REGISTRATION OF CULTIVARS

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 gm 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 Schlechtend.: 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


REGISTRATION OF ‘PIXIE’ SOYBEAN

‘PIXIE’ SOYBEAN (Glycine max (L.) Merr.) (Reg. no. CV-280, PI 543856) was jointly developed by the USDA-ARS and the Ohio Agricultural Research and Development Center. It was released in 1980 as a high-yielding, lodging resistant, determinate cultivar with specific adaptation to highly productive environments where lodging is frequently a problem with tall indeterminate cultivars.

Pixie was derived from an F₄ plant selected from the cross of ‘Williams’ (2) × ‘Ransom’ (3). The cross was made in 1970. An early-generation testing procedure was used in which F₂-derived lines were yield tested in 1972 and F₃ in 1973. Single plants were harvested from rows of a high-yielding F₄ line and were evaluated in Illinois (1974–1976) and Ohio (1977–1979) in Uniform Test IV of the Uniform Soybean Tests Northern States from 1977 to 1979 under the designation L74D-609.

Pixie is a determinate (dtₑ) Maturity Group IV cultivar that matures ≈4 d later than ‘Williams 82’. It has purple flowers, tawny pubescence, tan pods at maturity, and yellow seeds with black hilum. Plant height is compared with 100 cm for Williams 82, resulting in greater lodging resistance for Pixie than Williams 82. Pixie is recommended specifically for high-yield environments (>3300 kg ha⁻¹) and is best adapted to 38 to 48° N lat. It has moderate field resistance to Phytophthora megasperma Drechs f. sp. glycinea T. Kuan & D.C. Erwin.

Breeder seed of Pixie was distributed to organizations in Illinois, Indiana, Kentucky, Missouri, and Ohio for planting in 1980. Breeder seed is maintained by the Ohio Agricultural Research and Development Center, Wooster, OH 44691. Pixie has been protected under Title V of the Plant Variety Protection Act (No. 8100162).


References and Notes