

CLOSED FLUORCAM

LIST OF REFERENCES

2025

WILLIAMS, L., HOLZER, V.J.C., NICKELSEN, J., HATTON, F.L., MELE, E. (2025). Generation of photosynthetic biomaterials by loading electrospun fibres with the green microalgae, *Chlamydomonas reinhardtii*. *Next Materials*, 7, 100359.

DOI: [10.1016/j.nxmate.2024.100359](https://doi.org/10.1016/j.nxmate.2024.100359)

2024

BISON, N.N., & MICHALETZ, S.T. (2024). Variation in leaf carbon economics, energy balance, and heat tolerance traits highlights differing timescales of adaptation and acclimation. *New Phytologist*, 242: 1919–1931.

DOI: [10.1111/nph.19702](https://doi.org/10.1111/nph.19702)

FU, Z-W., DING, F., ZHANG, B-L., LIU, W-C., HUANG, Z-H., ET AL. (2024). Hydrogen peroxide sulfenylates and inhibits the photorespiratory enzyme PGLP1 to modulate plant thermotolerance. *Plant Communications* 5, 100852.

DOI: [10.1016/j.xplc.2024.100852](https://doi.org/10.1016/j.xplc.2024.100852)

GENG, R., LI, X., HUANG, J., & ZHOU, W. (2024). The chloroplast singlet oxygen-triggered biosynthesis of salicylic acid and jasmonic acid is mediated by EX1 and GUN1 in *Arabidopsis*. *Plant, Cell Environ*, 47, 2852–2864.

DOI: [10.1111/pce.14910](https://doi.org/10.1111/pce.14910)

KIM, H., KIM, J., CHOI, D.S., KIM, M-S., DESLANDES, L., ET AL. (2024). Molecular basis for the interference of the *Arabidopsis* WRKY54-mediated immune response by two sequence-unrelated bacterial effectors. *Plant J*, 118(3), 839–855.

DOI: [10.1111/tpj.16639](https://doi.org/10.1111/tpj.16639)

KIM, J., KALEKU, J., WOO, J., JIN, H., KANG, H.J., ET AL. (2024). An RXLR effector targets ER-Golgi interface to induce ER stress and necrotic cell death. *bioRxiv*, 2023.12.15.571945.

DOI: [10.1101/2023.12.15.571945](https://doi.org/10.1101/2023.12.15.571945)

LAZZARIN, M., DUPONT, K., VAN IEPEREN, W., MARCELIS, L.F.M., & DRIEVER, S.M. (2024). Far-red light effects on plant photosynthesis: from short-term enhancements to long-term effects of artificial solar light. *Annals of Botany*, mcae104.

DOI: [10.1093/aob/mcae104](https://doi.org/10.1093/aob/mcae104)

LAZZARIN, M., DRIEVER, S., WASSENAAR, M., MARCELIS, L.F.M., & VAN IEPEREN, W. (2024). Shining light on diurnal variation of non-photochemical quenching: Impact of gradual light intensity patterns on short-term NPQ over a day. *Physiologia Plantarum*, 176(4), e14410.

DOI: [10.1111/ppl.14410](https://doi.org/10.1111/ppl.14410)

LEMKE, M. D., ABATE, A. N., & WOODSON, J. D. (2024). Investigating the mechanism of chloroplast singlet oxygen signaling in the *Arabidopsis thaliana* accelerated cell death 2 mutant. *Plant Signaling & Behavior*, 19(1).
DOI: 10.1080/15592324.2024.2347783

SAHAY, S., GRZYBOWSKI, M., SCHNABLE, J.C., & GŁOWACKA, K. (2024). Genotype-specific nonphotochemical quenching responses to nitrogen deficit are linked to chlorophyll a to b ratios. *J Plant Physiol*, 297, 154261.
DOI: 10.1016/j.jplph.2024.154261

SAHAY, S., SHRESTHA, N., DIAS, H.D., ET AL. (2024). Nonphotochemical quenching kinetics GWAS in sorghum identifies genes that may play conserved roles in maize and *Arabidopsis thaliana* photoprotection. *Plant J.*
DOI: 10.1111/tpj.16967

SMITH, K.E., COWAN, L., TAYLOR, B., MCCLUSKEY, L., HEATLEY, M., ET AL. (2024). Physiological adaptation to irradiance in duckweeds is species and accession specific and depends on light habitat niche. *J Exp Botany*, 75(7), 2046-2063.

DOI: 10.1093/jxb/erad499

TAMIZHSELVAN, P.; MADHAVAN, S.; CONSTAN-AGUILAR, C.; ELREFAAY, E.R.; LIU, J.; ET AL. (2024). Chloroplast Auxin Efflux Mediated by ABCB28 and ABCB29 Fine-Tunes Salt and Drought Stress Responses in *Arabidopsis*. *Plants* 2024, 13, 7.

DOI: 10.3390/plants13010007

THAKUR, A., KUMAR, A., KUMAR, D., ET AL. (2024). Physiological and biochemical regulation of *Valeriana jatamansi* Jones under water stress. *Plant Physiol Biochem*, 208, 108476.

DOI: 10.1016/j.plaphy.2024.108476

TURC, B., SAHAY, S., HAUPT, J., ET AL. (2024). Up-regulation of non-photochemical quenching improves water use efficiency and reduces whole-plant water consumption under drought in *Nicotiana tabacum*. *J Exp Botany*, 75(13), 3959-3972.

DOI: 10.1093/jxb/erae113

TZORTZI, J.N., & HASBINI, R.A. (2024). Strategies and solutions to green concrete construction material. *E3S Web of Conferences* 546, 01005.

DOI: 10.1051/e3sconf/202454601005

TZORTZI, J.N., HASBINI, R.A., BALLOTTARI, M., & BELLAMOLI, F. (2024). The Living Concrete Experiment: Cultivation of Photosynthetically Active Microalgal on Concrete Finish Blocks. *Sustainability*, 16, 2147.

DOI: 10.3390/su16052147

2023

BALAKHONOVÁ, V., DOBISOVÁ, T., BENEDIKY, Z., PANZAROVÁ, K., PYTELA, J., ET AL. (2023). iReenCAM: automated imaging system for kinetic analysis of photosynthetic pigment biosynthesis at high spatiotemporal resolution during early deetiolation. *Front. Plant Sci.*, 14:1093292.

DOI: 10.3389/fpls.2023.1093292

BERALDO, C., GUYON-DEBAST, A., ALBORESI, A., NOGUÉ, F., & MOROSINOTTO, T. (2023). Functional analysis of *PsbS* transmembrane domains through base editing in *Physcomitrium patens*. *Plant J.* 113(5), 1049-1061.

DOI: 10.1111/tpj.16099

CORTI, F., FESTA, M., STEIN, F., STEVANATO, P., SIROKA, J., ET AL. (2023). Comparative analysis of wild-type and chloroplast MCU-deficient plants reveals multiple consequences of chloroplast calcium handling under drought stress. *Front Plant Sci*, 14:1228060.

DOI: [10.3389/fpls.2023.1228060](https://doi.org/10.3389/fpls.2023.1228060)

CUI, R., KWAK, J.I., & AN, Y-J. (2023). Multigenerational effects of microplastic fragments derived from polyethylene terephthalate bottles on duckweed *Lemna minor*: Size-dependent effects of microplastics on photosynthesis. *Sci Total Environ*, 872, 162159.

DOI: [10.1016/j.scitotenv.2023.162159](https://doi.org/10.1016/j.scitotenv.2023.162159)

LARSEN, D.H., MARCELIS, L.F.M., VAN KEMPEN, D., ET AL. (2023). Far-red light during cultivation improves postharvest chilling tolerance in basil. *Postharvest Biol Tech*, 198, 112232.

DOI: [10.1016/j.postharvbio.2022.112232](https://doi.org/10.1016/j.postharvbio.2022.112232)

LEE, K.P., LI, M., LI, M., LIU, K., MEDIAN-PUCHE, L., ET AL. (2023). Hierarchical regulatory module GENOMES UNCOUPLED1-GOLDEN2-LIKE1/2-WRKY18/40 modulates salicylic acid signaling. *Plant Physiol*, 192(4), 3120-3133.

DOI: [10.1093/plphys/kiad251](https://doi.org/10.1093/plphys/kiad251)

LIU, K., LEE, K.P., DUAN, J., KIM, E.Y., SINGH, R.M., ET AL. (2023). Cooperative role of AtRsmD and AtRimM proteins in modification and maturation of 16S rRNA in plastids. *Plant J*, 114(2), 310-324.

DOI: [10.1111/tpj.16135](https://doi.org/10.1111/tpj.16135)

MOŻDŻEŃ, K., BARABASZ-KRASNY, B., GALERA, H., ANTKOWIAK, W., & WÓDKIEWICZ, M. (2023). Changes in physiological features of undergrowth indicator species of old forest. *Annales Universitatis Paedagogicae Cracoviensis Studia Natura*, 8(1).

DOI: [10.24917/25438832.8.4](https://doi.org/10.24917/25438832.8.4)

NATALE, S., LA ROCCA, N., BATTISTUZZI, M., ET AL. (2023). Structure and function of bark and wood chloroplasts in a drought-tolerant tree (*Fraxinus ornus* L.). *Tree Physiol*, 43(6), 893-908.

DOI: [10.1093/treephys/tpad013](https://doi.org/10.1093/treephys/tpad013)

SAHAY, S., GRZYBOWSKI, M., SCHNABLE, J.C., & GŁOWACKA, K. (2023). Genetic control of photoprotection and photosystem II operating efficiency in plants. *New Phytologist*, 239: 1068–1082.

DOI: [10.1111/nph.18980](https://doi.org/10.1111/nph.18980)

SAHAY, S., SHRESTHA, N., DIAS, H.D., ET AL. (2024). Comparative GWAS identifies a role for Mendel's green pea gene in the nonphotochemical quenching kinetics of sorghum, maize, and arabidopsis. *bioRxiv*, 2023.08.29.555201.

DOI: [10.1101/2023.08.29.555201](https://doi.org/10.1101/2023.08.29.555201)

SEO, Y-E., LEE, H-Y., KIM, H., YAN, X., PARK, S.A., ET AL. (2023). The *Phytophthora capsici* RxLR effector CRISIS2 triggers cell death via suppressing plasma membrane H⁺-ATPase in the host plant. *J Exp Bot*, 74(5), 1675-1689.

DOI: [10.1093/jxb/erac500](https://doi.org/10.1093/jxb/erac500)

SEO, Y.-E., YAN, X., CHOI, D., & MANG, H. (2023). *Phytophthora infestans RxLR Effector PITG06478Hijacks 14-3-3 to Suppress PMA Activity Leadingto Necrotrophic Cell Death*. *MPMI*, 36(3), 150-158.
DOI: 10.1094/MPMI-06-22-0135-R

VASILIEVA, S., LUKYANOV, A., ANTIPOVA, C., GRIGORIEV, T., LOBAKOVA, E., ET AL. (2023). *Interactive Effects of Ceftriaxone and Chitosan Immobilization on the Production of Arachidonic Acid by and the Microbiome of the Chlorophyte Lobosphaera sp. IPPAS C-2047*. *Int. J. Mol. Sci.*, 24, 10988.
DOI: 10.3390/ijms241310988

WAN, C., ZHANG, H., CHENG, H., SOWDEN, R.G., CAI, W., ET AL. (2023). *Selective autophagy regulates chloroplast protein import and promotes plant stress tolerance*. *EMBO J* 42:e112534.
DOI: 10.15252/embj.2022112534

WULF, D., KRÜGER, F.J., KLAGES, L.J., VIEHÖVER, P., JIN, E., ET AL. (2023). *Multiple transcription factors mediate acclimation of Chlamydomonas to light stress*. *bioRxiv* 2023.10.30.564712.
DOI: 10.1101/2023.10.30.564712

XU, Y., ZHANG, J., WAN, Z., HUANG, S., DI, H., ET AL. (2023). *Physiological and transcriptome analyses provide new insights into the mechanism mediating the enhanced tolerance of melatonin-treated rhododendron plants to heat stress*. *J Integrative Agriculture*, 22(8): 2397-2411.

DOI: 10.1016/j.jia.2023.07.005

YILMAZER, I., VETRANO, P., EICKE, S., ABT, M.R., TRAVERSO, E., ET AL. (2023). *A conserved ESCRT-II-like protein participates in the biogenesis and maintenance of thylakoid membr 00,00000032020000000000000211anes*. *bioRxiv*, 2023.10.10.561251.

DOI: 10.1101/2023.10.10.561251

2022

AMIN B., ATIF M.J., MENG H., ET AL. (2022). *Melatonin Rescues Photosynthesis and Triggers Antioxidant Defense Response in Cucumis sativus Plants Challenged by Low Temperature and High Humidity*. *Frontiers in Plant Science*. 2022 ;13:855900.

DOI: 10.3389/fpls.2022.855900.

ASKARI N., ALINIAEIFARD S., VISSER R.G.F. (2022). *Low CO₂ levels are detrimental for In vitro plantlets through disturbance of photosynthetic functionality and accumulation of reactive oxygen species*. *Horticulturae*. 8(1):44.

