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Yields contradict weather extremes

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Yields contradict weather extremes

Abstract

Extremes marked the weather during the 1997 growing season, but average yields didn't seem to suffer. Dale Farnham, ISU Extension agronomist, said a late frost in mid May caused minimal damage in some isolated fields that had early emerged seedlings, but the next day the temperature was 92 degrees in Ames.

Keywords

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INTEGRATED CROP MANAGEMENT

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Dale Farnham, ISU Extension agronomist, said a late frost in mid May caused minimal damage in some isolated fields that had early emerged seedlings, but the next day the temperature was 92 degrees in Ames.

Soils stayed cool in May resulting in uneven emergence and "general lack of vigor" in corn plants, he said. June was fairly normal, but July was cool and dry and crops on lighter soils started showing effects from the lack of moisture.

"Subsoil moisture got us through July. In August the crops started to show stress, but it was cool and that probably saved us some," he said.

Northeast Iowa got some rain in August that the rest of the state didn't and could be called Iowa's garden spot last year, Farnham added.

The dryness came at a critical time for soybeans, during grain filling, which hurt yields. Corn's critical time, pollination, had

 1997 Crop Season in Review

Rainfall (inches), Deviation from Normal

 Rainfall April to June 1997

passed and so the crop was not hurt as badly.

Dry conditions prevailed into harvest and warmer-than-normal temperatures and high winds dried corn to less than 20 percent in many fields and took moisture out of soybeans that affected yields.

With all the extremes, yields came in near records for both crops. The January estimate for soybeans was 46.5, second best for that crop, and 138 for corn, third highest. Regional yield variations (see map) show the effects of weather variations.

Farnham cautioned against getting caught up in the El Niño fever because its effects on crops seem to be guesswork. Farmers should expect similar conditions to last year, with the extremes.

He advise producers to watch the weather and soil conditions to see if they allow field work. "Timeliness is important, but don't push it," he said.

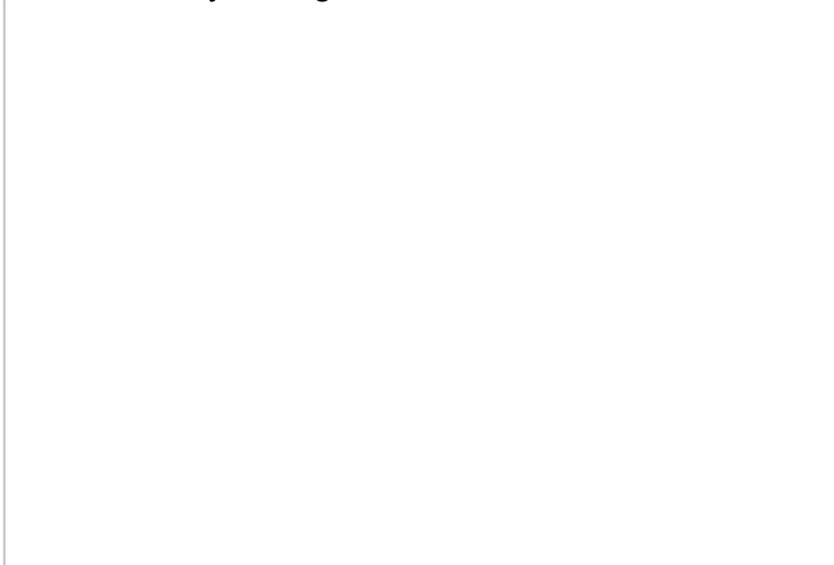
On the other hand, it also depends on the calendar.

"If we're getting into May and corn isn't planted, that's a new set of conditions," he added.

Source for rainfall and degree day data: Iowa Agricultural Statistics and [Elwynn Taylor](#) [1], Department of Agronomy.

