REGISTRATION OF WISHEK FLAX1
(Reg. No. 34)
E. O. Kenaschuk2

‘LINTOTT’ flax (Linum usitatissimum L.), Ott. 4264-C9, was developed at the Agriculture Canada Research Station, Ottawa, Ontario, from the cross (Ott. 3708 X Argentine 8G) X (‘Arrow’ X CI 975). Lintott was evaluated by the Morden Research Station under the designation F.P. 364 in the Flax Co-operative Test from 1961 to 1963. After being licensed in 1966, Lintott was grown in Canada on limited acreage in the province of Quebec, but was grown much more extensively in the northern U.S. The cultivar has been grown fairly extensively in Manitoba, Saskatchewan, and Alberta. The performance of Lintott in comparison to other cultivars was reported in 1977.3 Seed was released to select growers in 1975. Breeder seed is maintained by the Agriculture Canada Research Station, Regina, Saskatchewan.

REGISTRATION OF LINOTT FLAX1
(Reg. No. 34)
E. O. Kenaschuk2

‘LINTOTT’ flax (Linum usitatissimum L.), Ott. 4264-C9, was developed at the Agriculture Canada Research Station, Ottawa, Ontario, from the cross (Ott. 3708 X Argentine 8G) X (‘Arrow’ X CI 975). Lintott was evaluated by the Morden Research Station under the designation F.P. 364 in the Flax Co-operative Test from 1961 to 1963. After being licensed in 1966, Lintott was grown in Canada on limited acreage in the province of Quebec, but was grown much more extensively in the northern U.S. The cultivar has been grown fairly extensively in Manitoba, Saskatchewan, and Alberta. Breeder seed is maintained by the Agriculture Canada Research Station, Regina, Saskatchewan.

REGISTRATION OF WISHEK FLAX1
(Reg. No. 35)
J. J. Hammond, J. F. Miller, and G. D. Statler2

‘WISHEK’ flax (Linum usitatissimum L.), was developed at the North Dakota Agricultural Experiment Station, Fargo, in cooperation with AR, SEA, USDA. Wishek, released in February 1979, is the progeny of an F1 plant selected from the cross ‘Koto’ × CI 1220B-8-1. In the north central regional flax trials, Wishek, under designation of CI 2822, out-yielded ‘Linott’, ‘Culbert’, and ‘Dufferin’ for the years 1975-77. When sown late, Wishek is higher yielding than other cultivars. Wishek has the M and L1a rust-conditioning genes; the latter conditions resistance to all known North American races of rust, caused by Melampsora lini (Ehrenb.) Lev. The Linott gene confers resistance to all known North American races of rust, caused by Melampsora lini (Ehrenb.) Lev., including races 370, 371, and 372. Dufferin is moderately resistant to wilt, caused by Fusarium oxysporum Schlecht. f. sp. lini (Bolley) Snyder and Hanson.

Dufferin matures late, has high oil content, and good oil quality. It is of medium height and is moderately resistant to lodging. The flowers are blue and intermediate to large. The seeds are brown and of average size (6.0 g/1,000).

Dufferin is adapted to all flax-growing regions of Manitoba, Saskatchewan, and Alberta. The performance of Dufferin in comparison to other cultivars was reported in 1977.3 Seed was released to select growers in 1975. Breeder seed is maintained by the Agriculture Canada Research Station, Regina, Saskatchewan.

REGISTRATION OF WISHEK FLAX1
(Reg. No. 35)
J. J. Hammond, J. F. Miller, and G. D. Statler2

‘WISHEK’ flax (Linum usitatissimum L.), was developed at the North Dakota Agricultural Experiment Station, Fargo, in cooperation with AR, SEA, USDA. Wishek, released in February 1979, is the progeny of an F1 plant selected from the cross ‘Koto’ × CI 1220B-8-1. In the north central regional flax trials, Wishek, under designation of CI 2822, out-yielded ‘Linott’, ‘Culbert’, and ‘Dufferin’ for the years 1975-77. When sown late, Wishek is higher yielding than other cultivars. Wishek has the M and L1a rust-conditioning genes; the latter conditions resistance to all known North American races of rust, caused by Melampsora lini (Ehrenb.) Lev. The Linott gene confers resistance to all known North American races of rust, caused by Fusarium oxysporum Schlecht. f. sp. lini (Bolley) Snyder and Hanson.

