

Crop Management Diagnostic Clinics:

Impact on Advisors Recommendations and Producer Practices

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Crop Management Diagnostic Clinics (CMDC) are multi-disciplinary field days conducted at the UNL Agricultural Research and Development Center. The targeted audience is producers and advisors including independent consultants and agribusiness sales and advisory personnel.



CMDC uses ~40 plots of 12 x 15 m to create learning exercises for genetic improvement and management of crops, soil fertility and water, weeds, diseases, and insect pests. In addition to teaching and discussion session, small teams of participants develop diagnostic skills through Crop Scene Investigations of crop growth problems.

In 2008, an on-line survey was sent to 652 attendees of one or more of 47 CMDC field days conducted during the previous 5 years. The objectives were: 1) relate respondent characteristics to on knowledge and behavior; 2) evaluate the effects of characteristics of practices on adoption or skill gain; 3) access the economic impact of CMDC; and 4) determine how to improve CMDC.

Results: Respondents included 127 advisors and 21 producers. Most were well-qualified professionals. The only respondent characteristics that was related to change in practices or recommendations attributed to CMDC was frequency of attending CMDC.

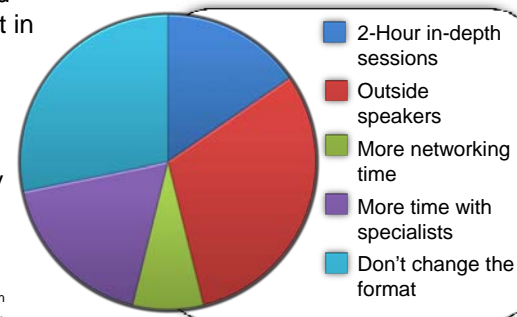
Respondent characteristics	Advisor	Producer
Row crop influenced/farmed (ha)	11,022	458
CMDC attendance, yr	2.4	2.7
Years in advising/farming	20	28
Post high school education, yr	4.5	3
Degree in agriculture, %	63	43

Respondents attributed CMDC for increased knowledge in most subject matter areas, but in particular for identification of disease injury, soybean aphid, spider mites, and soybean defoliating insects. The greatest change in behavior attributed to CMDC was in use of yield maps and monitoring of soil availability and crop water use in irrigation scheduling.



Observability and frequency of occurrence were more important to diagnostic skill than newness or importance of a problem. Adoption was more affected by compatibility of the practice with the farming system and its agronomic or economic advantage compared with the practice's complexity, cost, or trialability. Recommendations by advisors were most affected by CMDC for practices that were more complex, less easily tested, and less compatible with the farming system.

Producers attributed CMDC with mean yield increases of 0.26 and 0.17 Mg ha⁻¹ yr⁻¹ for corn and soybean, respectively, valued at \$19,950 yr⁻¹ farm⁻¹. The value of production increases resulting from CMDC was estimated to be \$17 500 000 yr⁻¹ for the 127 advisors and 21 producers that responded.



Respondents appreciated the hands-on opportunities with CMDC. Satisfaction with CMDC was high; the most selected improvement (pie chart) was to have more resource people from outside of UNL faculty.