School of Plant Sciences Seminar

FRDAY MARCH 6th• *2pm* • Marley 230 and Zoom*
Coffee, cookies, and collegiality: 1:30pm, Marley lobby

Dr. Franck Dayan

Professor of Agricultural Biology
Colorado State University

"*In Planta* Mechanism of Action of the Allelochemical Sorgoleone"

Sponsored by Alyssa Twitty

*Please join us in person if you can.
Remote participation is also welcome:
https://arizona.zoom.us/j/83742635768
Passcode "SPLS2026"

Sorgoleone is a major component of the oily droplets exuding from sorghum root hairs. Biosynthesis of sorgoleone is compartmentalized within root hairs and involves a unique unique fatty acid desaturase, an alkylresorcinol synthase, an *O*-methyltransferase, and a cytochrome P450 monooxygenase. Sorgoleone interferes with several molecular target sites resulting in inhibition of photosynthesis in germinating seedlings. Sorgoleone is not translocated acropetally in older plants, but can be absorbed through the hypocotyl and cotyledonary tissues.

Plant Sciences