

NODAK, AN EARLY MATURING PINTO BEAN CULTIVAR

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A new, early maturing pinto bean cultivar, Nodak, was released January 10, 1984, by the North Dakota, Washington, and Idaho Agricultural Experiment Stations and the USDA-ARS. Nodak was tested in North Dakota as GH-370 and in the National Cooperative Dry Bean nursery as NDP-912. The name Nodak is an abbreviation of North Dakota, the lead institution in the release of this cultivar.

Nodak is an F₂ selection from the cross: pinto selection 3R187-1/GN1140, made in 1975 by D.W. Burke, USDA-ARS, Prosser, WA. 3R187-1 was selected from the cross: selection 2R39-1pink/Royal Red red kidney.

Nodak has been tested at several locations in North Dakota since 1980, including three off-station locations in the state's major bean growing region. Seed yield of Nodak has consistently exceeded the widely grown pinto cultivars UI-114 and Olathe (Table 1). Nodak was one of the top three entries for seed yield at 11 of 15 locations comprising the 1982 National Cooperative Dry Bean Nursery, averaging 13 percent greater than UI-114, the check cultivar.

Table 1. Seed yield of Nodak and Olathe as percent of UI-114 at several locations in North Dakota.

Location	Years tested	Nodak	Olathe
		-----% UI-114-----	
Fargo	1980-83	103.9	97.6
Hatton	1980-83	132.2	127.0
Barney	1980-83	90.5	84.1
Forest River	1982-83	172.2	126.1
Avg. major bean growing region 14 Loc. years		124.7	108.7
Oakes (irrig.)	1980-83	112.5	113.8
Langdon	1981-83	115.6	121.7
Minot	1981-83	120.1	104.0
Carrington (Irrig.)	1981-82	108.4	114.1
Carrington (Dry)	181-82	113.4	111.1
Williston	1981-83	135.4	110.5
Avg. 31 Loc. years		120.4	111.0

Schneiter is professor and Grafton and Weiser are assistant professors, Department of Agronomy. Burke is research plant pathologist, USDA-ARS, Prosser, WA.

Under North Dakota conditions, Nodak is very early, maturing 9.0 days earlier than UI-114 and 8.0 days earlier than Olathe, when averaged over 12 location years (Table 2). Seed of Nodak is very uniform and similar in size to Olathe. Although the seed size of Nodak is smaller than that of UI-114, the uniform size results in lower dockage (Table 2). Seed color is very bright. Tests conducted at Prosser, WA indicated Nodak produced a cooked product with acceptable nutritional traits, flavor, and texture.

Table 2. Maturity, seed weight, and percent dockage of Nodak, UI-114, and Olathe grown at several locations in North Dakota, 1980-83.

Agronomic trait	No. location years	Nodak	UI-114	Olathe
Maturity (Days to harvest)	12	90.3	99.3	98.3
250 seed wt (g)	14	75.2	82.0	79.1
Percent dockage (10/64 x 3/4)	8	3.9	6.7	3.2

Nodak has a vine type growth habit with white flowers. Nodak exhibits considerable tolerance to the races of bean rust present in North Dakota, is resistant to the type and New York 15 strains of bean common mosaic virus, and is resistant to curly top virus.

Foundation Nodak seed was allocated to North Dakota seed producers in 1984 for certified seed production. Foundation Nodak will be available in future years either from production in North Dakota or western states. Edible bean growers are urged to plant only certified bean seed and to purchase Certified bean seed from North Dakota growers, if possible.