1. Record Nr. UNINA9910298444403321 Molecular Physiology and Ecophysiology of Sulfur / / edited by Luit J. Titolo De Kok, Malcolm J. Hawkesford, Heinz Rennenberg, Kazuki Saito, Ewald Schnug Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-20137-9 Edizione [1st ed. 2015.] 1 online resource (263 p.) Descrizione fisica Proceedings of the International Plant Sulfur Workshop, , 2451-9073 Collana 581.24 Disciplina Soggetti Plant physiology Plant biochemistry Plant ecology Plant Physiology Plant Biochemistry Plant Ecology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Foreword: The Value of Sulfur for Grapevine -- Partitioning of Sulfur between Primary and Secondary Metabolism -- Significance of Long-Distance Transport -- GSH Partitioning between the Nucleus and Cytosol in Arabidopsis thaliana -- Sulfur Metabolism in Hemiascomycetes Yeast -- Small World: A Plant Perspective on Human Sulfate Activatio -- Auxin Response Factors and AUX/IAA Proteins Potentially Control -S Responsive Expression of SULTR1;1 -- SULTR1;2 in S Nutrient-Status Control in Arabidopsis -- Comparison of Nitrite Reductase (AcNiR1) with Sulfite Reductase (AcSiR1) in Allium cepa (L.) -- Metabolic Analysis of Sulfur Metabolism During Developmental Leaf Senescence -- Apoplastic Iron Concentration in Maize Roots Grown under Sulfate Deprivation -- Suitability of the Ratio Between Reduced and Oxidized Glutathione as an Indicator for Plant Stress -- OAS Cluster Genes: A Tightly Co-Regulated Network -- More Than a Substrate: The O-Acetylserine Responsive Transcriptome -- The CBL-

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Sommario/riassunto

This proceedings volume contains a selection of invited and contributed papers of the 9th International Workshop on Sulfur Metabolism in Plants, which was hosted by the Albert-Ludwigs-University Freiburg and held at Schloss Reinach, Freiburg-Munzigen, Germany from April 14-17, 2014. The focus of this workshop was on molecular physiology and ecophysiology of sulfur in plants, and the content of this volume presents an overview on the current research developments in this field. The volume covers various aspects of the regulation of sulfate uptake and assimilation in plants, from a cellular to a whole plant level. The significance of sulfur metabolism in plant response to environmental stress is discussed in detail.