


Relative yield potential of corn by planting date and population

	Planting Date				
	April 20- May 5	May 5-15	May 15- 25	May 25- June 5	June 5-15
Population (Plants/Acre)	Percent Maximum Yield				
45,000	97	93	85	68	52
40,000	99	95	86	69	53
35,000	100	96	87	70	54
30,000	99	95	86	69	53
25,000	95	91	83	67	51
20,000	89	85	77	63	48
15,000	81	78	71	57	44
10,000	71	68	62	50	38

Note: Values based on preliminary Iowa research and modeling; 100% yield potential is estimated to occur with 35,000 plant population and early planting.

From: Iowa State University Extension, Corn Field Guide, CSI 001, 2009. In Press.

Planting Dates vs. Long-term Average Yield Northern Iowa

<u>Planting date</u>	<u>Soybeans</u>	
May 1	100%	 <p>Full season to mid-June</p>
May 10	100	
May 20	95-100	
June 1	90-95	
June 10	85-90	
June 20	70-80 (June 15-20)	
July 1	50-65	
July 10	30-45	

Soybean Yield Variability With Later Planting Dates, NEIAEA 2004-2007

Planting Date	Yield Average bu/ac	Yield Range (difference) bu/ac
Early April	65 (100%)	60 - 70 (10)
Late April	66 (100%)	59 - 71 (12)
Early May	65 (100%)	58 - 69 (11)
Late May	61 (93%)	54 - 68 (14)
Early June	57 (87%)	48 - 69 (21)

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Approximate Number of Plants Per Foot of Row to Give Various Populations Per Acre

-----Population (plants/A) -----

Row Width	150,000	125,000	100,000	75,000	50,000
36-38	10.6	8.8	7.1	5.3	3.5
30	8.6	7.2	5.7	4.3	2.9
20	5.7	4.8	3.8	2.9	1.9
15	4.3	3.6	2.9	2.2	1.4
10	2.9	2.4	1.9	1.4	1.0
7	2.0	1.7	1.3	1.0	0.7

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Effect of Plant Population on Soybean Yield

University of Minnesota

Plants thinned at cotyledon stage

Plants/A	Bushels/A
150,000 (no thinning)	45.1
125,000	44.8
100,000	45.1
75,000	44.2
50,000	41.6
1-ft gaps (75,000)	43.6
2-ft gaps (75,000)	41.5

LSD(0.05) = 2.1

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Considers for Late Planted Soybeans 2008

- Use fungicide treated seed.
- Plant in narrow rows (drill or 15").
Help with canopy closure.
- Use a full season variety to mid-June
and 0.5-1.0 earlier maturity group for
late June.
- No need to increase population.

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Re-Plant Interval to Soybeans With Corn Herbicides

- **Can Be Planted Any Time:**
Aim, Axiom, Basagran, Define, Dual II Magnum, Frontier, Liberty, Outlook, Python, Prowl, Pursuit
- **Others That Allow Soybeans:**
Option (14 days); Accent & Steadfast (15 days); Banvel, Clarity, Distinct (30 days)
- **Most Others Including Atrazine:**
6 months to 1 year
- **Check the Label**

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How Do You Kill Surviving Corn?

- **Tillage**
- **Glyphosate 11-22 oz/ac., *if not Roundup Ready***
- **Post grass herbicides: Assure II, Poast Plus, Fusilade, Fusion, Select**
- **Don't count on Liberty to kill Roundup Ready corn. It is often used as a Bt marker.**

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