

Delayed Corn Planting Considerations: Northern Corn Belt

Switching to earlier maturity hybrids

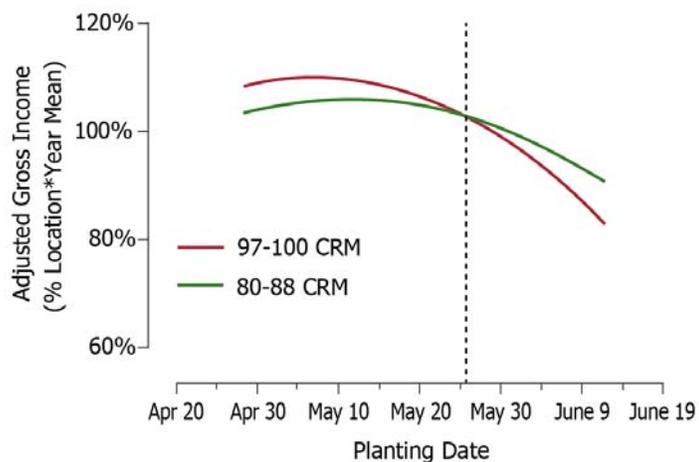
- When rainfall significantly delays field and planting operations, switching to early maturity hybrids may be considered to ensure timely crop maturation.
- To help guide these decisions, Pioneer researchers conducted planting date studies over 18 years (1987-2004).
- Northern Corn Belt studies included 15 environments in Minnesota, North Dakota, and Quebec.

Results indicate that growers should plant full season hybrids until approximately May 26. Switching to an early maturity hybrid prior to this point most likely will not be beneficial and may result in reduced profitability.

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



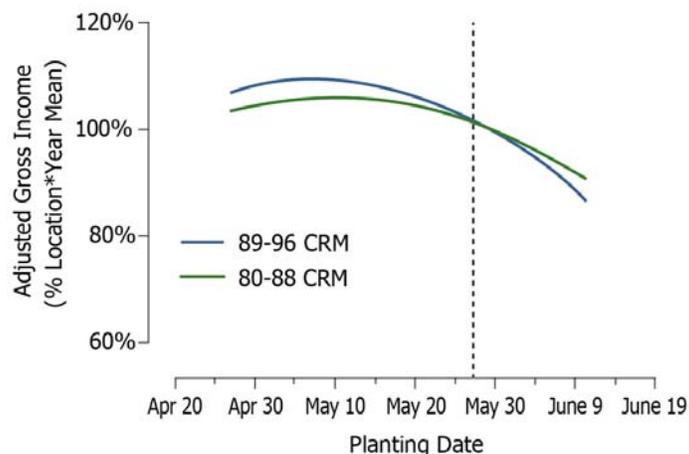
Profitability of Full-Season vs. Early Maturity Hybrids



- Full season hybrids provided the greatest profitability when planted up until May 26.
- Growers may consider switching to an earlier maturity hybrid after May 26. Earlier maturity hybrids had a significant economic advantage for planting after June 3.

- Adjusted gross income/acre was calculated as gross income at a corn price of \$5.00/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.

Profitability of Mid-Maturity vs. Early Maturity Hybrids



- Mid-maturity hybrids provided greater profitability when planted up until May 27.
- Growers may consider switching after this point; however, long-term data did not show a significant advantage to doing so.

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).