Foster, A New Flax Variety



Bothun

R. E. Bothun

The North Dakota Agricultural Experiment Station in cooperation with the Crops Research Division, USDA, has released a newly developed flax variety called Foster. It was named after Foster County in North Dakota where the variety is well adapted.

Foster flax originated from a cross of C.I. 1605 x Minerva made in the greenhouse during the 1956-57 winter season at Fargo, North Dakota. C.I. 1605 was a high yielding line from a cross of (Ott. 770B x Arg. 8C) x (Arrow x C.I. 975) made in Canada. Minerva, a high oil variety, originated at the Minnesota Agricultural Experiment Station from a cross of C.I. 649 x Bison, being backcrossed to Bison four times.

Foster is a dark blue flowered, yellow seeded flax. Foster, compared with other varieties in the accompanying table, is very good in seed yield, has very high oil content, and is good in iodine value. It produces more oil in pounds per acre than any other recommended variety. The relatively small seeded variety has adequate resistance to wilt, rust, and pasmo. It has been tested for rust reaction by Crops Research Division, USDA, and was found to be immune from all known pre-

Dr. Bothun is associate professor, Department of Agronomy.

valent North American races of flax rust. Its gene (or genes) for rust resistance is different from that found in our presently grown flax varieties.

Like other varieties Foster flax should be sown early on clean productive land to realize maximum seed yield.

Approximately 2,000 bushels of Foster will be allocated to county crop improvement associations and the Seed Trade Associations for increase in 1969. The seed will be allocated through the Agricultural Experiment Station. A limited amount of seed was also made available to Minnesota and South Dakota.

Table 1. Agronomic and quality data of Foster compared with other flax varieties during 1964-68 for Carrington, Minot, and Fargo, North Dakota.

Variety	Cereal Index No.	Yield Bu/A	Days To Ripe	Ht. In.	Lodging Index	Oil Per Cent	lodine No.	Oil Lb/A
Foster	2523	17	100	24	1.6	43	182	400
B5128	980	17	100	26	1.9	40	181	371
Redwood	1130	17	99	25	1.8	40	183	369
Bolley	1478	15	97	24	1.5	41	188	345
Windom	1823	17	96	24	1.7	40	187	385
Summit	1914	17	97	24	1.6	39	184	370
Noralta	2430	17	95	24	1.5	39	184	366



Fig. 1. An increase field of Foster Flax.