REGISTRATION OF ‘NECHE’ FLAX

‘NECHE’ FLAX (Linum usitatissimum L.) (Reg. no. CV-41, PI 522375) was developed and tested cooperatively by personnel of the North Dakota Agricultural Experiment Station and the USDA-ARS. Neche, released in February 1988, is a blue-flowered, brown-seeded F₅-derived selection advanced by pedigree selection from the cross CI 2847/‘Culbert 79’ (1) made in 1978. CI 2847 is a selection from a cross of CI 2204/‘Foster’ grown in flax regional trials in 1976–1977. Based on parentage and flax rust [incited by Melampsora lini (Ehrenb.) Desmaz.] evaluation, Neche has the L₆N³ rust genes. The L₆ gene confers resistance to all known naturally occurring and prevalent races of flax rust in North America.

Neche, tested as CI 3096, was 14% higher in seed yield than the cultivars ‘Linott’, ‘Culbert’, and ‘Dufferin’, averaged across early and late seed trials in North Dakota (14 trials in 1983–1986). Yield of Neche averaged 1370 kg ha⁻¹ and three checks averaged 1183 kg ha⁻¹. Neche was 8% higher yielding than the same checks in 52 North Central Regional Flax trials (1983–1985). Neche flowered 55 d after sowing and is medium height (57 cm), medium high in oil (417 g kg⁻¹), and high in iodine number (195). Linott, Culbert, and Dufferin flowered 54, 54, and 57 d after sowing and were 54, 53, and 64 cm in height. Neche is moderately resistant to wilt [incited by Fusarium oxysporum Schlecht.: Fr. f. sp. lini (Bolley) W.C. Snyder & H.N. Hans.] as evaluated at both Fargo, ND, and St. Paul, MN.

Neche is adapted to the north-central flax-growing region of the USA. Seed classes are breeder, foundation, registered, and certified. Breeder seed is maintained by the Seedstocks Project, Crop and Weed Sciences Department, North Dakota State Agricultural Experiment Station, Fargo, ND 58105.

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References and Notes