Dufferin matures late, has high oil content, and good oil quality. It is of medium height and is moderately resistant to lodging. The flowers are blue and intermediate to large. The seeds are brown and of average size (6.0 g/1,000).

Dufferin is adapted to all flax-growing regions of Manitoba, Saskatchewan, and Alberta. The performance of Dufferin in comparison to other cultivars was reported in 1977.3 Seed was released to select growers in 1975. Breeder seed is maintained by the Agriculture Canada Research Station, Regina, Saskatchewan.

REGISTRATION OF NEWREX RICE1
(Reg. No. 54)
C. N. Bollich, B. D. Webb, M. A. Marchetti, and J. E. Scott2

‘NEWREX’ rice (Oryza sativa L.), CI 9969, is a superior quality, early maturing long-grain rice cultivar developed at the Texas A&M Univ. Agric. Research and Extension Center at Beaumont, Tex., by AR-SEA-USDA in cooperation with the Texas Agric. Exp. Stn. and the Texas Rice Improvement Association. It was officially released on 1 Feb. 1979. Newrex originated as an F1 selection from Beaumont cross No. B686A. The parents of Cross B686A were an F1 selection from ‘Bluebelle’/‘Daun’/‘Belle Patna’/Dawn and Beaumont Selection B6122B-1-5-Bk-21-1. The latter was derived from the backcross ‘Bluebenton’/‘Jojutla’. Jojutla is a Mexican cultivar that is poorly adapted agronomically to the United States but has superior processing characteristics. In the cooperative Uniform Performance Nursery Series Newrex was identified as R17773085.

Newrex was developed especially to fill specific industry needs. It is markedly superior to other U.S. long-grain cultivars for quick-cook processing, soup manufacturing, and other related processes. In addition it possesses the traditional dry, fluffy cooking characteristics desired in U.S. long-grain types. The textural properties of Newrex appear to be similar to those of ‘Rexoro’ being slightly firmer than present U.S. long-grain cultivars but not as firm as Jojutla. Compared with other U.S. long-grain cultivars, Newrex shows a markedly lower solids loss (washout losses) for quick-cook, parboil-canning, and similar processes. It also retains its grain size and shape integrity on processing to a much greater degree than do other U.S. long-grain types. With respect to physicochemical (quality) characteristics, Newrex is distinguished from other U.S. long-grain cultivars by a very low "breakdown" in amylographic paste viscosity on cooking at 95 C, a very high "setback" viscosity, and an amylose content of about 28%, 3 to 4 percentage points higher than that of present U.S. long-grain cultivars (Table 1). The superior processing characteristics of Newrex, possessed by no other U.S. cultivar, constitute the primary reason for releasing it for commercial production.

The spikelet of Newrex is straw-colored, nonpubescent, and awnless, with a colorless apiculus. Brown rice seeds average about the same length as, but are more slender than, those of Bluebelle (Table 2). The period from seeding to maturity to that of Lebonnet. The 3-year average height of Newrex in regional uniform performance nurseries across the southern U.S. rice area was 97 cm, as compared to 100 and 101 cm for Labelle and Lebonnet, respectively. Newrex appears to have very good lodging resistance. Three years’ data from uniform nurseries in Texas, Louisiana, Arkansas, and Mississippi

1 Cooperative investigations of AR-SEA-USDA; Texas A&M Univ. Agric. Research and Extension Center at Beaumont; and the Texas Rice Improvement Association. Accepted 12 Oct. 1979.

2 Research scientist, Agriculture Canada Res. Stn., Morden, Manitoba R0G 1J0.

3 Registered by the Crop Sci. Soc. of Am. Accepted 29 Nov. 1979.

4 Research scientist, Agriculture Canada Res. Stn., Morden, Manitoba R0G 1J0.


6 Professor. Dep. of Agronomy, North Dakota State Univ.; research geneticist, AR, SEA, USDA; professor, Dep. of Plant Pathology, North Dakota State Univ., Fargo, ND 58102.