



Christopher Garrett Henry, PE

Christopher Garrett Henry, PE, is the recipient of the 2024 Award for the Advancement of Surface Irrigation for research and extension efforts that have significantly improved water use in irrigated crops across the mid-South and beyond.

Henry is a professor and water management engineer at the University of Arkansas System Division of Agriculture. His role in this position is to develop, manage and deliver an integrated extension and research program addressing agricultural and other water demands in Arkansas, with a focus on eastern and southern areas of agricultural production. Henry conducts innovative applied research and extension programming related to water management and irrigation technologies, crop water use, chemigation, irrigation scheduling, pumping plant performance, and overall irrigation efficiency.

To become sustainable in groundwater withdrawals in Arkansas, agricultural irrigation must reduce water use by around 50%. The program Henry created utilizes experiment station research studies and on-farm research, demonstration, and extension outreach to accomplish this goal. He has successfully obtained over six million dollars in extramural funding to support this program since he started in Arkansas in 2011. Henry has also instigated a novel extension program, the Arkansas Irrigation Yield Contest. This program was built on a successful on-farm demonstration program. The purpose of the program is to promote the adop-

tion of Irrigation Water Management Practices (IWM), specifically, Multiple Inlet Rice Irrigation, Computerized Hole Selection, surge irrigation, and soil moisture monitoring. Henry has developed a patented novel furrow irrigation tail water recovery system especially useful in rice production. This technology has demonstrated a reduction of water use by about half through increased irrigation efficiency. Twelve systems have been installed on working farms, and the technology and commercialization is rapidly progressing.

A 30-year member of ASABE, Henry has served on several committees including NRES-242 since 2012 and the Professional Engineers Institute within ASABE since 2003. He holds membership with several other organizations including the Irrigation Association.

Henry has published 22 journals, 28 research series articles, 66 other non-referred publications and popular press articles, 92 extension publications, delivered 32 technical meeting presentations, 26 field days, and 101 extension and general public presentations. He holds five patents for new surface irrigation technology. Henry has also created two mobile apps that are widely used. He has received numerous other awards including the Engineer of the Year award from the Nebraska and Arkansas Sections of ASABE, the Irrigation Researcher of the Year award, and the Distinguished Rice Research and Education Team award.