



# Sorgoleone: Synthesis, function, and genetic variation

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*Sorgoleone with Drs. Sakiko Okumoto, Bill Rooney, and Guntur Subbarao | Field, Lab, Earth #140*

When we fertilize our crops, some of the nitrogen from that fertilizer gets converted into different forms through nitrification and denitrification. When non-plant-available forms of nitrogen exit the soil through water or as gas, it's a serious environmental problem. Thankfully, plants have some pretty nifty ways to prevent nitrification, such as biological nitrification inhibition (BNI), a process that manages the bacteria that cause nitrification. In this episode of the *Field, Lab, Earth* podcast, we discuss sorgoleone, a product of sorghum roots that plays a key role in the BNI process.

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## Dig deeper

- This episode is based on the *Crop Science* article, “Synthesis, Function, and Genetic Variation of Sorgoleone, the Major Biological Nitrification Inhibitor in Sorghum”: <https://doi.org/10.1002/csc2.70066>.
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