DOI: 10.3390/horticulturae8010044

BARABASZ-KRASNY B.; MOZDZEN, K.; TATOJ, A.; ROZEK K.; ZANDI P., ET AL. (2022). *Ecophysiological Parameters of Medicinal Plant Filipendula vulgaris in Diverse Habitat Conditions*. *Biology* 2022, 11, 1198.
DOI: 10.3390/ biology11081198

CARRELL, A.A., LAWRENCE, T.J., CABUGAO, K.G.M., ET AL. (2022). *Habitat-adapted microbial communities mediate Sphagnum peatmoss resilience to warming*. *New Phytologist*.
DOI: 10.1111/nph.18072

CHOI D.S., NGUYEN T.K.L. & OH M.M., ET AL. (2022). Growth and biochemical responses of kale to supplementary irradiation with different peak wavelengths of UV-A light-emitting diodes. Hortic. Environ. Biotechnol. 63.
DOI: 10.1007/s13580-021-00377-4

Du G., Li X., Wang, J. et al. (2022). Discrepancy in photosynthetic responses of the red alga Pyropia yezoensis to dehydration stresses under exposure to desiccation, high salinity, and high mannitol concentration. Mar Life Sci Technol 4, 10–17 (2022).
DOI: 10.1007/s42995-021-00115-w

HAVLIK, I., BEUTEL, S., SCHEPER, T., ET AL. (2022). On-line monitoring of biological parameters in microalgal bioprocesses using optical methods. Energies, 15, 875.
DOI: 10.3390/en15030875

LAMACZOVÁ, A.; MALINA, T.; MARŠÁLKOVÁ, E.; ODEHNALOVÁ, K.; OPATŘILOVÁ, R., ET AL. (2022). Anxiety in Duckweed—Metabolism and Effect of Diazepam on Lemna minor. Water, 14, 1484.
DOI:10.3390/w14091484

LANOUE J, LITTLE C AND HAO X (2022) The Power of Far-Red Light at Night: Photomorphogenic, Physiological, and Yield Response in Pepper During Dynamic 24 Hour Lighting. Front. Plant Sci. 13:857616.
DOI: 10.3389/fpls.2022.857616

LARSEN D.H., LI H., SHRESTHA S., ET AL. (2022) Lack of Blue Light Regulation of Antioxidants and Chilling Tolerance in Basil. Front. Plant Sci. 13:852654.
DOI: 10.3389/fpls.2022.852654

LARSEN, D.H., LI, H., VAN DE PEPPEL, A.C., ET AL. (2022). High light intensity at End-Of-Production improves the nutritional value of basil but does not affect postharvest chilling tolerance. Food Chemistry, 369, 130913.
DOI: 10.1016/j.foodchem.2021.130913

LAW, S.S.Y., LIOU, G., NAGAI, Y. ET AL. (2022). Polymer-coated carbon nanotube hybrids with functional peptides for gene delivery into plant mitochondria. Nat Commun, 2417.
DOI: 10.1038/s41467-022-30185-y

LEE, H.-Y., SEO, Y.-E., LEE, J.H., LEE, S.E., ET AL. (2022), Plasma membrane-localized plant immune receptor targets H⁺-ATPase for membrane depolarization to regulate cell death. New Phytol, 233: 934-947.
DOI: 10.1111/nph.17789

*MA X, LIU JN, YAN L, LIANG Q, FANG H, WANG C., ET AL.(2022) Comparative Transcriptome Analysis Unravels Defense Pathways of *Fraxinus velutina* Torr Against Salt Stress. Front. Plant Sci. 13:842726.*
DOI: 10.3389/fpls.2022.842726

MANG H., SEO Y-E., LEE H-Y., ET AL. (2022). The Phytophthora capsici RxLR effector CRISIS2 has roles in suppression of PTI and triggering cell death in host plant. bioRxiv 2022.03.21.485173;
DOI:10.1101/2022.03.21.485173

Pshybytko N. L., Kruk J., Lysenko E., et al (2022). Heat-Induced Modifications of Linear and Alternative Electron Flow in Barley Chloroplasts. SSRN.
DOI: 10.2139/ssrn.4193692

REN, J., JIANG, C., ZHANG, H., SHI, X., AI, X., LI, R. ET AL. (2022). LncRNA-mediated ceRNA networks provide novel potential biomarkers for peanut drought tolerance. *Physiologia Plantarum*, 174(1), e13610.

DOI: [10.1111/ppl.13610](https://doi.org/10.1111/ppl.13610)

SOUZA, G. A. R. DE ANDRADE N. D., RUAS K. F., ET AL (2022). Optimal Temperatures Induce Photochemical Leaf Damages and Reduce Photosynthetic O₂ Evolution in *Carica Papaya* L. Genotypes SSRN.

DOI: [10.2139/ssrn.4134267](https://doi.org/10.2139/ssrn.4134267)

VELAY F., ABDALLAH D., LECAMPION C., ET AL. (2022). Structural Maintenance of Chromosome 3 interacts with the Topoisomerase VI complex and contributes to the oxidative stress response in *Arabidopsis thaliana*.

bioRxiv 2022.10.27.514040;

DOI: [10.1101/2022.10.27.514040](https://doi.org/10.1101/2022.10.27.514040)

YE, Q.; WANG, H.; LI, H. (2022). Arbuscular Mycorrhizal Fungi Improve Growth, Photosynthetic Activity, and Chlorophyll Fluorescence of *Vitis vinifera* L. cv. Ecolly under Drought Stress. *Agronomy*, 12, 1563.

DOI: [10.3390/agronomy12071563](https://doi.org/10.3390/agronomy12071563)

CHANG, J., GUO, Y., LI, J., ET AL. (2021). Positive Interaction between H₂O₂ and Ca²⁺ Mediates Melatonin-Induced CBF Pathway and Cold Tolerance in Watermelon (*Citrullus lanatus* L.). *Antioxidants*, 10, 1457.

DOI: [10.3390/antiox10091457](https://doi.org/10.3390/antiox10091457)

DANN, M., ORTIZ, E. M., THOMAS, M., GULJAMOW, A., ET AL. (2021). Enhancing photosynthesis at high light levels by adaptive laboratory evolution. *Nature Plants*, 7(5), 681–695.

DOI: [10.1038/s41477-021-00904-2](https://doi.org/10.1038/s41477-021-00904-2)

DOS SANTOS, E.S., GRACIANO, D.E., FALCO, W.F., ET AL. (2021). Effects of copper oxide nanoparticles on germination of *Sesbania virgata* (FABACEAE) plants. *An Acad Bras Cienc*, 93(3): e20190739.

DOI: [10.1590/0001-3765202120190739](https://doi.org/10.1590/0001-3765202120190739)

GUADAGNO, C.R., BEVERLY, D.P. & EWERS, B.E. (2021). The love–hate relationship between chlorophyll a and water in PSII affects fluorescence products. *Photosynthetica*, 59, 409-421.

DOI: [10.32615/PS.2021.023](https://doi.org/10.32615/PS.2021.023)

HERPPICH, W.B. & ZSOM, T. (2021). Comprehensive Assessment of the Dynamics of Banana Chilling Injury by Advanced Optical Techniques. *Applied Sciences*, 11, 11433.

DOI: [10.3390/APP112311433](https://doi.org/10.3390/APP112311433)

JIANG, D., CHEN, J., ZHANG, Z., ET AL. (2021). Mitochondrial Transcription Termination Factor 27 Is Required for Salt Tolerance in *Arabidopsis thaliana*. *International Journal of Molecular Sciences*, 22, 1466.

DOI: [10.3390/IJMS22031466](https://doi.org/10.3390/IJMS22031466)

JIANG, M., YUAN, Y., FANG, Y., ET AL. (2021). Integrating photon up-and down-conversion to produce efficient light-harvesting materials for enhancing natural photosynthesis. *Journal of Materials Chemistry A*.

DOI: [10.1039/d1ta04443e](https://doi.org/10.1039/d1ta04443e)

KAMEOKA, T., OKAYASU, T., KIKURAKU, K., OGAWA, T., ET AL. (2021). Cooperation of chloroplast ascorbate peroxidases and proton gradient regulation 5 is critical for protecting *Arabidopsis* plants from photo-oxidative stress. *The Plant Journal*, 107(3), 876–892.

DOI: [10.1111/tpj.15352](https://doi.org/10.1111/tpj.15352)

KHAN, R., MA, X., ZHANG, J., ET AL. (2021). Circular drought-hardening confers drought tolerance via modulation of the antioxidant defense system, osmoregulation, and gene expression in tobacco. *Physiologia Plantarum*, 172(2), 1073–1088.

DOI: [10.1111/ppl.13402](https://doi.org/10.1111/ppl.13402)

LANOUE, J., THIBODEAU, A., LITTLE, C., ZHENG, J., ET AL. (2021). Light Spectra and Root Stocks Affect Response of Greenhouse Tomatoes to Long Photoperiod of Supplemental Lighting. *Plants* 2021, 10, 1674.

DOI: [10.3390/plants10081674](https://doi.org/10.3390/plants10081674)

LANOUE J, ZHENG J, LITTLE C, GRODZINSKI B, HAO X. (2021). Continuous Light Does Not Compromise Growth and Yield in Mini-Cucumber Greenhouse Production with Supplemental LED Light. *Plants*. 10(2):378.

DOI: [10.3390/plants10020378](https://doi.org/10.3390/plants10020378)

LEMKE, M.D., FISHER, K.E., KOZLOWSKA, M.A., ET AL. (2021). Singlet oxygen-dependent chloroplast degradation is independent of macroautophagy in the *Arabidopsis ferrochelatase* two mutant. *BMC Plant Biology*.

DOI: [10.1101/2021.02.17.431731](https://doi.org/10.1101/2021.02.17.431731)

LEMKE, M.D., FISHER, K.E., KOZLOWSKA, M.A., ET AL. (2021). The core autophagy machinery is not required for chloroplast singlet oxygen-mediated cell death in the *Arabidopsis thaliana* plastid ferrochelatase two mutant. *BMC Plant Biol* 21, 342 (2021).

DOI: [10.1186/s12870-021-03119-x](https://doi.org/10.1186/s12870-021-03119-x)

LI, Y., LIU, Z., SHI, Q., ET AL. (2021). Mixed red and blue light promotes tomato seedlings growth by influencing leaf anatomy, photosynthesis, CO₂ assimilation and endogenous hormones. *Scientia Horticulturae*, 290.

DOI: [10.1016/j.scienta.2021.110500](https://doi.org/10.1016/j.scienta.2021.110500).

MAZUR, R., MASZKOWSKA, J., ANIELSKA-MAZUR, A., ET AL. (2021). The SnRK2.10 kinase mitigates the adverse effects of salinity by protecting photosynthetic machinery. *Plant Physiology*, 187, 2785–2802.

DOI: [10.1093/plphys/kiab438](https://doi.org/10.1093/plphys/kiab438)

MORALES, L.O., SHAPIGUZOV, A., SAFRONOV, O., ET AL. (2021). Ozone responses in *Arabidopsis*: beyond stomatal conductance. *Plant Physiology*, 186: 180–192.

DOI: [10.1093/plphys/kiab097](https://doi.org/10.1093/plphys/kiab097)

NOGUEIRA, M. L., CARVALHO, M. E. A., FERREIRA, J. M. M., ET AL. (2021). Cadmium-induced transgenerational effects on tomato plants: A gift from parents to progenies. *Science of The Total Environment*, 789, 147885.

DOI: [10.1016/j.scitotenv.2021.147885](https://doi.org/10.1016/j.scitotenv.2021.147885)

PAVICIC, M., OVERMYER, K., REHMAN, A.U., ET AL. (2021). Image-Based Methods to Score Fungal Pathogen Symptom Progression and Severity in Excised *Arabidopsis* Leaves. *Plants*, 10, 158.

DOI: [10.3390/plants10010158](https://doi.org/10.3390/plants10010158)

PITALOKA, M.K., CAINE, R.S., HEPWORTH, C., ET AL. (2021). Induced genetic variations in stomatal density and size of rice strongly affect water-use efficiency, drought tolerance, and responses to abiotic stresses. *Research square*.

DOI: [10.21203/rs.3.rs-655388/v1](https://doi.org/10.21203/rs.3.rs-655388/v1)

RREDHI, A., PETERSEN, J., SCHUBERT, M., ET AL. (2021). DASH cryptochrome 1, a UV-A receptor, balances the photosynthetic machinery of *Chlamydomonas reinhardtii*. *New Phytol*, 232: 610-624.
DOI: 10.1111/nph.17603

RYSIAK, A., DRESLER, S., HANAKA, A., ET AL. (2021). High Temperature Alters Secondary Metabolites and Photosynthetic Efficiency in *Heracleum sosnowskyi*. *International Journal of Molecular Sciences*, 22, 4756.
DOI: 10.3390/ijms22094756

SPYROGLOU I., SKALÁK J., BALAKHONOVA V., BENEDIKTY, Z., ET AL. (2021). Mixed Models as a Tool for Comparing Groups of Time Series in Plant Sciences. *Plants* 2021, 10, 362.

DOI: 10.3390/plants10020362

SHURYGIN, B., CHIVKUNOVA, O., SOLOVCHENKO, O., ET AL. (2021). Comparison of the Non-Invasive Monitoring of Fresh-Cut Lettuce Condition with Imaging Reflectance Hyperspectrometer and Imaging PAM-Fluorimeter. *Photonics* 2021, 8, 425.

DOI: 10.3390/photonics8100425

SORRENTINO M., DE DIEGO N., UGENA L., SPÍCHAL L., PANZAROVÁ K., ET AL. (2021). Seed Priming With Protein Hydrolysates Improves *Arabidopsis* Growth and Stress Tolerance to Abiotic Stresses. *Front. Plant Sci.* 12:626301.

DOI: 10.3389/fpls.2021.626301

STAYKOV, N.S., ANGELOV, M., PETROV, V., ET AL. (2021). An *Ascophyllum nodosum*-Derived Biostimulant Protects Model and Crop Plants from Oxidative Stress. *Metabolites*, 11, 24.

DOI: 10.3390/metabo 11010024

VITA, F., GHIGNONE, S., BAZIHIZINA, N., ET AL. (2021). Early responses to salt stress in quinoa genotypes with opposite behavior. *Physiologia Plantarum*.

DOI: 10.1111/ppl.13425

WANG, J., SHI, S.H., WANG, D.Y., ET AL. (2021). Exogenous salicylic acid ameliorates waterlogging stress damages and improves photosynthetic efficiency and antioxidative defense system in waxy corn. *Photosynthetica*, 59 (1), 84-94.

DOI: 10.32615/PS.2021.005

WU, X., KHAN, R., GAO, H., ET AL. (2021). Low Light Alters the Photosynthesis Process in Cigar Tobacco via Modulation of the Chlorophyll Content, Chlorophyll Fluorescence, and Gene Expression. *Agriculture*, 11, 755.
DOI: 10.3390/AGRICULTURE11080755

ZHAO, Z.F., LIU, Z.Y., QIN, S., ET AL. (2021). Impacts of low pH and low salinity induced by acid rain on the photosynthetic activity of green tidal alga *Ulva prolifera*. *Photosynthetica*, 59 (4): 468-477.

