



Suat Irmak

Suat Irmak, ASABE Fellow, is the 2021 recipient of the ADS/Hancor Soil & Water Engineering award for his significant contributions to scientific understanding in agricultural science and engineering through development, advancement and implementation of scientific techniques, education programs, and management tools.

Irmak is a professor and department head of agricultural and biological engineering at Penn State University in State College. Irmak is known for his unique teaching ability and coupling scientific and research data and information with practical implementations of strategies and his commitment to protecting the integrity of research and data to research and develop practical solutions for real world problems.

Irmak specializes in soil-water resources and numerous components of irrigation engineering. He is renowned as a scientist, researcher, educator, and a servant leader and is nationally and internationally recognized for his contributions to the advancement of science, education, and practice and exemplary accomplishments in soil and water resources engineering. His research, extension, outreach, and education programs revolve around innovation promotion, and adoption of durable, economical and accurate tools and technologies to conserve water resources, improve agricultural production efficiency and reduce energy consumption. The practical innovations of his research projects are being implemented by growers, crop consultants, state and federal water management agencies, and irrigation districts to make better-informed management decisions.

Irmak's extensive research has resulted in better understanding of plant response to environmental variables, which also resulted in developing improved measurement and modeling of evaporative losses, including evapotranspiration, transpiration and evaporation, from various surfaces to make more accurate hydrologic water balance analyses and improve soil and water conservation. He leads large programs to study and disseminate data and information about climate change impacts on water resources and agro-ecosystem productivity. One of Irmak's unique attributes is his outstanding ability to teach and work with farmers, extension educators, future agricultural engineering professionals, students and state and federal agency personnel to transfer research and science-based information through establishing large scale teaching platforms.

Irmak has authored or coauthored over 400 peer-reviewed articles, conference proceeding papers, extension publications, and research reports. His work has earned a huge number of awards, including the ASABE Heermann Sprinkler Irrigation award, the John Deere Gold Medal, the Turner Young Extension Worker award, and the New Holland Young Researcher award. He is also the 2021 recipient of the Netafim Award for Advancements in Microirrigation. He also received the American Society of Agronomy Excellence for Extension Education Materials in Extension Education Community award; the Universities Council on Water Resources Education and Public Service award; and numerous awards from the American Society of Civil Engineers, NASA and other institutions. In 2020, Irmak was inducted as an ASABE Fellow.