REGISTRATION OF 'YOUNG' SOYBEAN

'YOUNG' soybean [Glycine max (L.) Merr.] (Reg. no. 204) (PI 508266) was developed by USDA-ARS, in cooperation with the North Carolina Agricultural Research Service. It was released in 1984 to provide a cultivar of Maturity Group VI with high productivity and resistance to soybean mosaic virus.

Young is the bulked increase of an F₁ line from the cross 'Davis' X 'Essex'. The cross was made in 1972 at Clayton, NC, and the F₁ was grown in a greenhouse the following winter. The F₁ progeny were inbred to the F₂ generation using single seed descent. Initial yield testing of the population occurred in North Carolina in 1975 and 1976. Prior to release the breeding line was designated N75-2213. Young was tested in the Uniform Preliminary Group VI Nursery in 1977 at eight environments. It was subsequently tested in the Uniform Group VI Nursery at about 32 locations each year from 1978 to 1981.

Young is 4 days earlier in maturity than Davis, and has produced 5% higher seed yield than Davis. The average percent seed protein and oil for Young is 43.2 and 19.8, respectively, compared to Davis with 41.0 and 19.8. It has yellow seeds with buff hila, white flowers, gray pubescence, tan pod walls, and determinate growth habit. Young is resistant to the leaf diseases bacterial pustule [caused by Xanthomonas phaseoli (E.F.Sm.) Dawson var. sojensis (Hedges) Starr and Burkholder], soybean mosaic virus, and peanut mottle virus. It carries the Rps gene for resistance to Phytophthora rot (caused by Phytophthora megasperma Drechs. f. sp. glycinea Kuan and Erwin).

In 1982, breeders seed was provided to the North Carolina Foundation Seed Producers for increase. Foundation seed was distributed to other states by request and according to seed supply. The North Carolina Agricultural Research Service will be responsible for maintaining breeder seed. A U.S. Plant Variety Protection Certificate has been obtained for Young.

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References and Notes

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REGISTRATION OF 'JOHNSTON' SOYBEAN

'JOHNSTON' soybean [Glycine max (L.) Merr.] (Reg. no. 205) (PI 508268) was developed by USDA-ARS, in cooperation with the North Carolina Agricultural Research Service. It was released in 1984 because of its superiority in seed yield to public cultivars of Maturity Group VIII. Johnston is the increase of an F₁ line from the cross 'Hutton' X 'Hampson'. The parent, N70-2173, is a selection from the cross 'Hampson' X 'Ransom'. The cross, N70-2173 X Hutton, was made in 1973 at Clayton, NC. The F₁ was grown the following winter in a greenhouse. Progeny were advanced to the F₂ generation using single-seed descent. Initial yield testing of the population occurred in North Carolina in 1976 and 1977. Prior to release the breeding line was designated N76-1507. Johnston was tested in the Uniform Preliminary Group VIII Nursery in 1978 and in the Uniform Group VIII Nursery from 1979 through 1982.

Johnston has purple flowers, tawny pubescence, and tan pod walls similar to Ransom. However, it matures 7 days later than Ransom and has seed oil and protein percentages of 22.7 and 42.4, respectively, compared to Ransom with 22.7 and 42.4. It has yellow seeds with black hilum. Johnston seed size averages 17.0 g/100 seed, compared to 15.9 for Ransom. Johnston is resistant to the two foliar diseases, bacterial pustule [caused by Xanthomonas phaseoli (E.F.Sm.) Dawson var. sojensis (Hedges) Starr and Burkholder] and powdery mildew [caused by Microsphaera diffusa Clint and Pk.].

In 1981, breeders seed was provided to the North Carolina Foundation Seed Producers for increase. Foundation seed was distributed for increase to Alabama, Georgia, South Carolina, and Texas in 1983. The North Carolina Agricultural Research Service will be responsible for maintaining breeder seed. A U.S. Plant Variety Protection Certificate has been obtained for Johnston.

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REGISTRATION OF 'LANCER' WHEAT

'LANCER' (Reg. no. 720) (PI 508271) hard red spring wheat (Triticum aestivum L.) was developed at the Research Station, Agriculture Canada, Swift Current, Saskatchewan. Lancer was released in May 1985, and License no. 2536 was issued for Lancer on 15 May 1985 by the Food Production and Inspection Branch, Plant Health and Plant Products Directorate of Agriculture Canada. It should not be confused with 'Lancer' (Reg. no. 441), which is a hard red winter wheat cultivar developed by the Nebraska Agriculture Experimentation Station and USDA-ARS.

Lancer was selected from the progeny of a cross made in 1969 between 'Fortuna', which has resistance to the wheat stem sawfly (Cephus cinctus Nort.), and 'Chris', which has a long seed dormancy period. Lancer was developed using a modified pedigree breeding method and in 1978 it was assigned Selection no. 6903-180-27D. From 1979 to 1981 Lancer was evaluated in replicated regional trials for grain yield potential, agronomic characteristics, resistance to the wheat stem sawfly, and grain quality. From 1982 to 1984 it was evaluated in the Western Bread Wheat Co-operative tests as BW572.

Lancer averaged as much pith in the lumen of the culm cavity as 'Canuck' and significantly more than the solid-stemmed 'Leader'. It expressed a higher level of resistance to common root rot [caused primarily by Bipolaris sorokiniana (Sacc. in Sorok.) Shoem.] than Canuck, 'Columbus', and Leader. Lancer also exhibited significantly lower shattering losses than Canuck, Columbus, and Leader.

Grain yield of Lancer has been similar to that for Canuck and Leader, but less than that for the hollow-stemmed 'Neepawa' and Columbus in the absence of damage caused by the wheat stem sawfly. Compared to the sawfly resistant cultivar Canuck, Lancer averaged 2 days earlier maturity and 5 cm shorter straw length. Lancer is adapted and intended for use in drier prairie areas where the wheat stem sawfly is likely to be a serious pest.