DOI: 10.32615/ps.2021.036

ZORZ, J., RICHARDSON, W. D. L., LAVENTURE, A., ET AL. (2021). Light manipulation using organic semiconducting materials for enhanced photosynthesis. *Cell Reports Physical Science*, 2(4), 100390.

DOI: 10.1016/j.xcrp.2021.100390

ADACHI, S., OHKUBO, S., SAN, N. S. ET AL. (2020). *Genetic determination for source capacity to support breeding of high-yielding rice (*Oryza sativa*)*. *Mol Breeding* 40, 20.

DOI: [10.1007/s11032-020-1101-5](https://doi.org/10.1007/s11032-020-1101-5)

BEVERLY, D.P., GUADAGNO, C.R. & EWERS, B.E. (2020). *Biophysically Informed Imaging Acquisition of Plant Water Status*. *Frontiers in Forest and Global Change*, 3:589493.

DOI: [10.3389/ffgc.2020.589493](https://doi.org/10.3389/ffgc.2020.589493)

BLIFERNEZ-KLASSEN, O., BERGER, H., MITTMANN, B.G.K., ET AL. (2020). *A transcriptional regulatory circuit for the photosynthetic acclimation of microalgae to carbon dioxide limitation*.

DOI: [10.1101/2020.07.09.195545](https://doi.org/10.1101/2020.07.09.195545)

BURGESS, S.J., DE BECKER, E., CULLUM, S., ET AL. (2020). *Variation in relaxation of non-photochemical quenching in a soybean nested association mapping panel as a potential source for breeding improved photosynthesis*.

DOI: [10.1101/2020.07.29.201210](https://doi.org/10.1101/2020.07.29.201210)

DE SOUZA RODRIGUES T. LINS J. T., CATTEM M. V., ET AL. (2020). *Evaluation of *Setaria viridis* physiological and gene expression responses to distinct water-deficit conditions*. *Biotechnology Research and Innovation*.

DOI: [10.1016/j.biori.2020.03.001](https://doi.org/10.1016/j.biori.2020.03.001)

ESTEVES, G.F., BRESSANIN, L. A., DE SOUZA, K.R.D ET AL. (2020). *Do tailings from the Mariana, MG (Brazil), disaster affect the initial development of millet, maize, and sorghum?* *Environmental Science and Pollution Research*, 27, 38662–38673.

DOI: [10.1007/s11356-020-10013-w](https://doi.org/10.1007/s11356-020-10013-w)

FANG H., LUO F., LI P., ET AL. (2020). *Potential of jasmonic acid (JA) in accelerating postharvest yellowing of broccoli by promoting its chlorophyll degradation*. *Food Chemistry*, Volume 309.

DOI: [10.1016/j.foodchem.2019.125737](https://doi.org/10.1016/j.foodchem.2019.125737)

FRANK M., CORTLEVEN A., NOVAK O., ET AL. (2020). *Root-derived trans-zeatin cytokinin protects *Arabidopsis* plants against photoperiod stress*. *BioRxiv* 2020.03.05.978221.

DOI: [10.1101/2020.03.05.978221](https://doi.org/10.1101/2020.03.05.978221)

GOU, L., ZHUO, C., LU, S., & GUO, Z. (2020). *A Universal Stress Protein from *Medicago falcata* (MfUSP1) Confers Multiple Stress Tolerance by Regulating Antioxidant Defense and Proline Accumulation*. *Environmental and Experimental Botany*, 104168.

DOI: [10.1016/j.envexpbot.2020.104168](https://doi.org/10.1016/j.envexpbot.2020.104168)

GUINEA DIAZ, M., NIKKANEN, L., HIMANEN, K., ET AL. (2020). *Two chloroplast thioredoxin systems differentially modulate photosynthesis in *Arabidopsis* depending on light intensity and leaf age*. *The Plant Journal*.

DOI: [10.1111/tpj.14959](https://doi.org/10.1111/tpj.14959)

HEY, D., & GRIMM, B. (2020). *ONE-HELIX PROTEIN1 and 2 forms heterodimers to bind chlorophyll in Photosystem II biogenesis*. *Plant Physiology*, pp.01304.2019.

DOI: [10.1104/pp.19.01304](https://doi.org/10.1104/pp.19.01304)

JIANG, C., ZHANG, H., REN, J., DONG, J., ZHAO, X., ET AL. (2020). Comparative Transcriptome-Based Mining and Expression Profiling of Transcription Factors Related to Cold Tolerance in Peanut. International Journal of Molecular Sciences, 21(6), 1921.

DOI: [10.3390/ijms21061921](https://doi.org/10.3390/ijms21061921)

KHAN, R., MA, X., SHAH, S., ET AL. (2020). Drought-hardening improves drought tolerance in Nicotiana tabacum at physiological, biochemical, and molecular levels. BMC Plant Biology, 20, 486.

DOI: [10.1186/s12870-020-02688-7](https://doi.org/10.1186/s12870-020-02688-7)

KIKUCHI, Y., NAKAMURA, S., WOODSON, J.D., ET AL. (2020). Chloroplast Autophagy and Ubiquitination Combine to Manage Oxidative Damage and Starvation Responses. Plant Physiology, 183, 1531–1544.

DOI: [10.1104/pp.20.00237](https://doi.org/10.1104/pp.20.00237)

LEE, K.P., LIU, K., KIM, E.Y., ET AL. (2020). Plant natriuretic peptide A and Its Putative Receptor PNP-R2 Antagonize Salicylic Acid–Mediated Signaling and Cell Death. The Plant Cell, 32, 7.

DOI: [10.1105/tpc.20.00018](https://doi.org/10.1105/tpc.20.00018)

LEE, H., MANG, H., CHOI, E., ET AL. (2020). Genome-wide functional analysis of hot pepper immune receptors reveals an autonomous NLR clade in seed plants. New Phytologist, 229(1), 532–547.

doi: [10.1111/nph.16878](https://doi.org/10.1111/nph.16878)

LI, Z., DOGRA, V., LEE, K. P., LI, R., LI, M., LI, M., & KIM, C. (2020). N-terminal acetylation stabilizes SIGMA FACTOR BINDING PROTEIN 1 involved in salicylic acid-primed cell death. Plant Physiology, pp.01417.2019.

DOI: [10.1104/pp.19.01417](https://doi.org/10.1104/pp.19.01417)

LIU, C., LI, L.-L., LI, G.-Z., & HAO, L. (2020). Ethylene insensitive mutation improves Arabidopsis plant tolerance to NO₂ exposure. Ecotoxicology and Environmental Safety, 189, 110043.

DOI: [10.1016/j.ecoenv.2019.110043](https://doi.org/10.1016/j.ecoenv.2019.110043)

LIU, P.-C., PEACOCK, W. J., WANG, L., FURBANK, R., LARKUM, A., & DENNIS, E. S. (2020). Leaf growth in early development is key to biomass heterosis in Arabidopsis. Journal of Experimental Botany.

DOI: [10.1093/jxb/eraa006](https://doi.org/10.1093/jxb/eraa006)

LOKDARSHI, A., GUAN, J., URQUIDI-CAMACHO, R. A., CHO, S. K., ET AL. (2020). Light Activates the Translational Regulatory Kinase GCN2 via Reactive Oxygen Species Emanating from the Chloroplast. The Plant Cell, tpc.00751.2019.

DOI: [10.1105/tpc.19.00751](https://doi.org/10.1105/tpc.19.00751)

MA Z., GE L., ZHOU CH., LU X. (2020). Trichoderma harzianum improves drought resistance in maize by mediating acetic acid-ethanol metabolic pathways. Pak. J. Bot., 52(3): 1045-1054.

DOI: [10.30848/PJB2020-3\(25\)](https://doi.org/10.30848/PJB2020-3(25))

MEDINA-PUCHE, L., TAN, H., DOGRA, V., ET AL. (2020). A Defense Pathway Linking Plasma Membrane and Chloroplasts and Co-opted by Pathogens. Elsevier.

DOI: [10.1016/j.cell.2020.07.020](https://doi.org/10.1016/j.cell.2020.07.020)

MORCILLO R. J., SINGH S. K., HE D., ET AL. (2020). Rhizobacterium-derived diacetyl modulates plant immunity in a phosphate-dependent manner. EMBO Journal. 39:e102602.

DOI: [10.15252/embj.2019102602](https://doi.org/10.15252/embj.2019102602)

MOREAU, S., VAN AUBEL, G., JANKY, R. & VAN CUTSEM, P. (2020). Chloroplast Electron Chain, ROS Production, and Redox Homeostasis Are Modulated by COS-OGA Elicitation in Tomato (*Solanum lycopersicum*) Leaves. *Frontiers in Plant Science*, 11:597589.

DOI: [10.3389/FPLS.2020.597589](https://doi.org/10.3389/fpls.2020.597589)

NEGI, S., PERRINE, Z., FRIEDLAND, N., KUMAR, A., TOKUTSU, R., ET AL. (2020). Light-regulation of light harvesting antenna size substantially enhances photosynthetic efficiency and biomass yield in green algae. *The Plant Journal*.

DOI: [10.1111/tpj.14751](https://doi.org/10.1111/tpj.14751)

NGUYEN, T.K.L. & OH, M.-M. (2020). Physiological and biochemical responses of green and red perilla to LED-based light. *Journal of the Science of Food and Agriculture*.

DOI: [10.1002/jsfa.10636](https://doi.org/10.1002/jsfa.10636)

ORZECZOWSKA, A., TRTÍLEK, M., TOKARZ, K., & ROZPADEK, P. (2020). A study of light-induced stomatal response in *Arabidopsis* using thermal imaging. *Biochemical and Biophysical Research Communications*.

doi: [10.1016/j.bbrc.2020.09.020](https://doi.org/10.1016/j.bbrc.2020.09.020)

PARK S-Y., BAE J-H., OH M-M. (2020). Manipulating light quality to promote shoot growth and bioactive compound biosynthesis of *Crepidiastrum denticulatum* (Houtt.) Pak & Kawano cultivated in plant factories, *Journal of Applied Research on Medicinal and Aromatic Plants*. Volume 16.

DOI: [10.1016/j.jarmap.2019.100237](https://doi.org/10.1016/j.jarmap.2019.100237).

PEDRUZZI, D.P., ARAUJO, L.O., FALCO, W.F., ET AL. (2020). ZnO nanoparticles impact on the photosynthetic activity of *Vicia faba*: Effect of particle size and concentration. *NanoImpact*, 19, 100246.

DOI: [10.1016/j.impact.2020.100246](https://doi.org/10.1016/j.impact.2020.100246)

POUR, F.N., COBOS, R., COQUE, J.J.R., ET AL. (2020). Toxicity of Recombinant Necrosis and Ethylene-Inducing Proteins (NLPs) from *Neofusicoccum parvum*. *Toxins*, 12 (4), 235.

DOI: [10.3390/toxins12040235](https://doi.org/10.3390/toxins12040235)

POUR F. N., FERREIRA V., FÉLIX C., ET AL. (2020). Effect of temperature on the phytotoxicity and cytotoxicity of *Botryosphaeriaceae* fungi. *Fungal Biology*. ISSN 1878-6146.

DOI: [10.1016/j.funbio.2020.02.012](https://doi.org/10.1016/j.funbio.2020.02.012).

POUR N. F., COBOS, R., RUBIO COQUE, J. J., SERÔDIO, J., ET AL. (2020). Toxicity of Recombinant Necrosis and Ethylene-Inducing Proteins (NLPs) from *Neofusicoccum parvum*. *Toxins*, 12(4), 235.

DOI: [10.3390/toxins12040235](https://doi.org/10.3390/toxins12040235)

PRALON T., COLLOMBAT J., PIPITONE R., ET AL. (2020). Mutation of the Atypical Kinase ABC1K3 Partially Rescues the PROTON GRADIENT REGULATION 6 Phenotype in *Arabidopsis thaliana*. *Frontiers in Plant Science* 11.

DOI: [10.3389/fpls.2020.00337](https://doi.org/10.3389/fpls.2020.00337)

RAHMAN, A., KAWAMURA, Y., MAESHIMA, M., RAHMAN, A., & UEMURA, M. (2020). Plasma membrane aquaporins PIPs act in concert to regulate cold acclimation and freezing tolerance responses in *Arabidopsis thaliana*. *Plant and Cell Physiology*.

DOI: [10.1093/pcp/pcaa005](https://doi.org/10.1093/pcp/pcaa005)

*ROACH, T., NA, C. S., STÖGGL, W., & KRIEGER-LISZKAY, A. (2020). The non-photochemical quenching protein LHCSR3 prevents oxygen-dependent photoinhibition in *Chlamydomonas reinhardtii*. Journal of Experimental Botany.*
DOI:10.1093/jxb/eraa022

*SHAPIGUZOV, A., NIKKANEN, L., FITZPATRICK, D., VAINONEN, J. P., ET AL. (2020). Dissecting the interaction of photosynthetic electron transfer with mitochondrial signalling and hypoxic response in the *Arabidopsis rcd1* mutant. Philosophical Transactions of the Royal Society B: Biological Sciences, 375(1801), 20190413.*
DOI: 10.1098/rstb.2019.0413

TERAI, Y., UENO, H., OGAWA, T., SAWA, Y., MIYAGI, A., ET AL. (2020). Dehydroascorbate reductases and glutathione set a threshold for high light-induced ascorbate accumulation. Plant Physiology, pp.01556.2019.
DOI: 10.1104/pp.19.01556

WANG, Y., BURGESS, S. J., DE BECKER, E., & LONG, S. P. (2020). Photosynthesis in the fleeting shadows: An overlooked opportunity for increasing crop productivity? The Plant Journal.
DOI: 10.1111/tpj.14663

WENG H., ZENG Y., CEN H., ET AL. (2020). Characterization and detection of leaf photosynthetic response to citrus Huanglongbing from cool to hot seasons in two orchards. American Society of Agricultural and Biological Engineers.

