Sheyenne Flaxseed for Sowing in 1946

By
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Sheyenne flax, released cooperatively last spring by the North Dakota Agricultural Experiment Station and Bureau of Plant Industry, U. S. Department of Agriculture[2], will be available for sowing on about 20,000 acres in 1946. Forty-six farmers cooperated with the North Dakota Agricultural Experiment Station in the further increase of this flax in 1945. The 687 bushels available for sowing last spring has now been increased to about 12,000 bushels.

Sheyenne is an early ripening, wilt and rust resistant flax with a fair degree of tolerance to the pasmo disease. This variety grows nearly as tall as Bison, has blue flowers and brown seed. Sheyenne seed is slightly smaller than Bison and its oil yield is slightly under Bison, but the iodine number of the oil (index of drying quality) is better than in Bison.

Being an early ripening variety it is not expected that Sheyenne will yield as high as some other varieties having a longer growing season, when those longer season varieties can ripen normally. However, Sheyenne should return satisfactory yields more consistently under the usual climatic conditions in the area designated for it. Being highly resistant to wilt and rust and having about as much tolerance to pasmo as any variety now available, the early ripening Sheyenne is likely to have its largest use in the eastern and southeastern sections of the State where pasmo injury may be serious in some years, and perhaps the south central and southwestern sections of the State where earliness is frequently desirable in order to "escape" high summer temperatures or late summer drouth.

In trials to date Sheyenne has compared favorably in yield with other varieties now commonly grown. Sheyenne (C.I. 1073), a selection from a cross, Ottawa 770B x Buda, having good resistance to the important flax diseases, showed considerable promise in the early nursery tests. In the rust years 1941 and 1942 at Fargo, Sheyenne yields were 18.3 and 29.1 bushels per acre respectively, compared with 14.3 and 17.4 bushels for Bison. Pasmo, and to some extent also rust, were factors influencing yield differences in the nursery trials at Park River in 1944. Under those conditions Sheyenne yields were nearly 30 percent higher than for Bison and more than 50 percent higher than for Golden under similar conditions.

Grown in the larger field plats at Fargo the last 3 years, Shey-

[1]Agronomist
[2]N. Dak. Agric. Exp. Sta. Bimonthly Bulletin, Vol. 7, No. 4 (1945)

How Sheyenne Has Compared in Yield With Other Varieties In Bushels Per Acre

	Fargo		Eastern N. Dak. field plats 7 station years	Western N. Dak. field plats 3 station years
	Nursery 1941-1945	Field plats 1943-1945[a]		
Bison	16.7	15.2	13.5	12.2
Sheyenne	17.1	15.6	14.9	11.0
Golden	14.1	14.6	13.5	14.5
Buda	.....	14.5	14.5	.....
Koto	.....	16.6	15.1	13.9
Victory	.....	15.1	15.8	14.7
Renew	.....	15.1	14.8	11.4
5128	.....	16.4	16.4	14.6
Royal	.....	13.5	13.5	.....

[a]Preliminary yields for 1945, subject to slight changes upon cleaning and rechecking of weights.

enne has compared favorably in yield with other varieties. In 1943 when there was some injury from pasmo, Sheyenne gave a yield of 14.4 bushels, Golden 13.2 bushels and Victory 14.4 bushels per acre. For the 3 years in these field plat tests, altho rust was no large factor in any of these years, the average Sheyenne yield was 15.6 bushels, Bison 15.2, Golden 14.6, Victory 15.1 and Royal 13.5 bushels per acre. In seven field plat comparisons in eastern North Dakota since 1943 (including 2 years at Edgeley and 1 at Langdon) Sheyenne yields have compared favorably with other varieties (Table 1). Field tests in western North Dakota have not been extensive and the results should not be taken as conclusive. While it is expected that Sheyenne will not yield as high in some years as some later ripening variety, its earliness and good disease resistance will generally be regarded with favor.

Farmers interested in obtaining some seed of Sheyenne for sowing in 1946 may apply to their county agent, or direct to the Experiment Station. Under the option contract, which the Experiment Station has with the farmers who obtained the seed last spring and made the increase, these cooperating farmers are to share their seed with other farmers who may desire it in their communities. The Experiment Station can draw on these growers for seed up to 75 percent of their increase, thus assisting others to obtain seed if they want it. In so far as the supply of seed permits, applicants will be allowed seed in amounts sufficient to sow a fair sized field.

The annual report of the State Apiarist for the State of Iowa for 1945 including the report of the Beekeepers Association at Ames, Iowa, prints an article on the Biology and Control of the Sweet Clover Weevil by J. A. Munro, H. S. Telford, Kenneth Redman, and T. E. Stoa of the North Dakota Agricultural Experiment Station. Much of this material has previously appeared in articles in the Bimonthly Bulletin of this Station.