Science Societies

President’s pick: SSSA research February 2026

By Aaron Lee M. Daigh

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SSSA is the sole publisher of the Soil Science Society of America Journal and Vadose Zone Journal and co-publishes the *Journal of Environmental Quality* and *Agricultural & Environmental Letters* with CSSA and ASA.

Each month, I will pick one or two article among our journals that represent some of the most exciting, creative, and innovative research in our field of soil science. This month, I have chosen the following two articles from *Vadose Zone Journal* and the *Journal of Environmental Quality*. Congratulations to the authors, and thank you for sharing your excellent work!

Modeling the Influence of Rhizodeposits on Root Water Uptake

In this modeling study, the authors reveal nuances of how rhizodeposits in soil can lead to different outcomes for root water uptake based on the intensity, timing, and frequency of the soil's atmospheric boundary conditions. Their article is a compelling example of the value of going beyond evaluating soil properties and extending efforts to investigate how those properties and environmental conditions combine to govern soil processes.

- **Authors:** Andrew Mair, Emma Gómez Peral, Mariya Ptashnyk, and Lionel Dupuy
- **Journal:***Vadose Zone Journal*
- **Article link:** https://doi.org/10.1002/vzj2.70053

Interacting Contributions of Climate and Land Use Change to Sediment Yield in an Agricultural Geographically Isolated Wetland From 1940 to 2022

The authors couple sediment core analysis with historical modeling to reconstruct more than 80 years of sedimentation history in an agricultural wetland, revealing how land use transitions and episodic climate events together shaped the sediment record. Their findings underscore that these abrupt interacting factors, not gradual

accumulation, dominated the long-term sedimentation dynamics.

- **Authors:** Frances C. O'Donnell, Chloe Eggert, Benjamin C. Webster, Coleman J. Barrie, Suranjana Chatterjee, Sophia M. Rauen, Steven T. Brantley, Stephen W. Golladay, and Matthew N. Waters
- **Journal:***Journal of Environmental Quality*
- **Article link:** https://doi.org/10.1002/jeq2.70130

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