DOI: 10.13031/trans.13469

WINGLER, A., TIJERO, V., MÜLLER, M. ET AL. (2020). Interactions between sucrose and jasmonate signalling in the response to cold stress. BMC Plant Biol 20, 176.
DOI: 10.1186/s12870-020-02376-6

*YAO, L., HAO, X., CAO, H., DING, C., YANG, Y., WANG, L., & WANG, X. (2020). ABA-dependent bZIP transcription factor, CsbZIP18, from *Camellia sinensis* negatively regulates freezing tolerance in *Arabidopsis*. Plant Cell Reports.*

DOI: 10.1007/s00299-020-02512-4

YOU, L., ZHANG, J., LI, L., ET AL. (2020). Involvement of abscisic acid, ABI5, and PPC2 in plant acclimation to low CO₂. Journal of Experimental Botany, 71, 4093–4108.
DOI: 10.1093/jxb/eraa148

*ZAFIROV, D., GIOVINAZZO, N., BASTET, A. & GALLOIS, J.-L. (2020). When a knockout is an Achilles' heel: Resistance to one potyvirus species triggers hypersusceptibility to another one in *Arabidopsis thaliana*. Molecular Plant Pathology, 22, 334–347.*

DOI: 10.1111/mpp.13031

*INIAEIFARD S., SEIF M., ARAB M., ET AL. (2019). Growth and Photosynthetic Performance of *Calendula Officinalis* under Monochromatic Red Light. International Journal of Horticultural Science and Technology Vol. 5, No. 1.*
DOI: 10.22059/ijhst.2018.261042.248

ATAEIAN, M., LIU, Y., CANON-RUBIO, K.A. ET AL (2019). Direct capture and conversion of CO₂ from air by growing a cyanobacterial consortium at pH up to 11.2. Biotechnology and Bioengineering, 116: 1604 – 1611.
DOI: 10.1002/bit.26974

BASTET, A., ZAFIROV, D., GIOVINAZZO, N., ET AL. (2019). Mimicking natural polymorphism in eIF4E by CRISPR-Cas9 base editing is associated with resistance to potyviruses. *Plant Biotechnology Journal*.
DOI: 10.1111/pbi.13096

BIL'OVÁ I., GOGA M. AND BAČKOR M. (2019). Physiological responses of *Xanthoria parietina* to longterm copper excess: role of the extracellular secondary metabolite parietin. *Botanica Serbica* 2019 Volume 43, Issue 2, Pages: 133-142.
DOI: 10.2298/BOTSERB1902133B

DALL'OSTO, L., CAZZANIGA, S., GUARDINI, Z., BARERA, S., ET AL. (2019). Combined resistance to oxidative stress and reduced antenna size enhance light-to-biomass conversion efficiency in *Chlorella vulgaris* cultures. *Biotechnology for Biofuels*, 12(1).
DOI: 10.1186/s13068-019-1566-9

DING, S., ZHANG, Y., HU, Z., HUANG, X., ZHANG, B., ET AL. (2019). mTERF5 Acts as a Transcriptional Pausing Factor to Positively Regulate Transcription of Chloroplast psbEFLJ. *Molecular Plant*.
DOI: 10.1016/j.molp.2019.05.007

DIKAIOS, I., SCHIPHORST, C., DALL'OSTO, L., ALBORESI, A., BASSI, R., & PINNOLA, A. (2019). Functional analysis of LHCSR1, a protein catalyzing NPQ in mosses, by heterologous expression in *Arabidopsis thaliana*. *Photosynthesis Research*.
DOI: 10.1007/s11120-019-00656-3

DODIG, D., BOŽNOVIĆ, S., NIKOLIĆ, A., ZORIĆ, M., ET AL. (2019). Image-Derived Traits Related to Mid-Season Growth Performance of Maize Under Nitrogen and Water Stress. *Frontiers in Plant Science*, 10.
DOI: 10.3389/fpls.2019.00814

DUTTON, C., HÖRAK, H., HEPWORTH, C., MITCHELL, A., TON, J., HUNT, L., & GRAY, J. E. (2019). Bacterial infection systemically suppresses stomatal density. *Plant, Cell & Environment*.
DOI: 10.1111/pce.13570

ESPINOZA-CORRAL, R., HEINZ, S., KLINGL, A., JAHNS, P., ET AL. (2019). Plastoglobular protein 18 is involved in chloroplast function and thylakoid formation. *Journal of Experimental Botany*.
DOI: 10.1093/jxb/erz177

FAROOQ T, LIU D, ZHOU X, YANG Q. (2019). Tomato Yellow Leaf Curl China Virus Impairs Photosynthesis in the Infected Nicotiana benthamiana with 8C1 as an Aggravating Factor. *Plant Pathol J*. 2019;35(5):521-529.
DOI: 10.5423/PPJ.OA.04.2019.0120

GANGULY D. R., BETHANY A. B. STONE, STEVEN R. EICHTEN, BARRY J. POGSON (2019). Excess light priming in *Arabidopsis thaliana* with altered DNA methylomes. *bioRxiv* 475798;
DOI: 10.1101/475798

GAWROŃSKI P., BURDIAK P., SCHARFF L.B., ET AL. (2019). Dual-targeted transcription factors are required for optimal photosynthesis and stress responses in *Arabidopsis thaliana*.
bioRxiv 793968;
DOI: 10.1101/793968

GEROTTO, C., TROTTA, A., BAIWA, A. A., MANCINI, I., MOROSINOTTO, T., & ARO, E.-M. (2019). Thylakoid Protein Phosphorylation Dynamics in a Moss Mutant Lacking SERINE/THREONINE PROTEIN KINASE STN8. Plant Physiology, 180(3), 1582–1597.

DOI:10.1104/pp.19.00117

GONZALEZ-BAYON, R., SHEN, Y., GROSZMAN, M., ZHU, A., WANG, A., ET AL. (2019). Senescence and defense pathways contribute to heterosis. Plant Physiology, pp.01205.2018.

DOI:10.1104/pp.18.01205

HA, S. T. T., LIM, J.-H., & IN, B.-C. (2019). Extension of the Vase Life of Cut Roses by Both Improving Water Relations and Repressing Ethylene Responses. Horticultural Science and Technology.

DOI: 10.12972/kjhst.20190007

*HA, S. T. T., KWON M., NGUYEN T. K., ET AL. (2019). Improvement in Postharvest Quality of Cut Spray Roses 'Hessa' (*Rosa hybrida* L.) by Pretreatment with *Scutellaria baicalensis* Georgi Extract. Flower Res. J. 27(3).*

DOI: 10.11623/frj.2019.27.3.02

HA, S. T. T., LIM, J.-H., & IN, B.-C. (2019). Simultaneous Inhibition of Ethylene Biosynthesis and Binding Using AVG and 1-MCP in Two Rose Cultivars with Different Sensitivities to Ethylene. Journal of Plant Growth Regulation.

DOI:10.1007/s00344-019-09999-6

HA, S. T. T., KWON ., NGUYEN T. K., ET AL. (2019) Relationship Between Air Exposure Time and Water Relations of Cut Roses. Flower Res. J. 27(4) : 267-277

DOI : 10.11623/frj.2019.27.4.04

HEUERMANN, M. C., ROSSO, M. G., MASCHER, M., BRANDT, R., ET AL. (2019). Combining next-generation sequencing and progeny testing for rapid identification of induced recessive and dominant mutations in maize M₂ individuals. Plant J.

DOI:10.1111/tpj.14431

HINOJOSA, L., SANAD, M., JARVIS, D., STEEL, P., MURPHY, K., & SMERTENKO, A. (2019). Impact of heat and drought stress on peroxisome proliferation in quinoa. The Plant Journal.

DOI:10.1111/tpj.14411

HIRAKI, H., WATANABE, M., UEMURA, M., & KAWAMURA, Y. (2019). Season specificity in the cold-induced calcium signal and the volatile chemicals in the atmosphere. Physiologia Plantarum.

DOI:10.1111/ppl.13019

*HOMBURG, S. V., KRUSE, O., & PATEL, A. V. (2019). Growth and photosynthetic activity of *Chlamydomonas reinhardtii* entrapped in lens-shaped silica hydrogels. Journal of Biotechnology.*

DOI:10.1016/j.jbiotec.2019.06.009

JANECZKO, A., SAJA, D., DZIURKA, M., GULLNER, G., KORNAŚ, A., ET AL. (2019). Brassinosteroid deficiency caused by the mutation of the HvDWARF gene influences the reactions of barley to powdery mildew. Physiological and Molecular Plant Pathology, 101438.

DOI:10.1016/j.pmpp.2019.101438

KHAN, R.; ZHOU, P.; MA, X.; ZHOU, L.; WU, Y.; ULLAH, Z.; WANG, S. (2019). Transcriptome Profiling, Biochemical and Physiological Analyses Provide New Insights towards Drought Tolerance in *Nicotiana tabacum* L.. *Genes*, 1041.

DOI: [10.3390/genes10121041](https://doi.org/10.3390/genes10121041)

KNOPP M., GARG S. G., HANDRICH M., ET AL. (2019). Major changes in plastid protein import and the origin of the Chloroplastida. *bioRxiv* 799577.

DOI: [10.1101/799577](https://doi.org/10.1101/799577)

LANOUE, J., ZHENG, J., LITTLE, C., THIBODEAU, A., GRODZINSKI, B., & HAO, X. (2019). Alternating Red and Blue Light-Emitting Diodes Allows for Injury-Free Tomato Production With Continuous Lighting. *Frontiers in Plant Science*, 10.

DOI: [10.3389/fpls.2019.01114](https://doi.org/10.3389/fpls.2019.01114)

LELLIS A. D., PATRICK R. M., MAYBERRY L. K., ET AL. (2019). *eLFiso4G Augments the Synthesis of Specific Plant Proteins Involved in Normal Chloroplast Function*. *Plant Physiology*. Volume 181.

DOI: <https://doi.org/10.1104/pp.19.00557>

LEE K. P., LIU K., KIM E. Y., ET AL. (2019). PLANT NATRIURETIC PEPTIDE A antagonizes salicylic acid-primed cell death. *BioRxiv* 592881;

DOI: [10.1101/592881](https://doi.org/10.1101/592881)

LEE H. Y., MANG H., CHOI E. H., ET AL. (2019). Genome-wide functional analysis of hot pepper immune receptors reveals an autonomous NLR cluster in seed plants. *bioRxiv* 2019.12.16.878959;

DOI: [10.1101/2019.12.16.878959](https://doi.org/10.1101/2019.12.16.878959)

LEE K. P., LIU K., KIM E. Y., ET AL. (2019). PLANT NATRIURETIC PEPTIDE A antagonizes salicylic acid-primed cell death. *BioRxiv* 592881;

DOI: [10.1101/592881](https://doi.org/10.1101/592881)

LI M., HENSEL G., MELZER M., JUNKER A., ET AL. (2019). Mutation of the ALBOSTRIANS Ohnologous Gene HvCMF3 Impairs Chloroplast Development and Thylakoid Architecture in Barley due to Reduced Plastid Translation. *BioRxiv* 756833;

DOI: [10.1101/756833](https://doi.org/10.1101/756833)

LI Y., LIU B., ZHANG J., ET AL. (2019). OHP1, OHP2, and HCF244 Form a Transient Functional Complex with the Photosystem II Reaction Center. *Plant Physiology* Jan 2019, 179 (1) 195-208.

DOI: [10.1104/pp.18.01231](https://doi.org/10.1104/pp.18.01231)

LONGONI, P., SAMOL, I., & GOLDSCHMIDT-CLERMONT, M. (2019). The Kinase STATE TRANSITION 8 Phosphorylates Light Harvesting Complex II and Contributes to Light Acclimation in *Arabidopsis thaliana*. *Frontiers in Plant Science*, 10.

DOI: [10.3389/fpls.2019.01156](https://doi.org/10.3389/fpls.2019.01156)

LV, R., LI, Z., LI, M., DOGRA, V., LV, ET AL. (2019). Uncoupled Expression of Nuclear and Plastid Photosynthesis-associated Genes Contributes to Cell Death in a Lesion Mimic Mutant. *The Plant Cell*, tpc.00813.2018.

DOI: [10.1105/tpc.18.00813](https://doi.org/10.1105(tpc.18.00813)

Lv X., ZHANG Y., ZHANG Y., FAN S., ET AL. (2019). Source-Sink Modifications Affect Leaf Senescence and Grain Mass in Wheat. bioRxiv 647743;
DOI: 10.1101/647743

MAKOWSKI W., TOKARZ B., BANASIU R., ET AL. (2019). Is a blue–red light a good elicitor of phenolic compounds in the family Droseraceae? A comparative study. Journal of Photochemistry and Photobiology B: Biology, Volume 201.

DOI: 10.1016/j.jphotobiol.2019.111679.

MISHRA, K. B., VÍTEK, P., & BARTÁK, M. (2019). A correlative approach, combining chlorophyll a fluorescence, reflectance, and Raman spectroscopy, for monitoring hydration induced changes in Antarctic lichen Dermatocarpon polyphyllum. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 208, 13–23.

DOI:10.1016/j.saa.2018.09.036

NAM, S.-H., LEE, J., & AN, Y.-J. (2019). Quantitative assessment of photosynthetic activity of Chlorella (Class Trebouxiophyceae) adsorbed onto soil by using fluorescence imaging. Environmental Pollution, 254, 112942.
DOI:10.1016/j.envpol.2019.07.110

NTAGKAS, N., WOLTERING, E., BOURAS, S., DE VOS, R. C., DIELEMAN, J. A., ET AL. (2019). Light-Induced Vitamin C Accumulation in Tomato Fruits is Independent of Carbohydrate Availability. Plants, 8(4), 86.

