

Automated sampler collects water during runoff at Atkins, Arkansas (left) and in-line water flow meter for irrigation water input (right), at Dumas, Arkansas.

Summary

Implementation of standard water quality monitoring methods on private working farms across the state has started to document the true impacts of Arkansas agriculture on surface water quality and efficiency of current cropping systems and the implemented conservation practices. As this runoff monitoring is being conducted on private property, the results are having greater impact and resonate more with the farming community than work conducted on University property. In fact, we are already seeing a sense of farmer ownership of the Discovery Farm Program to the extent that cooperating farmers are requesting runoff data from the ADF Program in order to present their results at farm meetings. In some cases, neighboring farmers are voluntarily implementing additional conservation practices to further reduce nutrient runoff after seeing the ADF results. Most importantly, the Discovery Farm Program is empowering farmers to proactively address environmental concerns. More information on the ADF Program can be found on it's website at http://discoveryfarms.uark.edu/.

Nutrient Management Specialist with the Department of Crop, Soil, and Environmental Sciences, Division of Agriculture, University of Arkansas. Mr. Berry, Mr. Hallmark, and Mr. Riley are Environmental Science Technicians associated with the Arkansas Discovery Farm Program. Sharpley and Berry are located in Fayetteville, Arkansas. Daniels, Hallmark, and Riley are located in Little Rock, Arkansas.

References

- Alexander, R.B., R.A. Smith, G.E. Schwarz, E.W. Boyer, J.V. Nolan, and J.W. Brakebill. 2008. Environ. Sci. Technol. 42: 822-830.
- Dale, V.H., C.L. Kling, J.L. Meyer, J. Sanders, H. Stallworth, T. Armitage, D. Wangsness, T.S. Bianchi, A. Blumberg, W. Boynton, D.J. Conley, W. Crumpton, M.B. David, D. Gilbert, R.W. Howarth, R. Lowrance, K.R. Mankin, J. Opaluch, H.W. Paerl, K. Reckhow, A.N. Sharpley, T.W. Simpson, C. Snyder, and D. Wright. 2010. Hypoxia in the Northern Gulf of Mexico. Springer Series on Environmental Management. New York, NY: Springer Science.
- Jarvie, H.P., A.N. Sharpley, D. Flaten, P.J.A. Kleinman, A. Jenkins, and T. Simmons. 2015. J. Environ. Qual. 44: 1308-1326.
- Rebich, R.A., N.A. Houston, S.V. Mize, D.K. Pearson, P.B. Ging, and C.E. Hornig. 2011. J. Am. Water Res. Assoc. 47: 1061-1086.
- Sharpley A.N., M. Daniels, L. Berry, C. Hallmark, and L. Riley. 2015. Discovery Farm Guiding Principles. Discovery Links. Fall 2015 ARDF Bulletin. University of Arkansas Division of Agriculture. Available at: http:// discoveryfarms.uark.edu/566.htm

Dr. Sharpley (E-mail: sharpley@uark.edu) is a Professor and Dr. Daniels (E-mail: mdaniels@uaex.edu) is Extension Water Quality and

IPNI Science Award – Nominations Are Due September 30, 2016

ach year, the International Plant Nutrition Institute (IPNI) offers its IPNI Science Award to recognize and promote distinguished contributions by scientists. The Award is intended to recognize outstanding achievements in research, extension or education; with focus on efficient management of plant nutrients and their positive interaction in fully integrated crop production that enhances yield potential. Such systems improve net returns, lower unit costs of production, and maintain or improve environmental quality.

The IPNI Science Award requires that a nomination form (no self-nominations) and supporting letters be received at IPNI Headquarters by September 30, 2016. Announcement of Award recipient will be in December, 2016. An individual Award nomination package will be retained and considered for two additional years (for a total of three years). There is no need to resubmit a nomination during that three-year period unless a significant change has occurred.

All details and nomination forms for the 2016 IPNI Science Award are available from the IPNI Awards website http://www.ipni.net/awards.

