

ALPHA SOYBEANS

ALPHA was developed by the Minnesota Agricultural Experiment Station. It is a  $F_8$  selection from the cross Fayette x McCall. Prior to release, ALPHA was tested as selection M85-610.

ALPHA is of Group I maturity, relative maturity 95. It has purple and white flowers, tawny pubescence, tan pods at maturity, and intermediate seed coats with yellow hila. ALPHA carries the Soybean Cyst Nematode resistance gene SCN 3, which confers resistance to race 3.

Plant Variety Protection under the title V, certification-only option, has been applied for.

<u>Entry</u>	<u>Maturity</u> (Date)	<u>Yield</u> (bu/a)	<u>Lodging</u> <sup>1</sup> (Score)	<u>Height</u> (in)	<u>Protein</u> (%)	<u>Oil</u> (%)
<u>1991 4 Test Mean - Central Wisconsin Variety Test</u>						
Alpha	06-Sep	53	4.0	44	37.5	17.1
Bell	16-Sep	59	3.5	42	36.3	17.9
Sturdy	18-Sep	67	3.2	43	36.0	17.6
<u>1989-91 3 Year Mean - Uniform Test I - Arlington</u>						
Alpha	18-Sep	44	3.3	35	40.2	19.8
Bell	22-Sep	43	2.8	32	40.4	20.6
Sturdy	24-Sep	48	2.4	35	40.3	19.8
<u>1989-90 30 Test Mean - Noninfested Soil - Uniform Test I</u>						
Alpha	20-Sep	43	2.2	35	41.2	20.2
Bell	25-Sep	44	1.9	32	41.4	20.7
Sturdy	26-Sep	50	1.7	35	39.9	20.9
Sibley	20-Sep	46	1.9	34	40.2	20.9
<u>1988-90 10 Test Mean - Infested Soil - SCN Test I</u>						
Alpha	16-Sep	39	2.6	36	42.1	18.9
Bell	23-Sep	45	2.0	33	41.4	20.7
Sibley	16-Sep	31	2.1	35	40.8	21.2

<sup>1</sup>Score 1 (all plants erect); to 5 (all plants flat).

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THE MINNESOTA AGRICULTURAL EXPERIMENT STATION, ST. PAUL,  
MINNESOTA

## NOTICE OF RELEASE OF ALPHA SOYBEAN

The Minnesota Agricultural Experiment Station announces the release of a soybean cyst nematode

(SCN) resistant soybean variety named ALPHA.

ALPHA originated as an F5 plant selection from the cross Fayette x McCall made at the Minnesota

Agricultural Experiment Station. The generations were advanced to the F5 by a modified single seed

descent procedure in Minnesota and Chile. From 1986-1991 ALPHA was tested in Minnesota as M85-

610 for agronomic performance. M85-610 was entered in the Regional SCN Group I Test in 1988.

ALPHA was evaluated in the Uniform Soybean Test Group I from 1989 to 1991. Data from the 1990-

91 tests is shown below:

+score: 1 (very good) to 5 (very poor).

tdry weight basis.

ALPHA is classified as Group 0 maturity about 1 day earlier than Parker. ALPHA is the earliest maturing SCN resistant variety currently available. ALPHA is recommended for use in environments where SCN is a significant problem. Seeds of ALPHA are smaller than seeds of Parker.

ALPHA has purple flowers, tawny pubescence, tan pods at maturity and seeds with intermediate luster yellow seed coats with yellow hila.

Foundation seed of ALPHA will be produced by the foundation seed organization in Minnesota with seed distribution to seed producers for planting in 1992. The Minnesota Agricultural Experiment Station

will maintain breeder seed. The Minnesota Agricultural Experiment Station will be responsible for publicity after February 14, 1992.

Director, Minnesota Agricultural Experiment  
Station

Variety	Seed Yield Bu/a	Maturity date	Lodging Score+	Plant Height In.	Seed Quality Score+	Seed Size g/100	Composition Protein % Oil %		Iron Chlorosis Score+
ALPHA	46.2	9/15	2.7	37	2.1	14.8	42.0	19.6	2.6
Bell	48.1	9/21	2.4	35	1.7	19.4	42.1	20.6	2.5
Sturdy	53.5	9/21	2.0	34	2.0	19.1	40.5	20.7	2.6
Parker	54.7	9/16	2.5	38	2.0	18.6	40.1	21.1	3.0