DOI:10.3390/plants8040086

*PONTES, M. S., GRILLO, R., GRACIANO, D. E., ET AL. (2019). How does aquatic macrophyte *Salvinia auriculata* respond to nanoceria upon an increased CO₂ source? A Fourier transform-infrared photoacoustic spectroscopy and chlorophyll a fluorescence study. Ecotoxicology and Environmental Safety, 180, 526–534.*
DOI:10.1016/j.ecoenv.2019.05.041

*PRALON, T., SHANMUGABALAJI, V., LONGONI, P., GLAUSER, G., ET AL. (2019). Plastoquinone homoeostasis by *Arabidopsis* proton gradient regulation 6 is essential for photosynthetic efficiency. Communications Biology, 2(1).*

DOI:10.1038/s42003-019-0477-4

*QIN, Y., WANG, J., WANG, F., SHEN, L., ET AL. (2019). Purification and characterization of a secretory alkaline metalloprotease with highly potent antiviral activity from *Serratia marcescens* strain S3. Journal of Agricultural and Food Chemistry.*

DOI: 10.1021/acs.jafc.8b06909

*RUČOVÁ, D., GOGA, M., SABOVLJEVIĆ, M., VILKOVÁ, M., PETRULOVÁ, V., & BAČKOR, M. (2019). Insights into physiological responses of mosses *Physcomitrella patens* and *Pohlia drummondii* to lichen secondary metabolites. Protoplasma.*

DOI:10.1007/s00709-019-01403-0

*SHAHBAZ, M., & PILON, M. (2019). Conserved Cu-MicroRNAs in *Arabidopsis thaliana* Function in Copper Economy under Deficiency. Plants, 8(6), 141.*

DOI:10.3390/plants8060141

*SHAPIGUZOV A., NIKKANEN L., FITZPATRICK D., ET AL. (2019). Increased expression of mitochondrial dysfunction stimulon genes affects chloroplast redox status and photosynthetic electron transfer in *Arabidopsis*. BioRxiv 696740.*

DOI: 10.1101/696740

*STRENKERT, D., SCHMOLLINGER, S., GALLAHER, S. D., SALOMÉ, P. A., PURVINE, S. O., ET AL. (2019). Multiomics resolution of molecular events during a day in the life of *Chlamydomonas*. Proceedings of the National Academy of Sciences, 201815238.*

DOI:10.1073/pnas.1815238116

*SYNOWIEC, A., MOŻDŻEŃ, K., KRAJEWSKA, A., LANDI, M., & ARANITI, F. (2019). *Carum carvi* L. essential oil: A promising candidate for botanical herbicide against *Echinochloa crus-galli* (L.) P. Beauv. in maize cultivation. Industrial Crops and Products, 140, 111652.*

DOI:10.1016/j.indcrop.2019.111652

*TANG, L., QIU, L., LIU, C., DU, G., MO, Z., TANG, X., & MAO, Y. (2019). Transcriptomic Insights into Innate Immunity Responding to Red Rot Disease in Red Alga *Pyropia yezoensis*. International Journal of Molecular Sciences, 20(23), 5970.*

DOI:10.3390/ijms20235970

TABE, L., SAMUEL, S., DUNN, M., WHITE, R., MAGO, R., ESTAVILLO, G., & SPIELMEYER, W. (2019). The Phenotypes conferred by Wheat Multiple Pathogen Resistance Locus, Sr2, include Cell Death in Response to Biotic and Abiotic Stresses. Phytopathology.

DOI:10.1094/phyto-03-19-0099-r

*TOKUTSU, R., FUJIMURA-KAMADA, K., YAMASAKI, T., MATSUO, T., & MINAGAWA, J. (2019). Isolation of photoprotective signal transduction mutants by systematic bioluminescence screening in *Chlamydomonas reinhardtii*. Scientific Reports, 9(1).*

DOI:10.1038/s41598-019-39785-z

*TARIA, S., RANE, J., ALAM, B., KUMAR, M., BABAR, R., ET AL. (2019). Combining IR imaging, chlorophyll fluorescence and phenomic approach for assessing diurnal canopy temperature dynamics and desiccation stress management in *Azadirachta indica* and *Terminalia mantaly*. Agroforestry Systems.*

DOI: 10.1007/s10457-019-00461-w

*TOURAIN, B., VIGNOLS, F., PRZYBYLA-TOSCANO, J., ISCHEBECK, T., ET AL. (2019). The iron-sulfur protein NFU2 plays a predominant role in branched-chain amino acid synthesis in *Arabidopsis* roots. Journal of Experimental Botany.*

DOI:10.1093/jxb/erz050

VAN MEETEREN, U., KAISER, E., MALCOLM MATAMOROS, P., VERDONK, J., & ALINIAEIFARD, S. (2019). (No) critical role for NO signalling as key factor in ABA-induced rapid stomatal closure? Journal of Experimental Botany.

DOI:10.1093/jxb/erz437

VELEZ-RAMIREZ, A. I., VREUGDENHIL, D., MILLENAAR, F. F., & VAN IEPEREN, W. (2019). Phytochrome A Protects Tomato Plants From Injuries Induced by Continuous Light. Frontiers in Plant Science, 10.

DOI:10.3389/fpls.2019.00019

WANG Z-Y., QIN X-H., LI J-H., ET AL. (2019). Highly reproducible periodic electrical potential changes associated with salt tolerance in wheat plants. *Environmental and Experimental Botany*. Volume 160.

DOI: 10.1016/j.envexpbot.2019.01.014

WANG, Y.-Y., WANG, Y., LI, G.-Z., & HAO, L. (2019). Salicylic acid-altering *Arabidopsis* plant response to cadmium exposure: Underlying mechanisms affecting antioxidation and photosynthesis-related processes. *Ecotoxicology and Environmental Safety*, 169, 645–653.

DOI:10.1016/j.ecoenv.2018.11.062

WATANABE, E., FEKIH, R., & KASAJIMA, I. (2019). Advances in Chlorophyll Fluorescence Theories: Close Investigation into Oxidative Stress and Potential Use for Plant Breeding. *Prosody, Phonology and Phonetics*, 137–154.

DOI:10.1007/978-3-319-95315-1_7

WEN, D., SUN, S., YANG, W., ZHANG, L., LIU, S., GONG, B., & SHI, Q. (2019). Overexpression of S-nitrosoglutathione reductase alleviated iron-deficiency stress by regulating iron distribution and redox homeostasis. *Journal of Plant Physiology*.

DOI:10.1016/j.jplph.2019.03.007

WEN, Z., RAFFAELLO, T., ZENG, Z., PAVICIC, M., & ASIEGBU, F. O. (2019). Chlorophyll fluorescence imaging for monitoring effects of *Heterobasidion parviporum* small secreted protein induced cell death and in planta defense gene expression. *Fungal Genetics and Biology*.

DOI:10.1016/j.fgb.2019.02.003

YU, C., WU, Q., SUN, C., TANG, M., SUN, J., & ZHAN, Y. (2019). The Phosphoproteomic Response of Okra (*Abelmoschus esculentus* L.) Seedlings to Salt Stress. *International Journal of Molecular Sciences*, 20(6), 1262.

DOI:10.3390/ijms20061262

ZHANG, L., ZHOU, W., CHE, L., ROCHAIX, J.-D., LU, C., LI, W., & PENG, L. (2019). PPR Protein BFA2 Is Essential for the Accumulation of the atpH/F Transcript in Chloroplasts. *Frontiers in Plant Science*. 10.

DOI:10.3389/fpls.2019.00446

ZHOU, C., GE, N., GUO, J., ZHU, L., MA, Z., CHEN, S., & WANG, J. (2019). *Enterobacter asburiae* reduces cadmium toxicity in maize plants by repressing iron uptake-associated pathways. *Journal of Agricultural and Food Chemistry*.

DOI:10.1021/acs.jafc.9b03293

ZHUO, M., SAKURABA, Y., & YANAGISAWA, S. (2019). A Jasmonate-activated MYC2-Dof2.1-MYC2 Transcriptional Loop Promotes Leaf Senescence in *Arabidopsis*. *The Plant Cell*, tpc.00297.2019.

DOI:10.1105/tpc.19.00297

AGATHOKLEOUS, E., PAOLETTI, E., MANNING, W. J., ET AL. (2018). High doses of ethylenediamine (EDU) as soil drenches did not increase leaf N content or cause phytotoxicity in willow grown in fertile soil. *Ecotoxicology and Environmental Safety*, 147, 574–584.

DOI: 10.1016/j.ecoenv.2017.09.017

AIHARA, Y., FUJIMURA-KAMADA, K., YAMASAKI, T., & MINAGAWA, J. (2018). Algal photoprotection is regulated by the E3 ligase CUL4-DDB1DET1. *Nature Plants*.

DOI:10.1038/s41477-018-0332-5

BARABASZ-KRASNY, B., MOZDZEN, K., SOLTYS-LELEK, A., ET AL. (2018). *Biological Traits of Impatiens parviflora DC. under Different Habitat Conditions*. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 46(1), 277.

DOI:10.15835/nbha46110970

BASTET, A., LEDERER, B., GIOVINAZZO, N., ARNOUX, X., ET AL. (2018). *Trans-species synthetic gene design allows resistance pyramiding and broad-spectrum engineering of virus resistance in plants*. Plant Biotechnol J, 16: 1569-1581.

DOI:10.1111/pbi.12896

BOBIK, K., FERNANDEZ, J. C., HARDIN, S. R., ET AL. (2018). *The essential chloroplast ribosomal protein uL15c interacts with the chloroplast RNA helicase ISE2 and affects intercellular trafficking through plasmodesmata*. New Phytologist.

DOI:10.1111/nph.15427

BERNACKI, M. J., CZARNOCKA, W., WITOŃ, D., ET AL. (2018). *ENHANCED DISEASE SUSCEPTIBILITY 1 (EDS1) affects development, photosynthesis, and hormonal homeostasis in hybrid aspen (Populus tremula L. × P. tremuloides)*. Journal of Plant Physiology, 226, 91–102.

DOI:10.1016/j.jplph.2018.04.014

BERNACKI, M. J., CZARNOCKA, W., RUSACZONEK, A., ET AL. (2018). *LSD1, EDS1 and PAD4-dependent conditional correlation among salicylic acid, hydrogen peroxide, water use efficiency, and seed yield in Arabidopsis thaliana*. Physiologia Plantarum.

DOI:10.1111/ppl.12863

CHOI, G. H., KANG, J. N. (2018). *Effect of light and carbon dioxide on photosynthesis, chlorophyll fluorescence, and fruit yield in strawberry (Fragaria × ananassa Duch.) plants*. Journal of Berry Research, 1–11.

DOI:10.3233/jbr-18303

CHUKHUTSINA, V. U., HOLZWARTH, A. R., & CROCE, R. (2018). *Time-resolved fluorescence measurements on leaves: principles and recent developments*. Photosynthesis Research.

DOI:10.1007/s11120-018-0607-8

COE, R. A., CHATTERJEE, J., ACEBRON, K., DIONORA, J., ET AL. (2018). *High-throughput chlorophyll fluorescence screening of Setaria viridis for mutants with altered CO₂ compensation points*. Functional Plant Biology.

doi:10.1071/fp17322

DE VRIES, J., CURTIS, B. A., GOULD, S. B., ET AL. (2018). *Embryophyte stress signaling evolved in the algal progenitors of land plants*. Proceedings of the National Academy of Sciences, 115(15).

DOI:10.1073/pnas.1719230115

DYDA, M., WĄSEK, I., TYRKA, M., ET AL. (2018). *Local and systemic regulation of PSII efficiency in triticale infected by the hemibiotrophic pathogen Microdochium nivale*. Physiologia Plantarum.

DOI: 10.1111/ppl.12760

FENG, X., YU, C., CHEN, Y., ET AL. (2018). *Non-destructive Determination of Shikimic Acid Concentration in Transgenic Maize Exhibiting Glyphosate Tolerance Using Chlorophyll Fluorescence and Hyperspectral Imaging*. Frontiers in Plant Science, 9.

DOI:10.3389/fpls.2018.00468

FAN, T., ROLING, L., MEIERS, A., BRINGS, L., ORTEGA-RODÉS, P., HEDTKE, B., & GRIMM, B. (2018). Complementation studies of the *Arabidopsis* *fc1* mutant substantiate essential functions of ferrochelatase 1 during embryogenesis and salt stress. *Plant, Cell & Environment*.

DOI:10.1111/pce.13448

FORMENTIN, E., SUDIRO, C., PERIN, G., ET AL. (2018). Transcriptome and Cell Physiological Analyses in Different Rice Cultivars Provide New Insights Into Adaptive and Salinity Stress Responses. *Frontiers in Plant Science*, 9.

DOI:10.3389/fpls.2018.00204

FRISTEDT R., CHEN HU., WHEATLEY N., ET AL. (2018). RAF2 is a Rubisco Assembly Factor in *Arabidopsis thaliana*. *Plant Journal*. Volume 94, Pages 146-156.

DOI: 10.1111/tpj.13849

GANGULY D. R., CRISP P. A., EICHTEN S. R.. ET AL. (2018). Maintenance of pre-existing DNA methylation states through recurring excess-light stress. *Plant Cell and Environment*. Vol. 41.

DOI: 10.1111/pce.13324

GUO, H., GU, L., LIU, F., CHEN, F., GE, F., & SUN, Y. (2018). Aphid-borne viral spread is enhanced by virus-induced accumulation of plant reactive oxygen species. *Plant Physiology*, pp.00437.2018.

DOI:10.1104/pp.18.00437

HANELT D. (2018). Photosynthesis assessed by chlorophyll fluorescence. *Bioassays*, Elsevier, Pages 169-198.

DOI:10.1016/B978-0-12-811861-0.00009-7.

HERPPICH, W. B., MARTIN, C. E., TÖTZKE, C., MANKE, I., & KARDJILOV, N. (2018). External water transport is more important than vascular transport in the extreme atmospheric epiphyte *Tillandsia usneoides* (Spanish moss). *Plant, Cell & Environment*.

DOI:10.1111/pce.13496

HEY, D., & GRIMM, B. (2018). Requirement of ONE-HELIX PROTEIN 1 (OHP1) in early *Arabidopsis* seedling development and under high light intensity. *Plant Signaling & Behavior*, 1–3.

