

Auburn University Biosystems Engineering

Ecological and Water Resources Engineering Research Focus Area 2023 Publications

- Kalvakaalva, R.*, Smith, M., Prior, S.A., Runion, G.B., Ayipio, E., Blanchard, C., Wells, D., Blersch, D., Adhikari, S., Prasad, R. and Hanson, T.R., Higgins, B.T. 2023. Life cycle assessment of a decoupled biofloc aquaponics facility across seasons. *Journal of Cleaner Production*, 429, p.139356.
- Proano-Pena, G.*, Kardel, K., Blersch, D. M., & Carrano, A. L. 2023. The effect of interstitial surface spacing on algal biomass accumulation. *Algal Research*, 70, 102980.
- Kalvakaalva, R.*, Smith, M., Ayipio, E., Blanchard, C., Prior, S.A., Runion, G.B., Wells, D., Blersch, D., Adhikari, S., Prasad, R., Hanson, T.R., Wall, N., and Higgins, B.T., 2023. Mass-balance process model of a decoupled aquaponics system. *Journal of the ASABE*, 66(4): 955-967.
- Rose, P.K., V. Poonia, R. Kumar, N. Kataria, P. Sharma, J. Lamba, and P. Bhattacharya. 2023. Congo red dye removal using modified banana leaves: Adsorption equilibrium, kinetics, and reusability analysis. *Groundwater for Sustainable Development*: 101005. doi:<https://doi.org/10.1016/j.gsd.2023.101005>.
- Kumar, H*., P. Srivastava, J. Lamba,, B. Lena, E. Diamantopoulos, B. Ortiz, G. Morata, B. Takhellambam*, and L Bondesan. 2023. A methodology to optimize site-specific field capacity and irrigation thresholds. *Agricultural Water Management*, 286, 108385.
- Malhotra, K*., Zheng, J., A. Abebe, and J. Lamba. 2023. Application of Sediment Fingerprinting to Apportion Sediment Sources: Using Machine Learning Models. *Journal of the ASABE*. doi: 10.13031/ja.14906.
- Singh, R., R. Prasad, K. Balkcom, K., J. Lamba., and D. B Watts. 2023. Broiler Litter Application Rate and Time Impacts on Corn Ear Mineral Composition. *Agronomy Science*, 00, 00– 00. <https://doi.org/10.1002/agj2.21292>.
- Takhellambam, B.S*., P. Srivastava, J. Lamba, R.P. McGehee, H. Kumar* and D. Tian. 2023. Projected mid-century rainfall erosivity under climate change over the southeastern United States. *Science of The Total Environment* 865: 161119. doi:<https://doi.org/10.1016/j.scitotenv.2022.161119>.
- Sedighkia, M., Linhoss, A., & Mickle, P. (2023). Assessing Impacts of Flood Diversion on the Ecosystem of Brackish-Water Lakes through Simulation-Optimization Model. *Water*, 15(23), 4127.
- Linhoss, A., Mickle, P., & Osorio, R. J. (2023). Simulating How Freshwater Diversions Impact Salinity Regimes in an Estuarine System. *Journal of Marine Science and Engineering*, 11(12), 2349.
- Shahidzadehasadi, M.* , Linhoss, A., Moore, D., Reichley, S., Mickle, P., & Lawrence, M. (2024). Examining the effect of salinity on dolphin mortality using Lagrangian particle tracking in a hydrodynamic model. *Estuarine, Coastal and Shelf Science*, 297, 108605.
- Osorio, R. J.* , Linhoss, A., Skarke, A., Brasher, M. G., & McFarland*, M. (2024). Assessment of marsh terrace designs for wave attenuation utilizing a wave model. *Dynamics of Atmospheres and Oceans*, 101429.