

Research Counters Claims That Ethanol Production Causes Global Warming



MIKE PLUMER

CARBONDALE, ILL.

The concern about carbon footprints has been escalating during the past six months. The Department of Energy, EPA, various universities, environmental groups, and the Illinois Corn Growers and National Corn Growers have been evaluating greenhouse gas models, reviewing research and conducting informational meetings. The concern is that ethanol production and farming practices are contributing to global warming. The main problem is that most of the agency information that was used to develop the global warming models is not current, nor does it use the latest research.

The University of Illinois, University of Nebraska, Ohio State University and others are just now releasing research results that will have a major impact on how the carbon footprint is determined. In agriculture, many things are included in the calculations: tillage practices (any tillage releases carbon), number of trips over the field, the type and amount of fertilizer used, nitrogen rate and application timing (low rates, injected, side-dressed is best), efficiency of equipment, grain drying practices,

yield of crops/acre, amount of fuel used per acre, use of cover crops, CRP acres, irrigation (less is better), and efficiency in fertilizer use. All these factors are used to determine whether the production of ethanol is energy efficient and the amount of carbon sequestration in fields.

Some of the research has shown farming is far more efficient than the agencies thought. In fact, University of Nebraska research showed that corn ethanol production had 48 percent lower greenhouse gas emissions than gasoline production. University of Illinois data has shown that there is an energy gain in ethanol production and that land use has not changed, countering the environmental community argument that farmers are bringing new, environmentally sensitive land into production.

Our southern Illinois no-till study has also shown that more carbon is sequestered than what the model used. After changing from tillage to no-till, our plots accumulated 39,724 pounds of carbon per acre over a 12-year period. Our continuous no-till accumulated 44,257 pounds of carbon per acre over the 12 years, from the 23rd to 35th year of continuous no-till. The use of cover crops has shown that even more carbon can be captured. Δ

Mike Plumer is Extension Educator, Natural Resources Management, with the University of Illinois at the Carbondale Extension Center.



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