DOI:10.1080/15592324.2018.1550317

HEYER, M., SCHOLZ, S. S., VOIGT, D., REICHELT, M., ET AL. (2018). Herbivory-responsive calmodulin-like protein CML9 does not guide jasmonate-mediated defenses in *Arabidopsis thaliana*. *PLOS ONE*, 13(5), e0197633.

DOI:10.1371/journal.pone.0197633

HOMBURG, S. V., VENKANNA, D., KRAUSHAAR, K., ET AL. (2019). Entrapment and growth of *Chlamydomonas reinhardtii* in biocompatible silica hydrogels. *Colloids and Surfaces B: Biointerfaces*, 173, 233–241.

DOI: 10.1016/j.colsurfb.2018.09.075

HUBBART S., SMILLIE I. R. A., HEATLEY M., ET AL. (2018). Enhanced thylakoid photoprotection can increase yield and canopy radiation use efficiency in rice. *Communications Biology*. 1:22.

DOI: 10.1038/s42003-018-0026-6

ITO, A., SUGITA, C., ICHINOSE, M., KATO, Y., ET AL. (2018). An evolutionarily conserved P-subfamily pentatricopeptide repeat protein is required to splice the plastid *ndhA* transcript in the moss *Physcomitrella patens* and *Arabidopsis thaliana*. *The Plant Journal*, 94(4), 638–648.

DOI:10.1111/tpj.13884

JANEČKOVÁ, H., HUSÍČKOVÁ, A., FERRETTI, U., ET AL. (2018). The interplay between cytokinins and light during senescence in detached *Arabidopsis* leaves. *Plant, Cell & Environment*, 41(8), 1870–1885.

DOI: 10.1111/pce.13329

JE S.M., WOO S.Y., LEE S.H. ET AL. (2018). Combined effect of elevated CO₂ concentration and drought on the photosynthetic apparatus and leaf morphology traits in seedlings of yellow poplar. *Ecol Res* (2018) 33: 403.

DOI: 10.1007/s11284-017-1495-7

JIANG, M., WEI, H., CHEN, H., ZHANG, J., ZHANG, W., & SUI, Z. (2018). Expression analysis of three phosphate transporter genes in the fast-growing mutants of *Gracilaria* (*Gracilaria lemaneiformis* (Rhodophyta)) under low phosphorus condition. *Journal of Applied Phycology*.

DOI:10.1007/s10811-018-1679-8

KAMRANI, Y., MATSUO, T., MITTAG, M., & MINAGAWA, J. (2018). ROC75 Functions as an Attenuator of the Circadian Clock to Control Photoprotective LHCSP3 Gene in *Chlamydomonas reinhardtii*. *Plant and Cell Physiology*.

DOI:10.1093/pcp/pcy179

KNUESTING, J., BRINKMANN, M. C., SILVA, B., ET AL. (2018). Who will win where and why? An ecophysiological dissection of the competition between a tropical pasture grass and the invasive weed Bracken over an elevation range of 1000 m in the tropical Andes. *PLOS ONE*, 13(8), e0202255.

DOI: 10.1371/journal.pone.0202255

KUPPER, H., BENEDIKTY, Z., MORINA, F., ANDRESEN, E., SHAIK MISHRA, A. S., & TRTILEK, M. (2018). Analysis of OJIP chlorophyll fluorescence kinetics and QA re-oxidation kinetics by direct fast imaging. *Plant Physiology*, pp.00953.2018.

DOI:10.1104/pp.18.00953

MATUSZKIEWICZ, M., KOTER, M. D., & FILIPECKI, M. (2018). Limited ventilation causes stress and changes in *Arabidopsis* morphological, physiological and molecular phenotype during in vitro growth. *Plant Physiology and Biochemistry*.

DOI:10.1016/j.plaphy.2018.11.003

LABUDA, M., RÓŻAŃSKA, E., CZARNOCKA, W., ET AL. (2018). Systemic changes in photosynthesis and reactive oxygen species homeostasis in shoots of *Arabidopsis thaliana* infected with the beet cyst nematode *Heterodera schachtii*. *Molecular Plant Pathology*, 19(7), 1690–1704.

DOI:10.1111/mpp.12652

LI, N., YUE, C., CAO, H., ET AL. (2018). Transcriptome sequencing dissection of the mechanisms underlying differential cold sensitivity in young and mature leaves of the tea plant (*Camellia sinensis*). *Journal of Plant Physiology*.

DOI: 10.1016/j.jplph.2018.03.017

LUNN, D., SMITH, G. A., WALLIS, J. G., & BROWSE, J. (2018). Development Defects of Hydroxy-Fatty Acid-Accumulating Seeds Are Reduced by Castor Acyltransferases. *Plant Physiology*, 177(2), 553–564.
DOI:10.1104/pp.17.01805

MILANI, A. S. (2018). Mangrove Forests of the Persian Gulf and the Gulf of Oman. Threats to Mangrove Forests, 53–75.
DOI:10.1007/978-3-319-73016-5_3

NEUFFER, B., WESSE, C., VOSS, I., & SCHEIBE, R. (2018). The role of ecotypic variation in driving worldwide colonization by a cosmopolitan plant. *AoB PLANTS*, 10(1).
DOI:10.1093/aobpla/ply005

NGUYEN, L., SEOK, H.-Y., WOO, D.-H., LEE, S.-Y., & MOON, Y.-H. (2018). Overexpression of the DEAD-Box RNA Helicase Gene AtRH17 Confers Tolerance to Salt Stress in Arabidopsis. *International Journal of Molecular Sciences*, 19(12), 3777.
DOI:10.3390/ijms19123777

NOSHI M., TANABE N., OKAMOTO Y., ET AL. (2018). Clade Ib basic helix-loop-helix transcription factor, bHLH101, acts as a regulatory component in photo-oxidative stress responses, *Plant Science*. Volume 274. Pages 101-108,
DOI: 10.1016/j.plantsci.2018.05.012.

NTAGKAS, N., WOLTERING, E., NICOLE, C., LABRIE, C., & MARCELIS, L. F. (2018). Light regulation of vitamin C in tomato fruit is mediated through photosynthesis. *Environmental and Experimental Botany*.
DOI:10.1016/j.envexpbot.2018.12.002

PEROZENI F., STELLA G. R. AND BALLOTTARI M. (2018). LCSR Expression under HSP70/RBCS2 Promoter as a Strategy to Increase Productivity in Microalgae. *Int. J. Mol. Sci.* 2018, 19(1), 155;
DOI:10.3390/ijms19010155

PINNOLA, A., ALBORESI, A., NOSEK, L., SEMCHONOK, D., ET AL. (2018). A LHC9-dependent photosystem I megacomplex induced under low light in *Physcomitrella patens*. *Nature Plants*.
DOI:10.1038/s41477-018-0270-2

PRINZENBERG, A. E., VÍQUEZ-ZAMORA, M., HARBINSON, J., LINDHOUT, P., & VAN HEUSDEN, S. (2018). Chlorophyll fluorescence imaging reveals genetic variation and loci for a photosynthetic trait in diploid potato. *Physiologia Plantarum*.
DOI:10.1111/ppl.12689

PULA, J., BARABASZ-KRASNY, B., LEPIARCZYK, K., ET AL. (2018). Activity of the Photosynthetic Apparatus in *Phaseolus vulgaris* L. Leaves Under the Cadmium Stress. *Not Bot Horti Agrobo*, 2019, 47(1).
DOI:10.15835/nbha47111328

ROACH T., STÖGGL W., BAUR T., ET AL. (2018). Distress and eustress of reactive electrophiles and relevance to light stress acclimation via stimulation of thiol/disulphide-based redox defences. *Free Radical Biology and Medicine*. Volume 122.
DOI: 10.1016/j.freeradbiomed.2018.03.030

ROZPĄDEK, P., NOSEK, M., DOMKA, A., WAŻNY, R., ET AL. (2018). Acclimation of the photosynthetic apparatus and alterations in sugar metabolism in response to inoculation with endophytic fungi. Plant, Cell & Environment.
DOI:10.1111/pce.13485

*RAUCH, C., TIELENS, A. G. M., SERÔDIO, J., ET AL. (2018). The ability to incorporate functional plastids by the sea slug *Elysia viridis* is governed by its food source. Marine Biology, 165(5).*
DOI:10.1007/s00227-018-3329-8

*RUČOVÁ D, GOGA M., MATÍK M, ET AL. (2018) Adaptations of cyanobacterium *Nostoc commune* to environmental stress: Comparison of morphological and physiological markers between European and Antarctic populations after rehydration. CZECH POLAR REPORTS 8 (1): 84-93.*
DOI: 10.5817/CPR2018-1-6

*SEDLAREVIĆ, A., MORINA, F., TOŠEVSKI, I., TOSTI, T., ET AL. (2018). Resource allocation in response to herbivory and gall formation in *Linaria vulgaris*. Plant Physiology and Biochemistry.*
DOI:10.1016/j.plaphy.2018.11.032

*SEGEČOVÁ, A., ČERVENÝ, J. AND ROITSCH, T. (2018) Advancement of the cultivation and upscaling of photoautotrophic suspension cultures using *Chenopodium rubrum* as a case study. Plant Cell Tiss Organ Cult.*
DOI: 10.1007/s11240-018-1441-6

SELLO, S., MOSCATIELLO, R., MEHLMER, N., ET AL. (2018). Chloroplast Ca²⁺ fluxes into and across thylakoids revealed by thylakoid-targeted aequorin probes. Plant Physiology, pp.00027.2018.
DOI:10.1104/pp.18.00027

SERÔDIO J, SCHMIDT W., FROMMLET J. C., ET AL. (2018) An LED-based multi-actinic illumination system for the high throughput study of photosynthetic light responses. PeerJ 6:e5589
DOI: 10.7717/peerj.5589

SILVA, S., SANTOS, C., SERODIO, J., SILVA, A. M. S., & DIAS, M. C. (2018). Physiological performance of drought-stressed olive plants when exposed to a combined heat–UV-B shock and after stress relief. Functional Plant Biology.
DOI:10.1071/fp18026

SHANG-GUAN, K., WANG, M., HTWE, N. M. P. S., ET AL. (2018). Lipopolysaccharides Trigger Two Successive Bursts of Reactive Oxygen Species at Distinct Cellular Locations. Plant Physiology, 176(3), 2543–2556.
DOI:10.1104/pp.17.01637

*STORTI, M., COSTA, A., GOLIN, S., ZOTTINI, ET AL. (2018). Systemic Calcium Wave Propagation in *Physcomitrella patens*. Plant and Cell Physiology.*
DOI:10.1093/pcp/pcy104

TRIPOLDI, P., MASSA, D., VENEZIA, A., & CARDI, T. (2018). Sensing Technologies for Precision Phenotyping in Vegetable Crops: Current Status and Future Challenges. Agronomy, 8(4), 57.
DOI:10.3390/agronomy8040057

WANG, L., & APEL, K. (2018). Dose-dependent effects of O₂ in chloroplasts are determined by its timing and localization of production. Journal of Experimental Botany.
DOI:10.1093/jxb/ery343

WANG, L., YAO, L., HAO, X., ET AL. (2018). *Tea plant SWEET transporters: expression profiling, sugar transport, and the involvement of CsSWEET16 in modifying cold tolerance in Arabidopsis*. *Plant Molecular Biology*, 96(6), 577–592.

DOI:10.1007/s11103-018-0716-y

YAO, J., SUN, D., CEN, H., XU, ET AL. (2018). *Phenotyping of Arabidopsis Drought Stress Response Using Kinetic Chlorophyll Fluorescence and Multicolor Fluorescence Imaging*. *Frontiers in Plant Science*, 9.

DOI: 10.3389/fpls.2018.00603

ZHANG, L., PU, H., DUAN, Z., LI, Y., ET AL. (2018). *Nucleus-Encoded Protein BFA1 Promotes Efficient Assembly of the Chloroplast ATP Synthase Coupling Factor 1*. *The Plant Cell*, tpc.00075.

DOI:10.1105/tpc.18.00075

BARCZAK-BRZYŻEK A. K., KIEŁKIEWICZ M., GAWROŃSKI P. ET AL. (2017). *Cross-talk between high light stress and plant defence to the two-spotted spider mite in Arabidopsis thaliana*. *Exp Appl Acarol*, 73: 177.

DOI: 10.1007/s10493-017-0187-x

CHRISTA G., CRUZ S., JAHNS P., ET AL. (2017). *Photoprotection in a monophyletic branch of chlorophyte algae is independent of energy-dependent quenching (qE)*. *New Phytol*. 214: 1132–1144.

DOI:10.1111/nph.14435

GONZALES DE SOUZA, G., MENDES PINHEIRO, A. L., SILVA, J. A., ET AL. (2017). *Morpho-physiological Tolerance Mechanisms of *Talinum patens* to Lead*. *Water, Air, & Soil Pollution*, 229(1).

DOI:10.1007/s11270-017-3658-0

HANTZIS, L. J., KROH, G. E., JAHN, C. E., CANTRELL, M., PEERS, G., PILON, M., & RAVET, K. (2017). *A Program for Iron Economy during Deficiency Targets Specific Fe Proteins*. *Plant Physiology*, 176(1), 596–610.

DOI:10.1104/pp.17.01497

JE S. M., WOO S. Y., LEE S. H. ET AL. (2017). *Combined effect of elevated CO₂ concentration and drought on the photosynthetic apparatus and leaf morphology traits in seedlings of yellow poplar*. *Ecol Res*.

DOI: 10.1007/s11284-017-1495-7

LUKASZUK, E., RYS, M., MOŽDŽEŇ, K. ET AL. (2017). *Photosynthesis and sucrose metabolism in leaves of *Arabidopsis thaliana* aos, ein4 and rcd1 mutants as affected by wounding*. *Acta Physiol Plant* (2017) 39: 17.

