

Contents

Discussion meeting issue: Enhancing photosynthesis in crop plants:
targets for improvement

	Article ID		Article ID
INTRODUCTION			
Photosynthesis solutions to enhance productivity CH Foyer, AV Ruban and PJ Nixon	20160374	Interaction between photosynthetic electron transport and chloroplast sinks triggers protection and signalling important for plant productivity PJ Gollan, Y Lima-Melo, A Tiwari, M Tikkanen and E-M Aro	20160390
ARTICLES			
What limits photosynthetic energy conversion efficiency in nature? Lessons from the oceans PG Falkowski, H Lin and MY Gorbunov	20160376	Chloroplast thioredoxin systems: prospects for improving photosynthesis L Nikkanen, J Toivola, MG Diaz and E Rintamäki	20160474
Structure of Psb29/Thf1 and its association with the FtsH protease complex involved in photosystem II repair in cyanobacteria M Bečková, J Yu, V Krynická, A Kozlo, S Shao, P Koník, J Komenda, JW Murray and PJ Nixon	20160394	Enhancing (crop) plant photosynthesis by introducing novel genetic diversity M Dann and D Leister	20160380
Overexpression of plastid terminal oxidase in <i>Synechocystis</i> sp. PCC 6803 alters cellular redox state K Feilke, G Ajlani and A Krieger-Liszkay	20160379	Inhibitor-induced oxidation of the nucleus and cytosol in <i>Arabidopsis thaliana</i> : implications for organelle to nucleus retrograde signalling B Karpinska, SO Alomrani and CH Foyer	20160392
Hacking the thylakoid proton motive force for improved photosynthesis: modulating ion flux rates that control proton motive force partitioning into $\Delta\psi$ and ΔpH GA Davis, AW Rutherford and DM Kramer	20160381	Strategies and tools to improve crop productivity by targeting photosynthesis ML Nuccio, L Potter, SM Stieglmeyer, J Curley, J Cohn, PE Wittich, X Tan, J Davis, J Ni, J Trullinger, R Hall and NJ Bate	20160377
Photoprotection through ultrafast charge recombination in photochemical reaction centres under oxidizing conditions F Ma, DJK Swainsbury, MR Jones and R van Grondelle	20160378	Increased SBPase activity improves photosynthesis and grain yield in wheat grown in greenhouse conditions SM Driever, AJ Simkin, S Alotaibi, SJ Fisk, PJ Madgwick, CA Sparks, HD Jones, T Lawson, MAJ Parry and CA Raines	20160384
Quantifying the efficiency of photoprotection AV Ruban	20160393	Recruitment of pre-existing networks during the evolution of C ₄ photosynthesis I Reyna-Llorens and JM Hibberd	20160386
Slow induction of photosynthesis on shade to sun transitions in wheat may cost at least 21% of productivity SH Taylor and SP Long	20160543	A bioarchitectonic approach to the modular engineering of metabolism CA Kerfeld	20160387