

Faculty Vitae

Name: Kent A. McVay

Highest Degree: Ph.D. from University of Georgia received 1999

Date of Appointment: June 1999

Rank: Assistant Professor

Budgeted Time (Tenths):

| | | |
|------------|----|-------------------|
| Research- | .2 | Teaching- |
| Extension- | .8 | Directed Service- |

Program Area: Soil and Water Conservation

Significant Accomplishments 1993 to Present:

Developed a soil and water conservation extension program in dryland agriculture utilizing no-tillage cropping systems.

Goals for the Next Five Years:

Establish a long-term cropping systems direct seeding demonstration field at the Agronomy north farm to be used as training for our own specialists, showcase for best management practices at field days and in-service training events. Establish baseline fertility and soil physical measurements to be able to compare at approximately five year intervals.

Use the success of the dryland cropping systems program to begin an effort to bring no-tillage production methods to irrigated agriculture in central and western Kansas.

Produce a TMDL fact sheet on sediment (suspended solids) as part of a series on Water Quality in Kansas.

Produce a fact sheet on crop rotations and their importance in a no-till production system.

Coordinate the FHA and 4-H Land and Homesite evaluation contests held annually in the state.

Increase the adoption of no-tillage production systems in eastern Kansas to help producers reach TMDL goals that should improve surface water quality in the region while maintaining or improving agricultural profitability.

Develop a web-site to organize current no-tillage information for quick and convenient access by producers

Coordinate Banker s award program for soil conservation practices.

Publications:

| | | | | |
|---------------------------------------|------------|----|-------|----|
| Referee Journal Articles and Chapters | Since 1993 | 4 | Total | 4 |
| Numbered Extension Publications | Since 1993 | -- | Total | -- |
| Proceedings Papers | Since 1993 | 4 | Total | 4 |

Most Significant Publications Since 1993:

McVay, K. A., D. E. Radcliffe. 1999. Improving estimates of unsaturated hydraulic conductivity by accounting for entrapped air. Submitted to Water Resour. Res. Nov, 1999.

McVay, K. A., D. E. Radcliffe. 1999. Water quality of runoff and leachate from an improved loafing area. Georgia Water Resources Conference. March 30-31, 1999. University of Georgia, Athens, GA. 230-233.

McVay, K. A., D. E. Radcliffe. 1997. Comparison of direct and indirect methods for the prediction of unsaturated hydraulic conductivity. International Workshop on Characterization and Measurement of the Hydraulic Properties of Unsaturated Porous Media. October 22-24, 1997. Riverside, CA. In press.

Radcliffe, D. E., K. A. McVay, and D. E. Brune. 1997. Nitrogenous and phosphorous losses from dairy loafing areas and lagoons. Southeastern Sustainable Animal Waste Management Workshop. February 11-13, 1997. Tifton, GA. 25-32.

Stecker, J. A., D. D. Buchholz, R. G. Hanson, N. C. Wollenhaupt, K. A. McVay, 1995. Tillage and rotation effects on corn yield response to fertilizer nitrogen on Aqualf soils. Agron. J. 87:409-415.

Gupte, S. M., D. E. Radcliffe, and K. A. McVay. 1994. Field-scale dispersivity determined by time domain reflectometry. Proceedings of the conference on Time Domain Reflectometry in Environmental, Infrastructure and Mining Applications. Evanston, IL. Sep 7-9, 1994. 227-234.

Stecker, J. A., D. D. Buchholz, R. G. Hanson, N. C. Wollenhaupt, K. A. McVay, 1993. Application placement and timing of nitrogen solution for no-till corn. Agron. J. 85:645-650.

Stecker, J. A., D. D. Buchholz, R. G. Hanson, N. C. Wollenhaupt, K. A. McVay, 1993. Broadcast nitrogen-sources for no-till continuous corn and corn following soybean. Agron. J. 85:893-897.

Graduate Student Involvement:

| | | | | |
|--------------------------------------|------|----|-------|----|
| Students Graduated Since 1993 | M.S. | -- | Ph.D. | -- |
| Current Students | M.S. | -- | Ph.D. | -- |
| Current Member of Advisory Committee | M.S. | -- | Ph.D. | -- |

Grant Activity:

Most Common Sources of Extramural Support (ex. NSF, Sorghum Commission, NRI, Industry, Variety Performance):

Industry

KCARE

| | | | | |
|--|--------|---|----|--------|
| Proposals Submitted Since January 1, 1997: | Number | 3 | \$ | 34,000 |
| Funded | Number | 2 | \$ | 24,000 |

Current dollars (grant or contract) available to support your work \$25,000

Most Significant Funded Projects Since 1993:

Teaching:

Courses Taught:

| Course Number | Title | Most Recent Enrollment |
|---------------|-------|------------------------|
| N/A | | |

Number of Undergraduate Research Assistants: N/A

Number of Undergraduate Advisees: N/A

Service Activities:

Board member and advisor Kansas Crop Residue Management Alliance