DOI: 10.1007/s11738-016-2309-1

PERIN G., SIMIONATO D., BELLAN A., ET AL. (2017). *Cultivation in industrially relevant conditions has a strong influence on biological properties and performances of *Nannochloropsis gaditana* genetically modified strains*. *Algal Research*. Volume 28. Pages 88-99.

DOI: 10.1016/j.algal.2017.10.013.

SELLO S., MOSCATIELLO R., LA ROCCA N., ET AL. (2017). *A Rapid and Efficient Method to Obtain Photosynthetic Cell Suspension Cultures of *Arabidopsis thaliana**. *Front. Plant Sci.* 8.

DOI: 10.3389/fpls.2017.01444

SEGEČOVÁ A., ČERVENÝ J. AND ROITSCH T. (2017). Stress Response Monitoring of Photoautotrophic Higher Plant Suspension Cultures by Fluorescence Imaging for High-Throughput Toxic Compound Screening. *J. Envir. Protect.* 8.

DOI: [10.4236/jep.2017.86044](https://doi.org/10.4236/jep.2017.86044)

WANG L., LI O., ZHANG A., ET AL. (2017). The Phytol Phosphorylation Pathway Is Essential for the Biosynthesis of Phylloquinone, which Is Required for Photosystem I Stability in *Arabidopsis*. *Molecular Plant*. Volume 10.

DOI: [10.1016/j.molp.2016.12.006](https://doi.org/10.1016/j.molp.2016.12.006)

ROACH T., BAUR T., STÖGGL W. AND KRIEGER-LISZKAY A. (2017). *Chlamydomonas reinhardtii* responding to high light: a role for 2-propenal (acrolein). *Physiol Plantarum*.

DOI: [10.1111/ppl.12567](https://doi.org/10.1111/ppl.12567)

VELEZ-RAMIREZ A. I., CARREÑO-QUINTERO N., VREUGDENHIL D., ET AL. (2017). Sucrose and Starch Content Negatively Correlates with PSII Maximum Quantum Efficiency in Tomato (*Solanum lycopersicum*) Exposed to Abnormal Light/Dark Cycles and Continuous Light. *Plant Cell Physiol.*

DOI: [10.1093/pcp/pcx068](https://doi.org/10.1093/pcp/pcx068)

VELEZ-RAMIREZ A. I., DÜNNER-PLANELLA G., VREUGDENHIL D., ET AL. (2017). On the induction of injury in tomato under continuous light: circadian asynchrony as the main triggering factor. *Functional Plant Biology*. Volume 44.

DOI: [10.1071/FP16285](https://doi.org/10.1071/FP16285)

ALLORENT G., LEFEBVRE-LEGENDRE L., CHAPPUIS R., ET AL. (2016). UV-B photoreceptor-mediated protection of the photosynthetic machinery in *Chlamydomonas reinhardtii*. *PNAS*.

DOI: [10.1073/pnas.1607695114](https://doi.org/10.1073/pnas.1607695114)

BERTEOTTI S., BALLOTTARI M. AND BASSI R. (2016). Increased biomass productivity in green algae by tuning non-photochemical quenching. *Scientific Reports*. Volume 6.

DOI: [10.1038/srep21339](https://doi.org/10.1038/srep21339)

EILERS U., DIETZEL L., BREITENBACH J., ET AL., (2016). Identification of genes coding for functional zeaxanthin epoxidases in the diatom *Phaeodactylum tricornutum*, *Journal of Plant Physiology*. Volume 192.

DOI: [10.1016/j.jplph.2016.01.006](https://doi.org/10.1016/j.jplph.2016.01.006)

GHAZARYAN A., AKHTAR P., GARAB G., ET AL. (2016). Involvement of the Lhc α protein Fcp6 of the diatom *Cyclotella meneghiniana* in the macro-organisation and structural flexibility of thylakoid membranes. *Biochimica et Biophysica Acta (BBA) - Bioenergetics*, Volume 1857.

DOI: [10.1016/j.bbabiobio.2016.04.288](https://doi.org/10.1016/j.bbabiobio.2016.04.288)

GOTO S., KAWAGUCHI Y., SUGITA CH., ET AL. (2016). P-class pentatricopeptide repeat protein PTSF1 is required for splicing of the plastid pre-tRNA^{Leu} in *Physcomitrella patens*. *The Plant Journal*. Volume 86.

DOI: [10.1111/tpj.13184](https://doi.org/10.1111/tpj.13184)

HIDA E., MEMA M., BABANI F., ET AL. (2016). Differences on stress response of *Cercis Siliquastrum* plants in different places in metallurgical complex and in different periods via screening photosynthetic activity by chlorophyll fluorescence imaging. *Science and Technologies*. Volume 6.

KIM J. A., JUNG H., HONG J. K., ET AL. (2016). Reduction of GIGANTEA expression in transgenic *Brassica rapa* enhances salt tolerance. *Plant Cell Reports*. Volume 35.

DOI: 10.1007/s00299-016-2008-9

KONG L. A., XIE Y., SUN M. Z., ET AL., (2016). Comparison of the photosynthetic characteristics in the pericarp and flag leaves during wheat (*Triticum aestivum L.*) caryopsis development. *Photosynthetica*. Volume 54.

DOI:10.1007/s11099-015-0153-y

KRÁLIKOVÁ I., GOGA M., BIL'OVÁ I., ET AL. (2016). Response of lichens *Cladonia arbuscula* subsp. *mitis* and *Cladonia furcata* to nitrogen excess. *Biologia*. Volume 71.

DOI: 10.1515/biolog-2016-0078

LAUERSEN K. J., BAIER T., WICHMANN J., ET AL. (2016). Efficient phototrophic production of a high-value sesquiterpenoid from the eukaryotic microalga *Chlamydomonas reinhardtii*. *Metabolic Engineering*. Volume 38.

DOI: 10.1016/j.ymben.2016.07.013.

MAZUR R., SADOWSKA M., KOWALEWSKA L., ET AL. (2016). Overlapping toxic effect of long term thallium exposure on white mustard (*Sinapis alba L.*) photosynthetic activity. *BMC Plant Biology*.

DOI: 10.1186/s12870-016-0883-4

MEMĂ M., BABANI F., HIDĂ E., ET AL. (2016). Fluorescence imaging and pigment determination of *Populus* by the photosynthetic apparatus in DAJТ area. *Science and Technologies*. Volume 6.

NOSHI M., HATANAKA R., TANABE N., ET AL. (2016). Redox regulation of ascorbate and glutathione by a chloroplastic dehydroascorbate reductase is required for high-light stress tolerance in *Arabidopsis*. *Bioscience, Biotechnology, and Biochemistry*. Volume 80.

DOI: 10.1080/09168451.2015.1135042

NOSHI M., YAMADA H., HATANAKA R., ET AL. (2016). *Arabidopsis* dehydroascorbate reductase 1 and 2 modulate redox states of ascorbate-glutathione cycle in the cytosol in response to photooxidative stress. *Bioscience, Biotechnology and Biochemistry*.

DOI: 10.1080/09168451.2016.1256759

PAVLOVIČ A., STOLÁRIK T., NOSEK L., ET AL. (2016). Light-induced gradual activation of photosystem II in dark-grown Norway spruce seedlings. *Biochimica et Biophysica Acta (BBA) – Bioenergetics*. Volume 185

DOI: 10.1016/j.bbabiobio.2016.02.009

PERIN G., CIMETTA E., MONETTI F., ET AL. (2016). Novel micro-photobioreactor design and monitoring method for assessing microalgae response to light intensity. *Algal Research*. Volume 19.

DOI: 10.1016/j.algal.2016.07.015

SELLO S., PEROTTO J., CARRARETTO L., ET AL. (2016). Dissecting stimulus-specific Ca²⁺ signals in amyloplasts and chloroplasts of *Arabidopsis thaliana* cell suspension cultures. *Journal of Experimental Botany*.

DOI:10.1093/jxb/erw038

SHAPIGUZOV A., CHAI X., FUCILE G., ET AL. (2016). Activation of the Stt7/STN7 Kinase through Dynamic Interactions with the Cytochrome b₆f Complex. *Plant Physiology*. Volume 171.

DOI: 10.1104/pp.15.01893

VOJTA P., KOKÁŠ F., HUSÍČKOVÁ A., ET AL. (2016). Whole transcriptome analysis of transgenic barley with altered cytokinin homeostasis and increased tolerance to drought stress. *New Biotechnology*. Volume 33.

DOI: [10.1016/j.nbt.2016.01.010](https://doi.org/10.1016/j.nbt.2016.01.010)

WANNATHONG T., WATERHOUSE J. C., YOUNG, R. E. B., ET AL. (2016). New tools for chloroplast genetic engineering allow the synthesis of human growth hormone in the green algae *Chlamydomonas reinhardtii*. *Applied Microbiology and Biotechnology*. Volume 100.

DOI: [10.1007/s00253-016-7354-6](https://doi.org/10.1007/s00253-016-7354-6)

ZHENG CH., WANG Y., DING Z., ET AL. (2016). Global Transcriptional Analysis Reveals the Complex Relationship between Tea Quality, Leaf Senescence and the Responses to Cold-Drought Combined Stress in *Camellia sinensis*. *Frontiers in Plant Science*. Volume 7.

DOI: [10.3389/fpls.2016.01858](https://doi.org/10.3389/fpls.2016.01858)

BOURDAIS G., BURDIAK P., GAUTHIER A., ET AL. (2015) Large-Scale Phenomics Identifies Primary and Fine-Tuning Roles for CRKs in Responses Related to Oxidative Stress. *PLoS Genet.*, Volume 11.

DOI: [10.1371/journal.pgen.1005373](https://doi.org/10.1371/journal.pgen.1005373)

BEIKE A. K., LANG D., ZIMMER A. D., ET AL. (2015). Insights from the cold transcriptome of *Physcomitrella patens*: global specialization pattern of conserved transcriptional regulators and identification of orphan genes involved in cold acclimation. *The New Phytologist*. Volume 205, Pages 869-881.

DOI: [10.1111/nph.13004](https://doi.org/10.1111/nph.13004)

DOOLEY F. D., WYLLIE-ECHEVERRIA S., GUPTA E., ET AL. (2015). Tolerance of *Phyllospadix scouleri* seedlings to hydrogen sulfide. *Aquatic Botany*. Volume 123, Pages 72–75.

DOI: [10.1016/j.aquabot.2015.02.004](https://doi.org/10.1016/j.aquabot.2015.02.004)

PERIN G., BELLAN A., SEGALLA A., ET AL. (2015). Generation of random mutants to improve light-use efficiency of *Nannochloropsis gaditana* cultures for biofuel production. *Biotechnology for Biofuels*. Volume 8.

DOI: [10.1186/s13068-015-0337-5](https://doi.org/10.1186/s13068-015-0337-5)

VERCRUYSSEN L., TOGNETTI V. B., GONZALEZ N., ET AL. (2015). GROWTH REGULATING FACTOR5 Stimulates *Arabidopsis* Chloroplast Division, Photosynthesis, and Leaf Longevity. *Plant Physiology*. Volume 167, Pages 817-32.

DOI: [10.1104/pp.114.256180](https://doi.org/10.1104/pp.114.256180)

ALINIAEIFARD S. AND VAN MEETEREN (2014). Natural variation in stomatal response to closing stimuli among *Arabidopsis thaliana* accessions after exposure to low VPD as a tool to recognize the mechanism of disturbed stomatal functioning. *Journal of Experimental Botany*. Volume 65, Pages 6529-6542.

DOI: [10.1093/jxb/eru370](https://doi.org/10.1093/jxb/eru370)

BEELER S., LIU H., STADLER M., ET AL. (2014). Plastidial NAD-Dependent Malate Dehydrogenase Is Critical for Embryo Development and Heterotrophic Metabolism in *Arabidopsis*. *Plant Physiology*. Volume 164, Pages 1175–1190.

DOI: [10.1104/pp.113.233866](https://doi.org/10.1104/pp.113.233866)

GAWROŃSKI P, WITOŃ D, VASHUTINA K., ET AL. (2014). *Mitogen-Activated Protein Kinase 4 Is a Salicylic Acid-Independent Regulator of Growth But Not of Photosynthesis in Arabidopsis*. *Molecular Plant*. Volume 7, Pages 1151–1166.

DOI: <http://dx.DOI.org/10.1093/mp/ssu060>

HIDA E. Z., ÇAKO V., BABANI F., ET AL. (2014). *The Influence of Stress Analyzed By The Emitted Fluorescence Changes*. *Journal of Engineering (IOSRJEN)*; Volume 4, Pages 38-43.

HIDA E. Z., ÇAKO V., BABANI F., ET AL. (2014). *Activity Imaging Photosynthetic Of Populus X Canadensis Moench Plants In Air Pollution*. *International Journal of Engineering Inventions*. Volume 3. Pages 35-40.

HURA K., HURA T., GRZESIAK M. (2014). *Function of the photosynthetic apparatus of oilseed winter rape under elicitation by Phoma lingam phytotoxins in relation to carotenoid and phenolic levels* *Acta Physiol Plant*. Volume 36, Pages 295–305

DOI: [10.1007/s11738-013-1410-y](https://doi.org/10.1007/s11738-013-1410-y)

JOHNSON, S. M., LIM F. L., FINKLER A., ET AL. (2014). *Transcriptomic analysis of Sorghum bicolor responding to combined heat and drought stress.*, *BMC genomics*, Volume 15, Page 456.

DOI: [10.1186/1471-2164-15-456](https://doi.org/10.1186/1471-2164-15-456)

LEAL M. C., JESUS B., EZEQUIEL J., ET AL. (2014). *Concurrent imaging of chlorophyll fluorescence, Chlorophyll a content and green fluorescent proteins-like proteins of symbiotic cnidarians*. *Marine Ecology*, Pages 1-13.

DOI: [10.1111/maec.12164](https://doi.org/10.1111/maec.12164)

LEE S. B., YOO S. Y., KIM D. Y., ET AL. (2014) *Proteomic evaluation of the response of soybean (Glycine max var Seoritae) leaves to UV-B*. *Plant Omics*.

