

Dr. Ariel Turcios

Publications in refereed journals and refereed conference proceedings

2018

Cuff, G.; **Turcios, A.E.**; Mohammad-Pajoooh, E.; Kujawski, O.; Weichgrebe, D. & Rosenwinkel, K.H. (2018): Bioaccumulation of metals and granular sludge development in a newly-inoculated high rate anaerobic reactor. *Bioresource Technology Reports* 3, 119-126. doi: 10.1016/j.biteb.2018.07.012.

Cuff, G.; **Turcios, A.E.**; Mohammad-Pajoooh, E.; Kujawski, O.; Weichgrebe, D. & Rosenwinkel, K.H. (2018): High-rate anaerobic treatment of wastewater from soft drink industry: Methods, performance and experiences. *Journal of Environmental Management* 220, 8-15. doi:10.1016/j.jenvman.2018.05.015.

Mohammad-Pajoooh, E.; **Turcios, A.E.**, Cuff, G.; Weichgrebe, D.; Rosenwinkel, K.H.; Vedenyapina, M.D. & Sharifullina, L.R. (2018): Removal of inert COD and trace metals from stabilized landfill leachate by granular activated carbon (GAC) adsorption. *Journal of Environmental Management* 228, 189-196. doi: 10.1016/j.jenvman.2018.09.020.

Turcios, A.E. & Papenbrock, J. (2018): Biofiltration of the antibacterial drug sulfamethazine by the species *Chenopodium quinoa* and its further biodegradation through anaerobic digestion. *Journal of Environmental Sciences* 75, 54-63. doi: 10.1016/j.jes.2018.02.022.

2016

Cejas, I.; Rumlow, A.; **Turcios, A.E.**; Engelmann, F.; Martínez, M.E.; Yabor, L.; Papenbrock, J. & Lorenzo, J.C. (2016): Exposure of common bean seeds to liquid nitrogen modifies mineral composition of young plantlet leaves. *American Journal of Plant Sciences* 7 (12), 1612-1617. doi: 10.4236/ajps.2016.712152.

Turcios, A.E.; Weichgrebe, D. & Papenbrock, J. (2016a): Effect of salt and sodium concentration on the anaerobic methanisation of the halophyte *Tripolium pannonicum*. *Biomass & Bioenergy* 87, 69-77. doi: 10.1016/j.biombioe.2016.01.013.

Turcios, A.E.; Weichgrebe, D. & Papenbrock, J. (2016b): Potential use of the facultative halophyte *Chenopodium quinoa* Willd. As substrate for biogas production cultivated with different concentrations of sodium chloride under hydroponic conditions. *Bioresource Technology* 203, 272-279. doi: 10.1016/j.biortech.2015.12.061.

Turcios, A.E.; Weichgrebe, D. & Papenbrock, J. (2016c): Uptake and biodegradation of the antimicrobial sulfadimidine by the species *Tripolium pannonicum* acting as biofilter and its further biodegradation by anaerobic digestion and concomitant biogas production. *Bioresource Technology* 219, 687-693. doi: 10.1016/j.biortech.2016.08.047.

2014

Turcios, A.E. & Papenbrock, J. (2014): Sustainable treatment of aquaculture effluents – what can we learn from the past for the future? *Sustainability* 6, 836-856. doi:10.3390/su6020836.

Conference talks

Turcios, A.E.; Weichgrebe, D. & Papenbrock, J. (2015): Biogas and methane production using biomass of the halophyte *Salicornia spp.* Book of Abstracts from 14th World Congress of Anaerobic Digestion, November 15th – 18th, Viña del Mar, Chile.

Conference poster

Turcios, A. & Tränkner, M. (2019): Importance of potassium for quinoa (*Chenopodium quinoa* Willd.) cultivated under moderate saline conditions. Annual Meeting of the German Society of Plant Nutrition (DGP), September 25th – 27th, Berlin, Germany.

Further publications

Turcios, A.E.; Glasenapp, Y. & Papenbrock, J. (2017): Salzpflanzen als Biofilter, Küstenschutz und Delikatesse, Technologie-Informationen, Wasser und Meer 3, 6-7.

Turcios, A.E. (2016): Use of halophytes as biofilter to decrease organic and inorganic contaminants in water and their further use for biogas production. Dissertation Leibniz Universität Hannover, <https://www.tib.eu/de/suchen/id/TIBKAT%3A88080131X>.