REGISTRATION OF CROP CULTIVARS

Breeder seed of Shadow is maintained by Pure-Seed Testing, Inc. Seed production is limited to two generations of increase from breeder seed—one each of foundation and certified.

United States Plant Variety Protection Number 8100155 has been issued for Shadow.

ACKNOWLEDGMENTS

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REGISTRATION OF PALMER PERENNIAL RYEGRASS1

(Reg. No. 37)

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'FLOR' flax (Linum usitatissimum L.) was developed and tested cooperatively by personnel of the North Dakota Agricultural Experiment Station and the USDA-ARS. Flor, released in February 1981, is a blue-flowered, brown-seeded selection from the cross of 'Bison' $M^3M^3$/'Linott'//Bison $P^3P^3$/Linott. Bison $M^3M^3$ and Bison $P^3P^3$ are near-isogenic lines developed by H. H. Flor as rust differential lines. This is the first flax cultivar to carry the $M^3P^3P^3$ multiple-gene resistance to flax rust, caused by Melampsora lini (Ehrenb.) Lév. In addition to the $M^3$ and $P^3$ genes, Flor possesses the $L^6$ rust gene. All three genes convey resistance to presently known races of flax rust in North America.

Flor, CI 2896, yielded 6% higher when compared to the average yield of the cultivars Linott, 'Culbert,' and 'Dufferin' and averaged across early and late seedings in regional trials, 1978-1980. Flor averaged 1650 kg/ha yield and the three checks averaged 1560 kg/ha. Flor was the highest yielding entry in the 1978 and 1979 North central regional flax trials. Flor is early flowering (47 days from sowing to full bloom), medium height (59 cm), and moderately resistant to lodging. Linott, Culbert and Dufferin averaged 46, 47, and 52 days from sowing to full bloom and were 61, 59, and 60 cm in height, respectively. It is medium high in oil percentage and iodine value, and is moderately susceptible to wilt, caused by Fusarium oxysporum Schlecht. f. lini (Bolley) Snyder and Hans.

Flor is adapted to the North central flax-growing region of the United States. Seed classes are breeder, foundation, registered, and certified. Breeder seed is maintained by the North Dakota Agric. Exp. Stn., Fargo, ND 58105.

1 Registered by the Crop Sci. Soc. of Am. Cooperative investigations between the North Dakota Agric. Exp. Stn. and the USDA-ARS, Fargo, ND 58105. Published with the approval of the Director of the North Dakota Agric. Exp. Stn. as Series Paper No. 1207. Accepted 29 Nov. 1982.

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