



Delayed Corn Planting Considerations: Far Northern Corn Belt

Switching to Earlier Maturity Hybrids

- When rainfall significantly delays field and planting operations, switching to early maturity hybrids may be considered to ensure timely crop maturation.
- To help guide these decisions, Pioneer researchers conducted planting date studies over 18 years.
- Far Northern Corn Belt studies included 15 environments in Minnesota, North Dakota, and Quebec and a total of 45 Pioneer® brand corn products ranging from 80 to 100 CRM.
- Adjusted gross income was calculated for corn products in different maturity ranges over a range of planting dates based on income from corn yield at \$3.50/bu minus drying costs and discounts for low test weights.

Results indicate that farmers should plant full season hybrids until approximately May 18. Switching to an early maturity hybrid prior to this point most likely will not be beneficial and may result in reduced profitability.

- Farmers should consult their local Pioneer representative for recommendations about hybrid switches under delayed planting conditions.

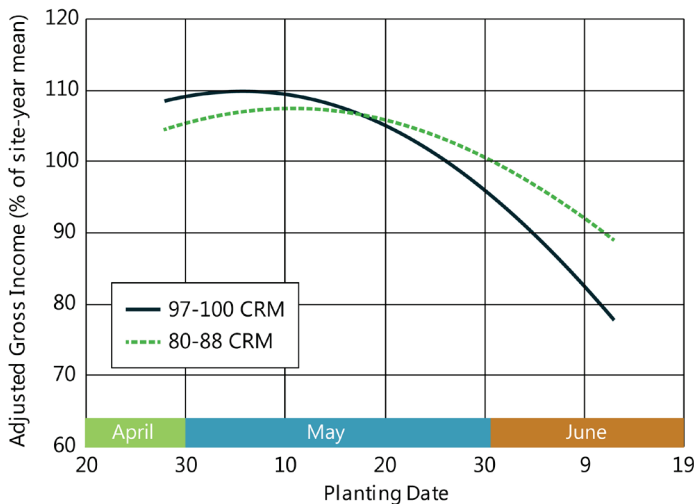


Figure 1. Profitability of full-season (97-100 CRM) vs. early maturity (80-88 CRM) hybrids by planting date in the Far Northern Corn Belt.

- Full season hybrids provided the greatest profitability when planted up until May 18.
- Farmers may consider switching to an earlier maturity hybrid after May 18.

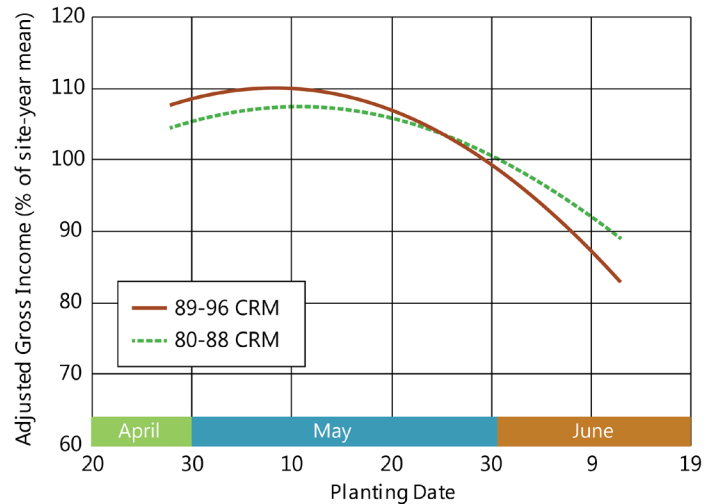


Figure 2. Profitability of mid-maturity (89-96 CRM) vs. early maturity (80-88 CRM) hybrids by planting date in the Far Northern Corn Belt.

- Adjusted gross income of mid-maturity hybrids was greater than that of early maturity hybrids with planting dates through May 26.
- Consider switching from a mid-maturity to an early maturity hybrid if planting is delayed beyond this point.

Corn Adjusts to Later Planting

- A three-year study was conducted by researchers at Purdue and Ohio State Universities documented that hybrids can adjust their growth and development, requiring fewer growing degree units (GDUs) to reach physiological maturity when planted late.
- Averaged over all hybrids, locations and years, 244 less GDUs were required to reach maturity when planting was delayed from late-April or early May to early or mid-June (approximately 40 days).
- Adjusted gross income/acre was calculated as gross income at a corn price of \$3.50/bu minus drying costs and discounts for low test weights. Higher corn price would move switching date later.
- Drying costs were calculated based on 4 cents/bu for each point of moisture above 15%. Higher drying costs would move switching date earlier.

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