Special Guest Seminar

Thursday, May 7, 2015

@ 2.00 p.m. in SCIE 3317

Dr. Lukas Schreiber

Professor of Plant Ecophysiology

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Germany

Suberin in Arabidopsis and rice roots: characterization of P450 monooxygenases as key enzymes for suberization.

Root/soil interfaces are characterized by the deposition of hydrophobic biopolymer suberin to the endo- and exodermal cell walls of roots. In response to different environmental stress factors (salt, drought, oxygen deficiency …), suberization is enhanced, resulting in strengthened apoplastic barriers in roots. Suberin is composed of oxygenated long-chain fatty acids. Cytochrome P450 monooxygenases, leading to the formation of oxygenated fatty acids, represent key enzymes for suberin monomer biosynthesis. Using reverse genetic approaches, knockout mutants of P450-genes in Arabidopsis and rice could successfully be isolated, and changes in root suberin composition of mutants compared to wildtypes could be determined.

Everyone is welcome to attend!

For information, please contact Dr. Kosala Ranathunge (Rothstein Lab) ×54841