively developed by the Georgia and Florida Agricultural Experiment Stations as a cultivar in 1989. Sunland is a spring triticale selected from the cross B-2736, Merino “S” × ‘Stacy’ wheat, at the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. Sunland was selected as a high-yielding advanced line from CIMMYT’s national Triticale Screening Nursery grown at Quincy, FL, and Plains, GA. From 1984 to 1987, the breeding lines were reselected and tested further in both states. Seed was produced from a single plant of Merino “S”/Juanillo, in 1987 as the source of breeder seed and distributed to Georgia, AZ, and Aberdeen, ID, during 1988 and 1989. Sunland has been extensively yield tested in Florida and Georgia since its release.

Sunland is an early-maturing, high-yielding hexaploid triticale cultivar. Sunland is similar in appearance to ‘Florida 201’ triticale, having an erect growth habit, long broad leaves, large stems, and panicles with a white awn. Heads have long rough awns, with a distinct nodding appearance at maturity. Sunland has a tall, averaging 114 cm across 21 environments, but has strong straw and moderate lodging resistance. Sunland heads 4 to 5 d later than Florida 201, but is not well adapted to temporary winter grazing. Average seasonal forage yield of Sunland (4135 kg dry matter ha⁻¹) is higher than that of the best early soft red winter wheat cultivars. When planted earlier than ‘Florida 303’ oat (Avena saliva (L.)), ‘Coker 227’ oat (Avena saliva (L.)), and ‘Stacy’ wheat, respectively.

Sunland was released in 1989 as a highly productive hexaploid cultivar. In nine Florida environments (1985-1990), average grain yield of Sunland (3265 kg ha⁻¹) surpassed that of Florida 201 (638 kg m⁻³). When planted later than Florida 201 (3676 kg ha⁻¹). Average grain yield of Sunland (3265 kg ha⁻¹) surpassed that of Florida 201 (638 kg m⁻³) and Beagle 82 (3676 kg ha⁻¹). Average grain yield of Sunland (3265 kg ha⁻¹) surpassed that of Florida 201 (638 kg m⁻³) and Beagle 82 (3676 kg ha⁻¹). Average grain yield of Sunland (3265 kg ha⁻¹) surpassed that of Florida 201 (638 kg m⁻³) and Beagle 82 (3676 kg ha⁻¹). Average grain yield of Sunland (3265 kg ha⁻¹) surpassed that of Florida 201 (638 kg m⁻³) and Beagle 82 (3676 kg ha⁻¹).