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Long silks, short pollen...a long year?

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Corn harvest is nearly complete in Iowa as I write this, 19 days ahead of the 5-year normal and slightly behind that of last year (USDA-NASS, 2011a). Many farmers already report corn and soybean yields are “better than expected.” Does that mean the crop is turning out better than they expected at planting, in early July, in early August?

It depends on the baseline. In early July I heard many talk about being in the ‘garden spot,’ things were looking really good! But then the straight-line winds of July 11th flattened corn across a wide strip of central, eastern and northeast Iowa. Later, hail and wind storms decimated more of our corn even into September.

Then, with such a hot July we were very concerned about poor pollination (Elmore, 2011). Reports of long silks suggested we either were short on pollen or we had missed the ‘nick.’ The high temperatures certainly sped up crop development to where it was pushing growth stages faster than we would have liked. Of course, it could have been worse.

Some fields were flooded out, some were dried out, many were badly lodged. Not surprisingly, 2011 yields are across the board from ‘lower than expected’ to ‘higher than expected.’ The current state yield forecast (USDA-NASS, 2011b) is for 169 bushels per acre. If realized, that is 4 bushels above last year but 8 below the 30-year trend line (Figure 1). The USDA expects 13,650,000 acres harvested, 600,000 more than last year, and 450,000 less than we planted.

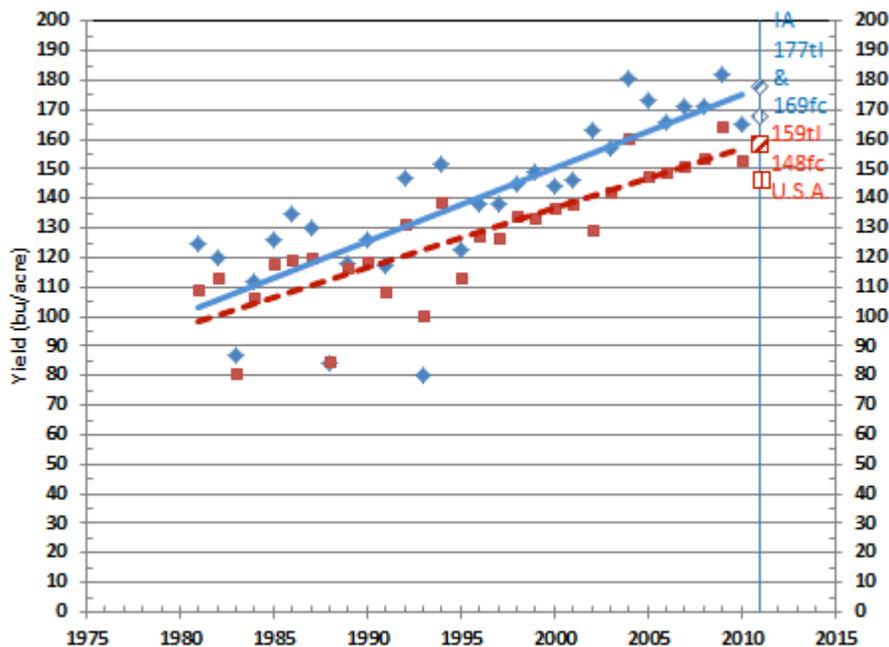


Figure 1. Thirty-year corn yield trendline (tl) & 2011 October Forecast (fc), Iowa and U.S.A. from USDA-NASS, 2011b and previous years.

Yield variation

Regional differences are obvious this year. For example, the current estimate of 178 bushels per acre as the average for the Northwest Iowa district is about 7 bushels below that of 2010 but the 135 bushel per acre estimate for Southeast

Iowa is 37 bushels above that of 2010!

Lessons from 2011

Is there anything we should take away from their 2011 corn growing experience? What can we learn from this year and do differently next year to try to improve their yield? There are always things to learn, I'm always on the learning curve. We need to keep thinking, comparing and learning year-to-year.

This year with the extremely high heat in July, I'm not sure we could have avoided a yield reduction, even with good hybrid selection, management practices, etc. In any case, it's wise to plant a diverse set of hybrids the crop silks at different times. That way you can avoid the consequences of a week or several days perhaps of stress occurring during the pollination period.

But when we have three or four weeks of extremely hot weather like we did in July this year, there's not much gained by having different silking dates resulting from different hybrids planted. They were all stressed! Nevertheless, always plant a diversity of corn hybrids, in order to spread out the silking dates and maturity dates. It may not help in a year like 2011, but there is a good chance it will in other years.

"Better than expected..." that's something for which to be thankful. Let's try to do what we can to do much better than expected next year!

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