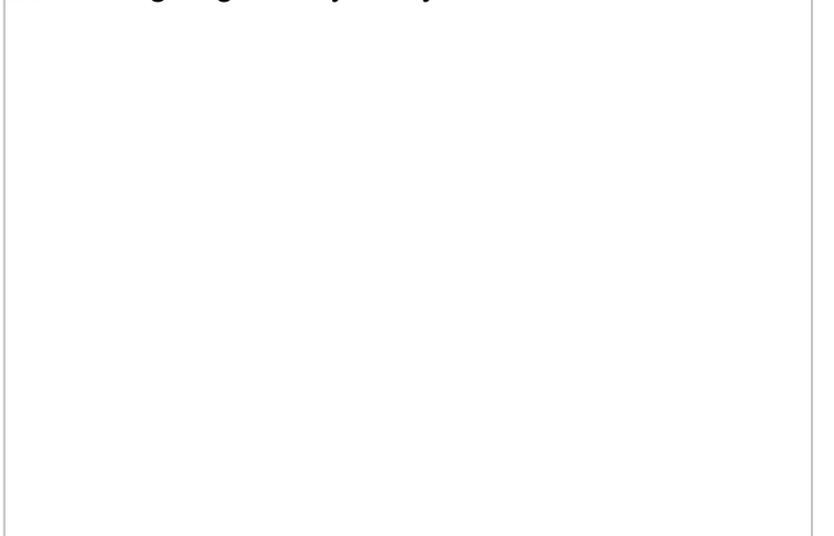
Source for 1997 yields: Iowa Agricultural Statistics.

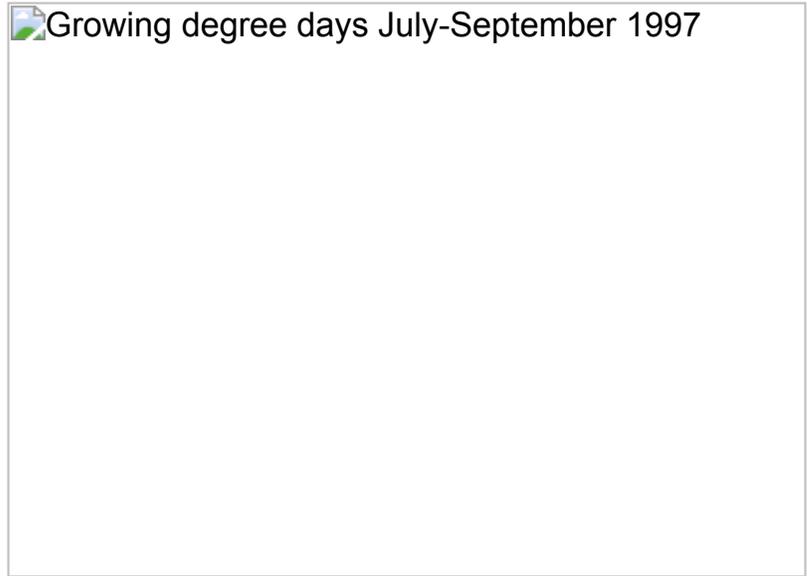
 Rainfall July to August 1997



Growing Degree Days

 Growing degree days May-June 1997



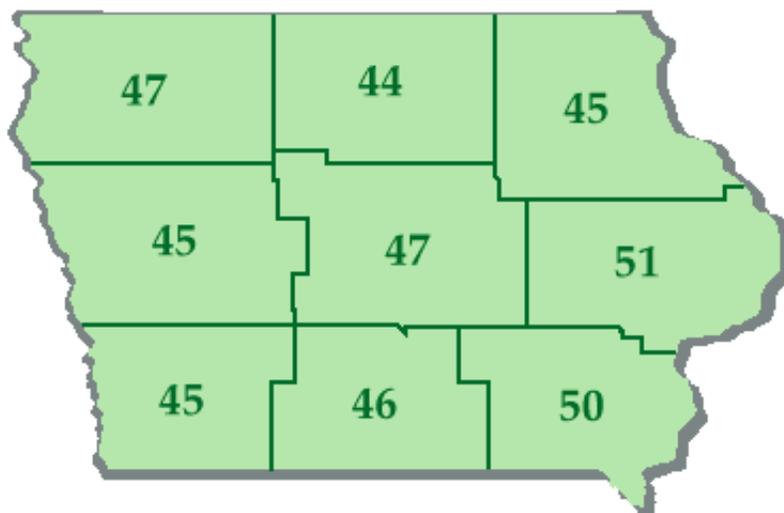


1997 Yields (January estimate)

Corn (bushels/acre)



Soybeans (bushels/acre)



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<http://www.ipm.iastate.edu/ipm/icm//ipm/icm/1998/4-7-1998/yield97.html>

Links:

[1] <http://extension.agron.iastate.edu/faculty/taylor.html>

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