MOŻDŻEŃ K. AND REPKA P. (2014). *Allelopathic influence of aqueous extracts from the leaves of Morus alba L. on seed germination and seedling growth of Cucumis sativus L. and Sinapis alba L. Modern Phytomorphology*. Volume 5. Pages 93–99.

PERIN G., SEGALLA A., BASSO S., ET AL. (2014) *Biotechnological Optimization of Light Use Efficiency in Nannochloropsis Cultures for Biodiesel Production* *Chemical Engineering Transactions*. Volume 37, Pages 763-768.

DOI: [10.3303/CET1437128](https://doi.org/10.3303/CET1437128)

BIANCONI D., PIETRINI F., MASSACCI A., ET AL. (2013). *Uptake of Cadmium by Lemna minor, a (hyper?-) accumulator plant involved in phytoremediation applications*. *E3S Web of Conferences*. Volume 1.

DOI: [10.1051/e3sconf/20130113002](https://doi.org/10.1051/e3sconf/20130113002)

GAWROŃSKI P, GÓRECKA M, BEDERSKA M, ET AL. (2013). *Isochorismate synthase 1 is required for thylakoid organization, optimal plastoquinone redox status, and state transitions in Arabidopsis thaliana*. *Journal of Experimental Botany*. Volume 64, Pages 3669-3679.

DOI: [10.1093/jxb/ert203](https://doi.org/10.1093/jxb/ert203)

HIDA E. Z., ÇAKO V., BABANI F., ET AL. (2013). *Photosynthetic activity imaging of stressed-pollution plants*. *International Journal of Ecosystems & Ecology Sciences*. Volume. 3. Page 53.

HIRTH M., DIETZEL L., STEINER S., ET AL. (2013). Photosynthetic acclimation responses of maize seedlings grown under artificial laboratory light gradients mimicking natural canopy conditions. *Frontiers in Plant Science*. Volume 4, Page 334.

DOI: [10.3389/fpls.2013.00334](https://doi.org/10.3389/fpls.2013.00334)

LYSKA D., ENGELMANN K., MEIERHOFF K., ET AL. (2013). A Gateway-Based Vector System for Adaptive Expression and Flexible Tagging of Proteins in *Arabidopsis*. *PLoS ONE*. Volume 8.

DOI: [10.1371/journal.pone.0053787](https://doi.org/10.1371/journal.pone.0053787)

MALASARN D., KROPAT J., HSIEH S. I., ET AL. (2013). Zinc Deficiency Impacts CO₂ Assimilation and Disrupts Copper Homeostasis in *Chlamydomonas reinhardtii*. *The Journal of Biological Chemistry*. Volume 288, Pages 10672-10683.

DOI: [10.1074/jbc.M113.455105](https://doi.org/10.1074/jbc.M113.455105)

MARTEINSSON V., VAISHAMPAYAN P., KVÍDEROVÁ J., ET AL. (2013). A Laboratory of Extremophiles: Iceland Coordination Action for Research Activities on Life in Extreme Environments (CAREX) Field Campaign. *Life: Open Access Journal*. Volume 3, Pages 211-233.

DOI: [10.3390/life3010211](https://doi.org/10.3390/life3010211)

NOVÁK J., PAVLŮ J., NOVÁK O., ET AL. (2013). High cytokinin levels induce a hypersensitive-like response in tobacco. *Annals of Botany*. Volume 112, Pages 41-55.

DOI: [10.1093/aob/mct092](https://doi.org/10.1093/aob/mct092)

PINNOLA A., DALL'OSTO L., GEROTTO C., ET AL. (2013). Zeaxanthin Binds to Light-Harvesting Complex Stress-Related Protein to Enhance Nonphotochemical Quenching in *Physcomitrella patens*. *The Plant Cell*. Volume 25, Pages 3519-3534.

DOI: [10.1105/tpc.113.114538](https://doi.org/10.1105/tpc.113.114538)

WITUSZYŃSKA . W., GAŁAZKA K., RUSACZONEK A., ET AL. (2013). Multivariable environmental conditions promote photosynthetic adaptation potential in *Arabidopsis thaliana*. *J Plant Physiol*. Volume 170, Pages 548-59.

DOI: [10.1016/j.jplph.2012.11.016](https://doi.org/10.1016/j.jplph.2012.11.016)

ECKERT C., BOEHM M., CARRIERI D., ET AL. (2012). Genetic Analysis of the Hox Hydrogenase in the Cyanobacterium *Synechocystis* sp. PCC 6803 Reveals Subunit Roles in Association, Assembly, Maturation, and Function. *The Journal of Biological Chemistry*. Volume 287, Pages 43502-43515.

DOI: [10.1074/jbc.M112.392407](https://doi.org/10.1074/jbc.M112.392407)

HEBBELMANN I., SELINSKI J., WEHMEYER C., ET AL. (2012). Multiple strategies to prevent oxidative stress in *Arabidopsis* plants lacking the malate valve enzyme NADP-malate dehydrogenase. *Journal of Experimental Botany*. Volume 63, Pages 1445-1459.

DOI: [10.1093/jxb/err386](https://doi.org/10.1093/jxb/err386)

KONG L., WANG F., ZHANG R., ET AL. (2012). High Nitrogen Rate Inhibits Proteolysis and Decreases the Export of Leaf Pre-stored Proteins to Grains in Wheat (*Triticum aestivum*). *International Journal of Agriculture and Biology*. Volume 14, Pages 1009-1013.

DOI: [12-639/MFA/2012/14-6-1009-1013](https://doi.org/10.12639/MFA/2012/14-6-1009-1013)

BAURIEGEL E., GIEBEL A. AND HERPPICH W.B. (2011). Hyperspectral and chlorophyll fluorescence imaging to analyse the impact of *Fusarium culmorum* on the photosynthetic integrity of infected wheat ears. *Sensors (Basel)*. Volume 11, Pages 3765-3779.

DOI: [10.3390/s110403765](https://doi.org/10.3390/s110403765)

DIETZEL L., BRÄUTIGAM K., STEINER S., ET AL. (2011). Photosystem II Supercomplex Remodeling Serves as an Entry Mechanism for State Transitions in *Arabidopsis*. *The Plant Cell*. Volume 23, Pages 2964-2977.

DOI: [10.1105/tpc.111.087049](https://doi.org/10.1105/tpc.111.087049)

GUTZAT R., BORGHI L., FÜTTERER J., ET AL. (2011) Retinomablastoma-related protein controls the transition to autotrophic plant development. *Development*. Volume 138, Pages 2977-2986.

DOI: [10.1242/dev.060830](https://doi.org/10.1242/dev.060830)

KVÍDEROVÁ J., ELSTER J. AND ŠIMEK M. (2011). In situ response of *Nostoc commune* s.l. colonies to desiccation in Central Svalbard, Norwegian High Arctic. *Fottea*. Volume 11, Pages 87-97.

PENG L, SHIKANAI T. (2011). Supercomplex Formation with Photosystem I Is Required for the Stabilization of the Chloroplast NADH Dehydrogenase-Like Complex in *Arabidopsis*. *Plant Physiology*. Volume 155, Pages 1629-1639.

DOI: [10.1104/pp.110.171264](https://doi.org/10.1104/pp.110.171264)

WILLIG A., SHAPIGUZOVA A., GOLDSCHMIDT-CLERMONT M., ET AL. (2011). The Phosphorylation Status of the Chloroplast Protein Kinase STN7 of *Arabidopsis* Affects Its Turnover. *Plant Physiology*. Volume 157, Pages 2102-2107.

DOI: [10.1104/pp.111.187328](https://doi.org/10.1104/pp.111.187328)

HERPPICH W. B., FOERSTER J., ZEYMER J., ET AL. (2010). Chlorophyll fluorescence image analysis for non-destructive monitoring of physiological changes in the fresh and fresh-cut produce. *Environmentally Friendly and Safe Technologies for Quality of Fruits and Vegetables*. Volume 1.

PARK S. J., KIM D. Y., YOO S. Y. ET AL. (2010). Response of Leaf Pigment and Chlorophyll Fluorescence to Light Quality in Soybean (*Glycine max* Merr. var *Seoritae*). *Korean Journal of Soil Science and Fertilizer*. Volume 43, Pages 400-406.

TAKAMI T. KOBAYASHI Y. AND SHIKANAI T. (2010). *Arabidopsis CFD* is an ortholog of *Chlamydomonas Ccs1* that is required for c-type heme assembly in chloroplasts. *Plant Biotechnology*. Volume 27, Pages 401-408.

DOI: [10.5511/plantbiotechnology.10.0614a](https://doi.org/10.5511/plantbiotechnology.10.0614a)

WINGLER A., PURDY S. J., EDWARDS S. A., ET AL. (2010). QTL analysis for sugar-regulated leaf senescence supports flowering-dependent and –independent senescence pathways. *New Phytologist*. Volume 185, Pages 420-433.

DOI: [10.1111/j.1469-8137.2009.03072.x](https://doi.org/10.1111/j.1469-8137.2009.03072.x)

WORK V. H., RADAKOVITS R., JINKERSON R. E., ET AL. (2010). Increased Lipid Accumulation in the *Chlamydomonas reinhardtii sta7-10* Starchless Isoamylase Mutant and Increased Carbohydrate Synthesis in Complemented Strains. *Eukaryotic Cell*. Volume 9, Pages 1251-1261.

DOI: [10.1128/EC.00075-10](https://doi.org/10.1128/EC.00075-10)

BARUAH A., SIMKOVA K., HINCHA D. K., ET AL. (2009). Modulation of O₂-mediated retrograde signaling by the PLEIOTROPIC RESPONSE LOCUS 1 (PRL1) protein, a central integrator of stress and energy signaling *The Plant Journal*. Volume 60, Pages 22–32

DOI: 10.1111/j.1365-313X.2009.03935.x

MESKAUSKIENE R., WURCH M., LALOI C., ET AL. (2009'). A mutation in the Arabidopsis mTERF-related plastid protein SOLDAT10 activates retrograde signaling and suppresses ¹O₂-induced cell death. *The Plant Journal*. Volume 60, Pages 399–410

DOI: 10.1111/j.1365-313X.2009.03965.x

STETTLER M., EICKE S., METTLER T., ET AL. (2009). Blocking the Metabolism of Starch Breakdown Products in Arabidopsis Leaves Triggers Chloroplast degradation. *Molecular Plant* Volume 2, Pages 1233–1246

DOI: 10.1093/mp/ssp093

JEONG J., COHU C., LOUBNA KERKEB L., ET AL. (2008). Chloroplast Fe(III) chelate reductase activity is essential for seedling viability under iron limiting conditions. *PNAS*. Volume 105, Pages 10619–10624.

DOI: 10.1073/pnas.0708367105

*BERGER S., BENEDIKTYOVÁ Z., MATOUS K., ET AL.(2007). Visualization of dynamics of plant-pathogen interaction by novel combination of chlorophyll fluorescence imaging and statistical analysis: differential effects of virulent and avirulent strains of *P. syringae* and of oxylipins on *A. thaliana*.* *J Exp Bot.* Volume 58. Pages 797-806.

DOI: 10.1093/jxb/erl208

HOGEWONING S., AND HARBINSON J. (2007). Insights on the development, kinetics, and variation of photoinhibition using chlorophyll fluorescence imaging of a chilled, variegated leaf *Journal of Experimental Botany*. Volume 3, Pages 453–463.

DOI:10.1093/jxb/erl219

MASCLAUX-DAUBRESSE C, PURDY S, LEMAITRE T, ET AL.(2007). Genetic Variation Suggests Interaction between Cold Acclimation and Metabolic Regulation of Leaf Senescence. *Plant Physiology*. Volume 143, Pages 434–446

DOI: 10.1104/pp.106.091355

OZAKI H., IKEUCHI M., OGAWA T. ET AL. (2007). Large-Scale Analysis of Chlorophyll Fluorescence Kinetics in Synechocystis sp. PCC 6803: Identification of the Factors Involved in the Modulation of Photosystem Stoichiometry *Plant Cell Physiology*. Volume 48, Pages 451–458.

DOI:10.1093/pcp/pcm015

VAN HOEWYK D, ABDEL-GHANY SE, COHU CM, ET AL. (2007). Chloroplast iron-sulfur cluster protein maturation requires the essential cysteine desulfurase CpNifS. *Proceedings of the National Academy of Sciences of the United States of America.* Volume 104, Pages 5686-5691.

DOI:10.1073/pnas.0700774104

*MATOUS K., BENEDIKTYOVÁ Z., BERGER S., ET AL. (2006). Case study of combinatorial imaging: what protocol and what chlorophyll fluorescence image to use when visualizing infection of *Arabidopsis thaliana* by *Pseudomonas syringae*?* *Photosynth Res.* Volume 90, Pages 243-53.

ŠKALOUDOVÁ B., KŘIVAN V. AND ZEMEK R. (2006). Computer-assisted estimation of leaf damage caused by spider mites *Computers and Electronics in Agriculture.* Volume 53, Pages 81–91.

DOI:10.1016/j.compag.2006.04.002

OBENLAND D. AND NEIPP P. (2005). *Chlorophyll Fluorescence Imaging Allows Early Detection and Localization of Lemon Rind Injury following Hot Water Treatment*. HortScience Volume 40, Pages 1821-1823.

THORNTON L. E., KEREN N., OHAD I., ET AL. (2005). *Physcomitrella patens and Ceratodon purpureus, mosses as model organisms in photosynthesis studies*. Photosynthesis Research. Volume 83. Pages 87-96.

WINGLER A., BROWNHILL E. AND POURTAU N. (2005). *Mechanisms of the light-dependent induction of cell death in tobacco plants with delayed senescence*. Journal of Experimental Botany, Volume 56, Pages 2897–2905.

DOI:10.1093/jxb/eri284

KAŇA R., ŠPUNDOVÁ M., ILÍK P., ET AL. (2004). *Effect of herbicide clomazone on photosynthetic processes in primary barley (*Hordeum vulgare L.*) leaves*. Pesticide Biochemistry and Physiology. Volume 78, Pages 161-170.

DOI:10.1016/j.pestbp.2003.12.002