

2015

## Corn nitrogen rate calculator helps farmers determine fertilizer needs, protects environment

Dustin Vande Hoef

*Iowa State University*, [dustin.vandehoef@iowawagriculture.gov](mailto:dustin.vandehoef@iowawagriculture.gov)

Willy Klein

*Iowa State University*, [wklein@iastate.edu](mailto:wklein@iastate.edu)

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### Recommended Citation

Vande Hoef, Dustin and Klein, Willy (2015) "Corn nitrogen rate calculator helps farmers determine fertilizer needs, protects environment," *Ag Decision Maker Newsletter*: Vol. 17 : Iss. 1 , Article 3.

Available at: <http://lib.dr.iastate.edu/agdm/vol17/iss1/3>

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## Corn nitrogen rate calculator helps farmers determine fertilizer needs, protects environment

by *Dustin Vande Hoef, Iowa Department of Agriculture and Land Stewardship, 515-281-3375*  
*Dustin.VandeHoef@Iowawagriculture.gov and Willy Klein, ISU Extension and Outreach, 515-294-0662, wklein@iastate.edu*

Iowa State University Extension and Outreach and the Iowa Department of Agriculture and Land Stewardship recently highlighted the Corn Nitrogen Rate Calculator available to help farmers find the maximum return to nitrogen fertilizer applications and the most profitable application rate for their farm.

The Corn Nitrogen Rate Calculator can be found at <http://extension.agron.iastate.edu/soilfertility/nrate.aspx>. This online tool is rapidly updated to allow for changing hybrid genetics, rotations and climatic conditions. The Iowa database in the calculator was updated in 2012 with 2011 response data and now contains 214 trials for corn following soybean and 111 trials for corn following corn.

“Having adequate nitrogen available is critical for corn production, but given the high prices for fertilizer it is important farmers determine the right amount that is needed on their crops,” Iowa Secretary of Agriculture Bill Northey said. “Every farmer wants to make sure plants have the fertilizer they need while not over applying, so this calculator is a great tool.”

The calculator can be used for both corn and soybean rotations and corn-on-corn operations. It allows farmers to compare up to five price ratios – pricing options for nitrogen and corn. Farmers can reach out to their local fertilizer suppliers to find current fertilizer prices

The calculator then lets farmers determine the optimal rate of application based on up to four different corn prices.

“Nitrogen rates determined by the calculator are the total fertilization amounts for each rotation; there is no need to further adjust rate for previous crop,” said John Sawyer, soil fertility and nutrient management specialist with Iowa State University Extension and Outreach.

Sawyer reminds farmers they should also wait until soil temperatures remain below 50° F before applying anhydrous ammonia (NH<sub>3</sub>) fertilizer this fall. A statewide real-time soil temperature data map is maintained by ISU Extension and Outreach at <http://extension.agron.iastate.edu/NPKnowledge/> and can be used by ag retailers and farmers to determine when fall nitrogen applications are appropriate.

## Research briefs from the Department of Economics

### Streamlined access to data reflects change at ICIP

Open access to data on the Internet doesn't always mean that it's easy to find. That's why Liesl Eathington, director of the Iowa Community Indicators Program (ICIP), has worked to streamline what she now offers on a revamped website found at [www.icip.iastate.edu](http://www.icip.iastate.edu).

ICIP, housed in the Department of Economics at Iowa State University, provides data resources to the general public as a means for understanding

regional economic and demographic change. The center also provides data and analysis services that help inform local decision making, policy development and strategic planning processes.

The new site coincides with an official name change to ICIP, formerly called the Regional Economics & Community Analysis Program (ReCAP). Says Eathington, “Both of these changes reflect an effort to speed up the search process for people seeking community-level indicators for a variety of purposes.”

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ICIP's new site is easier for users to navigate, makes frequently requested items more prominent and hones in on a smaller range of offerings. "As more data is available on more sites, there's less need for us to try to do everything," she says. "We want to try to help people locate things quickly and to put things into formats that are easy to understand."

Construction of the site is not complete, and the addition of an expanded reference section with help and other resources is yet to come. "It's challenging to make the site keep up with the demands that people have and the amounts and types of data that are available," she says.

Eathington appreciates feedback on these changes and is receptive to any direct questions through a phone call or e-mail. "You can waste hours searching for something," she admits. "With ICIP, there's a person behind the site who is happy to answer your questions."

ICIP is a coordinating agency in the State Data Center of Iowa network, part of a federal-state cooperative program providing census data and expertise to local data users. It is supported by the ISU Department of Economics, ISU Department of Sociology and ISU Extension and Outreach Community and Economic Development.

### **Dan Otto retires**

Dan Otto, professor, extension economist and associate program director of ISU Extension and Outreach Community and Economic Development, retired at the beginning of November after 32 years with the department. "I've enjoyed the people in the department and appreciate the caliber of the programs and the respect and acknowledgment that we receive," he said.

Otto plans to pursue hobbies and interests such as biking, traveling, cooking and history. He and his wife, Fran Antonovitz, formerly with the ISU Department of Economics, will continue to reside in Ames, but will enjoy part of their year in

Florida. View photos of Otto's retirement reception at <http://gallery.econ.iastate.edu/gallery/dan-otto-retirement-reception-102512>.

### **Recent publication by Hennessy and Jensen**

David Hennessy, Helen Jensen, and Fengxia Dong's article, "Factors determining milk quality and implications for production structure under somatic cell count standard modification," was recently accepted for publication in the November issue of the Journal of Dairy Science, and has been selected as a highlighted article of the month. It will be available for viewing in November at <http://www.journalofdairyscience.org/>.

### **Hayes participates in U.S.-China agricultural investment group**

Dermot Hayes, professor of economics and finance and the Pioneer Chair in Agribusiness at Iowa State University, is participating in a recent collaboration, supported by The Chicago Council on Global Affairs and The Paulson Institute, designed to discuss opportunities and constraints in U.S.-China agriculture-related cross-investment, examine successes and failures and explore potential investment models. Learn more about this work at [http://www.thechicagocouncil.org/files/About\\_Us/Press\\_Releases/FY13\\_Releases/121015.aspx](http://www.thechicagocouncil.org/files/About_Us/Press_Releases/FY13_Releases/121015.aspx).

### **USDA funds department's ag co-op work**

Keri Jacobs, Georgeanne Artz and Kevin Kimle of the Department of Economics were recent recipients of a \$175,000 grant from the USDA to fund their work in agricultural cooperatives as part of the Iowa Alliance for Cooperative Business Development (IACBD).

Updates, continued from page 1

**Internet Updates**

The following information files have been added or updated on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).

**Selected Alternative Agricultural Financial Benchmarks** – C3-65 (4 pages)

**Current Profitability**

The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://www.extension.iastate.edu/agdm/info/outlook.html).

**Corn Profitability** – A1-85

**Soybean Profitability** – A1-86

**Iowa Cash Corn and Soybean Prices** – A2-11

**Season Average Price Calculator** – A2-15

**Ethanol Profitability** – D1-10

**Biodiesel Profitability** – D1-15

**Returns for Farrow-to-Finish** – B1-30

**Returns for Weaned Pigs** – B1-33

**Returns for Steer Calves** – B1-35

**Returns for Yearling Steers** – B1-35

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Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and November 30, 1914, in cooperation with the U.S. Department of Agriculture. Cathann A. Kress, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

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