

Expected Grain Yields to Various Planting Dates and Final Plant Populations

| Planting Date | Percent of Optimum Yield | | | | | | | | | | | | | |
|---------------|--------------------------|----|----|----|----|----|----|----|----|-----|-----|-----|----|----|
| | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
| April 10 | 62 | 68 | 73 | 78 | 82 | 85 | 91 | 92 | 93 | 94 | 94 | 94 | 93 | 91 |
| April 15 | 65 | 71 | 76 | 81 | 85 | 88 | 91 | 94 | 95 | 96 | 97 | 96 | 96 | 94 |
| April 20 | 67 | 73 | 78 | 83 | 87 | 90 | 93 | 96 | 97 | 98 | 99 | 98 | 98 | 96 |
| April 25 | 68 | 74 | 79 | 84 | 88 | 92 | 94 | 97 | 98 | 99 | 100 | 100 | 99 | 97 |
| April 30 | 68 | 74 | 79 | 84 | 88 | 92 | 95 | 97 | 99 | 100 | 100 | 100 | 99 | 97 |
| May 05 | 67 | 73 | 79 | 83 | 87 | 91 | 94 | 96 | 98 | 99 | 99 | 99 | 98 | 97 |
| May 10 | 65 | 71 | 77 | 82 | 86 | 89 | 92 | 94 | 96 | 97 | 97 | 97 | 96 | 95 |
| May 15 | 63 | 69 | 74 | 79 | 83 | 87 | 89 | 92 | 93 | 94 | 95 | 95 | 94 | 92 |
| May 20 | 59 | 65 | 71 | 75 | 80 | 83 | 86 | 88 | 90 | 91 | 91 | 91 | 90 | 89 |
| May 25 | 55 | 61 | 66 | 71 | 75 | 79 | 81 | 84 | 85 | 86 | 87 | 87 | 86 | 84 |
| May 30 | 49 | 55 | 61 | 65 | 70 | 73 | 76 | 78 | 80 | 81 | 81 | 81 | 80 | 79 |
| June 04 | 43 | 49 | 54 | 59 | 63 | 67 | 70 | 72 | 74 | 75 | 75 | 75 | 74 | 73 |
| June 09 | 36 | 42 | 47 | 52 | 56 | 60 | 62 | 65 | 66 | 67 | 68 | 68 | 67 | 65 |

Source: Emerson D Nafziger, *Journal of Production Agriculture* 7 (1994): 59-62. Yield response to planting data extrapolated beyond May 25, with concurrence of author. Purdue Crop Diagnostic Training and Research Center and Integrated Pest Management. Purdue University Corn & Soybean Field Guide. 2007 ed. Published by Agricultural Communication Media Distribution Center.

How to use the Table:

1. Enter the row that most closely represents the date you first planted the field. Then read across until it intersects with the column that most closely represents the actual plant population remaining in the field. The value at the intersection is the estimated percent of the maximum yield you can expect. **Example:** Planted April 25 with 17,500 plants remaining = 87% of maximum potential yield.
2. Enter the row for the date closest to scheduled replanting. Determine your plant population goal then read across to that intersection. **Example:** Scheduled May 24 replanting with 27,500 plant population goal = 86% of maximum expected yield.
3. The difference between these numbers is the percent yield increase or decrease to be expected from replanting.
4. When the table indicates that replanting may provide a yield increase remember to first subtract all replant costs and consider the risks involved in replanting.