

## Late Season Corn Fearmongering

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The current near-record USDA-NASS corn yield estimate for Indiana of 167 bu/ac (USDA-NASS, Sep 2006) might lead one to believe that everything is hunky-dory with the state's favorite crop. After all, that yield estimate is only 1 bushel shy of the all-time record yield established in 2004. Some prognosticators believe the yield estimate will go even higher as we move further into the fall harvest season.

In talking with the locals down at the Chat 'n Chew Café over the past few weeks and based on my own wanderings in and out of corn fields, I would suggest that more problems exist in some fields than would be suspected by simply looking at the statewide yield estimate. Some of the issues that growers ought to be aware of include...

- Incomplete kernel set on ears is evident in quite a few fields; especially those late-planted or replanted fields (late May to mid June plantings). In some cases the problem lies in kernel abortion at the tips of ears, in other cases due to pollination problems (Nielsen, 2005a).
- Rapid senescence (death) of the crop canopy, especially the upper leaves, was very noticeable in many fields beginning mid- to late August prior to kernel black layer. The upper leaf death can be caused by a number of factors (Nielsen, 2005c), but regardless of the cause(s), rapid death of the crop canopy prior to kernel black layer (physiological maturity) can easily reduce yield in affected fields.
- Stalk rot is developing in some fields, either as random plants or as large areas within fields dying prematurely. The latter areas tend to be those where other stresses were prevalent during the grain fill period (Nielsen, 2005b). Given the risk of downed corn when a popup thunderstorm hits a field with severe stalk rot, it behooves growers to walk their fields and determine the presence and extent of severe stalk rot. Severely affected fields should be scheduled for earlier harvest to minimize the risk of downed corn later.
- Nitrogen loss became evident in some fields beginning back in about mid-August, as lower leaves and in some cases entire plants begin "firing" or turning yellow rapidly in response to deficient soil nitrogen levels. While this season's frequent and ample rainfall provides much of the basis for the current high corn yield estimates, it is nevertheless true that a number of areas received numerous

“goose-drownders” throughout the summer. Such heavy rainfall events easily cause significant loss of available soil nitrate through denitrification on heavy poorly drained soils or leaching on lighter, sandier soils (Nielsen, 2006).

### Related References

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Don't forget, this and other timely information about corn can be viewed at the Chat 'n Chew Café on the Web at <http://www.kingcorn.org/cafe>. For other information about corn, take a look at the Corn Growers' Guidebook on the Web at <http://www.kingcorn.org>.

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