Sadeghi Receives Soil and Water Management and Conservation Graduate Student Award

Hossein Sadeghi, Ph.D. candidate in the Agriculture and Biological Systems Engineering Department at Washington State University, received SSSA's Soil and Water Management and Conservation Graduate Student Award.

Sadeghi’s work focuses on irrigation of agricultural crops. Irrigation is by far the largest use of water in the arid Western U.S. A typical center pivot usually achieves an irrigation application efficiency of only 80–85%, with 15–20% of the applied water being lost before it reaches the soil or is used by the crop. The most important factors affecting these losses are evaporation and wind drift losses. These cause application efficiency to vary greatly with weather conditions and diurnal changes. Small improvements in irrigation application efficiency of center pivots can have large benefits by reducing the consumption of limited fresh water resources, saving energy, and decreasing the soil erosion.

Prior to working on his Ph.D., Sadeghi received his M.Sc. (2008–2010) from the Water Engineering Department, Isfahan University of Technology, Isfahan, Iran, working on the effect of a freeze–thaw cycle on the erosion and runoff of a silty clay soil, and his B.Sc (2003–2007), from the Irrigation and Drainage Engineering Department, University of Tehran, Tehran, Iran.