

New Small-Seeded Experimental Soybean Variety Available From Iowa State University IA2005

An improved experimental soybean variety, IA2005, has been developed by Iowa State University for use in products for which small seeds are preferred, including natto and soy sprouts.

The new experimental variety has a seed weight of only 81 mg/sd, equivalent to 5,605 seeds/pound. More than 90% of the seeds pass through a 14/64-inch round screen. The small round seeds have yellow seed coats and yellow hila, characteristics preferred for the natto and soy sprout markets.

IA2005 was selected from the small-seeded variety SS202 developed by ISU. A higher percentage of IA2005's smaller seeds pass through a 14/64 round screen than those of SS202. The experimental variety was evaluated for agronomic performance and seed characteristics in row plots at three Iowa locations in 1990 (see data below).

IA2005 and SS202 are agronomically similar. IA2005 has a high yield potential compared with other small-seeded varieties of Maturity Group II. It has an unusual growth habit which results in a high lodging score. After the leaves drop at maturity, the bottom one-third of the plant is upright, but the upper part of the plant leans. However, the pods do not touch the soil surface and the plants can be harvested without difficulty.

IA2005 does not have any major genes for resistance to *Phytophthora* rot or the soybean cyst nematode. It is susceptible to iron-deficiency chlorosis when grown on calcareous soil.

IA2005 seed will be distributed under license agreements with the Iowa State University Research Foundation. Seed of IA2005 will be available to interested parties for testing and research in 1991. Foundation seed will be produced in 1991 and will be distributed on a first-come basis. It is recommended that orders for foundation seed be placed before February 1, 1991.

Interested parties should contact Steven Price, Interim Director, ISURF, 214 Office and Lab Bldg., ISU, Ames, Iowa 50011, tel. (515) 294-4740, FAX (515) 294-0778.

1990 IOWA STATE UNIVERSITY EVALUATION OF IA2005 AVERAGE OF AMES, MARSHALLTOWN, AND WINTERSSET, IA.

Entry	Yield (bu/A)	Maturity* (mo-day)	Height (in)	Lodging† (score)	Seed size		Protein 0%H ₂ O	Oil 0%H ₂ O
					mg/sd	sd/lb		
IA2005	44.5	9-22	36	3.9	81	5605	44.2	20.1
SS202	45.0	9-20	38	4.0	91	4989	44.2	20.7
IL1‡	39.2	9-24	25	1.9	63	7206	41.2	21.7
Corsoy 79	50.1	9-18	38	2.1	158	2873		
Kenwood	51.4	9-20	34	1.8	152	2987	41.1	22.2
Hack	49.7	9-22	34	1.5	166	2735		
Burlison	52.3	9-24	33	1.6	190	2389		
LSD (0.05)	4.6	1.5	4.4	0.6				

* Maturity recorded at Ames.

† Scores range from 1 (plants erect) to 5 (plants prostrate).

‡ Developed by the University of Illinois/USDA-ARS.