REGISTRATION OF 'FINCH' SAFFLOWER

'FINCH' safflower (Carthamus tinctorius L.) (Reg. no. 15) (PI 525458) was developed at the Eastern Agricultural Research Center, Montana Agricultural Experiment Station, Sidney, MT as a cooperative effort between personnel of the Montana Agricultural Experiment Station and the Williston Experiment Station, North Dakota Agricultural Experiment Station, Williston, ND. Finch was released by the Montana Agricultural Experiment Station cooperatively with the North Dakota Agricultural Experiment Station and USDA-ARS in 1986.

Finch originates from the cross 'Rio'/'Royal'/Sidney Selection 87-42-3. Rio is a grey, striped-hull variety developed by the Arizona Agricultural Experiment Station. Rio was an individual plant selection from Rio. Rio is similar to Frio in general plant characteristics but has a larger seed size and more frost tolerance. Royal is a high seed oil content cultivar with purple-striped hull developed by the Arizona Agricultural Experiment Station. Sidney Selection 87-42-3 is a 1965 selection resistant to Alternaria leaf spot (incited by Alternaria carthami (Chow.)) made from a bulk composite population of 555 safflower introductions contained in the 1960 world safflower collection. This normal hull selection was obtained from a lower Yellowstone River Valley site near Sidney, MT that was continuously cropped to this safflower population since 1961.

The initial cross was made in 1973. Field selection for disease resistance to Alternaria leaf spot and Pseudomonas bacterial blight (incited by Pseudomonas syringae (Van Hall)) was practiced at Sidney, Montana in the F1, F2, F3, F4, and F5 generations. Finch is an F2 plant selection derived from an F1 plant selected in 1975. It was tested in yield trials as 81B3565.

Finch plants are spiny with spines on the leaf tips and along leaf margins and involucral bracts. Finch is similar to 'S-208' in flowering and maturity. The flower is yellow in the bud and full bloom stages. After drying, the flower color of most plants is yellow or light orange, but about 1% of the plants will have orange or red wilted flowers. Finch is similar in height to S-208 with an average height of 51.3 cm under dryland conditions. The plants will have orange or red wilted flowers. Finch is similar to S-208 with an average height of 51.3 cm under dryland conditions. The seeds have a predominantly white normal hull (95%). The pericarp is reduced on approximately 4% of the seeds so that the underlying phytomelanin layer is exposed as irregular blotches. This reduction of the sclerenchyma is variable and is most pronounced under high moisture growing conditions. An occasional striped hull seed also remains in Finch (1%).

Finch was released as a normal hull cultivar for the birdseed market and recommended for dryland production in Montana and western North Dakota. Its production reduces the risk of reduced test wt. and yield losses due to diseases in this production area.

Breeder and foundation seed will be maintained by the Foundation Seed Stocks Committee, Plant and Soil Science Department, Montana Agricultural Experiment Station, Montana State University, Bozeman, MT 59717.

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References and Notes


REGISTRATION OF 'BATUC 86' SOYBEAN

'Batuc 86' soybean [Glycine max (L.) Merr.] (Reg. no. 230) (PI 525490) was developed at the Northwest Agriculture Research Center (CIANO-INIFAP-SARH) of Mexico. It was released in 1987 as a high yielding, stable cultivar adapted for production in northwest Mexico.

Batuc 86 was derived from the cross 'Mayo 80' X ('Hood' X sel. 'Lee'). Mayo 80 is a selection from Hood X Lee. It is an F1 plant selection, was bulked in the F2 generation, and designated II-S105-6-M. Batuc 86 was tested in the National Uniform Soybean Trial (North Zone) from 1983 through 1986. In these tests Batuc 86 averaged 10% higher in seed yield than the check variety 'Cajeme' and showed wide adaptability in the Yaqui and Mayo Valleys of Sonora, Culiacan and Fuerte Valleys of Sinaloa, the Mexicali Valley of North Baja California, and the soybean growing regions of Chihuahua.

Batuc 86 is a Maturity Group VI cultivar that is similar in morphology and agronomic characteristics to Mayo 80. Batuc 86 has a determinate growth habit, begins flowering about 52 d after planting and reaches physiological maturity about 130 d after planting. Mature plant height averages 95 cm. Batuc 86 has purple flowers, tawny pubescence, and yellow seeds with black or gray hila. Seed wt. averages 13.5 g per 100 seeds. Seed protein content averages 40.8%, and oil content averages 20.0%. The check variety Mayo 80 has an average protein content of 39.7% and 21.1% oil content. Batuc 86 is resistant to both lodging and shattering.