

## Selected Publications

Dr. Leon Kochian

Bernardino KC, de Menezes CB, de Sousa SM, Guimarães CT, Carneiro PCT, Schaffert RE, **Kochian LV**, Pastina MM, Magalhaes JV. 2021. Association mapping and genomic selection for sorghum adaptation to tropical soils in a sorghum multiparental random mating population. *Theor and Applied Genetics* 134: 295-312 <https://doi.org/10.1007/s00122-020-03697-8>

Barros VA, Chandnani R, de Sousa SM, Maciel LS, Tokizawa M, Guimaraes CT, Magalhaes JV, **Kochian L**. 2020. Root adaptation via common genetic factors conditioning tolerance to multiple stresses for crops cultivated on acidic tropical soils. *Frontiers in Plant Science* 11: 1755.

Sun L, Zhang M, Liu X, Mao Q, Shi C, **Kochian LV**, Liao H. 2020. Aluminum is essential for root growth and development of tea plants (*Camellia sinensis*). *Journal Integrative Plant Biol* 62 (7): 984-997.

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Melo JO, Martins LGC, Barros BA, Pimenta MR, Lana UGP, Duarte CEM, Pastina MM, Guimaraes CT, Schaffert RE, **Kochian LV**, Fontes EPB, Magalhaes JV. 2019. Repeat variants for the SbMATE transporter protect sorghum roots from aluminum toxicity by transcriptional interplay in *cis* and *trans*. *Proceedings of the National Academy of Sciences of the USA* 116: 313-318

Yusaku Uga, Ithipong Assaranurak, Yuka Kitomi, Brandon G. Larson, Eric J. Craft, Jon E. Shaff, Susan R. McCouch, **Leon V. Kochian**. 2018. Genomic regions responsible for seminal and crown root lengths identified by 2D & 3D root system image analysis. *BMC Genomics* 19: 273-284

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Dong J, Piñeros MA, Li X, Yang H, Liu Y, Murphy A, **Kochian LV**, Liu Dong. 2017. An Arabidopsis ABC transporter mediates phosphate deficiency-induced remodeling of root architecture by modulating iron homeostasis in roots. *Mol Plant* 10: 244-259.

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**Kochian LV**, Piñeros MA, Liu J, Magalhaes JV. 2015. Plant adaptation to acid soils: The molecular basis for crop aluminum resistance. *Annual Review of Plant Biology* 66: 571-598.

Hufnagel B, de Sousa SM, Assis L, Guimaraes CT, Leiser W, Azevedo GC, Negri B, Larson BG, Shaff JE, Pastina MM, Barros BA, Weltzien E, Rattunde FFW, Viana JH, Clark RT, Falcão A, Gazaffi R, Garcia AAF, Schaffert RE, **Kochian LV**, Magalhaes JV. 2014. Duplicate and conquer: Multiple homologs of PHOSPHORUS-STARVATION TOLERANCE1 enhance phosphorus acquisition and sorghum performance on low-phosphorus soils. *Plant Physiol* 166: 159-167.

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Sivaguru M\*, Liu JL\*, **Kochian LV**. 2013. Targeted expression of SbMATE in the root distal transition zone is responsible for sorghum aluminum resistance. *Plant J* 76: 297–307.

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