

# PLANTSCREEN™ SYSTEMS

## LIST OF REFERENCES

### PLANTSCREEN™ COMPACT SYSTEM:

COE R. A., CHATTERJEE J., ACEBRON K., ET AL. (2018). High-throughput chlorophyll fluorescence screening of *Setaria viridis* for mutants with altered CO<sub>2</sub> compensation points. *Functional Plant Biology*.  
DOI: 10.1071/FP17322

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

FICHMAN Y., KONCZ Z., REZNIK N., ET AL. (2018). SELENOPROTEIN O is a chloroplast protein involved in ROS scavenging and its absence increases dehydration tolerance in *Arabidopsis thaliana*. *Plant Science*. Volume 270.  
DOI: 10.1016/j.plantsci.2018.02.023.

PAVICIC M., MOUHU K., WANG F., ET AL. (2017). Genomic and Phenomic Screens for Flower Related RING Type Ubiquitin E3 Ligases in *Arabidopsis*. *Frontiers in Plant Scienc*. Volume 8.  
DOI: 10.3389/fpls.2017.00416

AWLIA M., NIGRO A., FAJKUS J., ET AL. (2016): High-throughput non-destructive phenotyping of traits contributing to salinity tolerance in *Arabidopsis thaliana*. Submitted *Frontiers in Plant Sciences*.  
DOI: 10.3389/fpls.2016.01414

SIMKO I., HAYES R. J. AND FURBANK R. T. (2016). Non-destructive Phenotyping of Lettuce Plants in Early Stages of Development with Optical Sensors. *Frontiers in Plant Science*;7:1985.  
DOI:10.3389/fpls.2016.01985

HUMPLIK J.F., LAZAR D., FÜRST, T., HUSICKOVA A., HYBL, M. AND SPICHAL L. (2015): Automated integrative high-throughput phenotyping of plant shoots: a case study of the cold-tolerance of pea (*Pisum sativum* L.). *Plant Methods* 19;11:20,  
DOI: 10.1186/s13007-015-0063-9

### PLANTSCREEN™ MODULAR SYSTEM:

SYTAR O., BRÜCKOVÁ K., KOVÁR M., ET AL. (2017). Nondestructive detection and biochemical quantification of buckwheat leaves using visible (VIS) and near-infrared (NIR) hyperspectral reflectance imaging. *Journal of Central European Agriculture*. 18(4), p.864-878  
DOI: 10.5513/JCEA01/18.4.1978

TSCHIRSCH H., JUNKER A., MEYER R. C., & ALTMANN, T. (2017). Establishment of integrated protocols for automated high throughput kinetic chlorophyll fluorescence analyses. *Plant Methods*, 13, 54.

**DOI: 10.1186/s13007-017-0204-4**

BUSH M.S., PIERRAT O, NIBAU C, ET AL.(2016). eIF4A RNA Helicase Associates with Cyclin-Dependent Protein Kinase A in Proliferating Cells and is Modulated by Phosphorylation[b]. *Plant Physiol.* 2016 Jul 7,

**DOI: 10.1104/pp.16.00435**

BELL J. AND DEE M. H. (2016). The subset-matched Jaccard index for evaluation of Segmentation for Plant Images. *Front Plant Sci.* 2016; 7: 1985.

**DOI: 10.3389/fpls.2016.01985**

BELL J. AND DEE M. H. (2016). Watching plants grow – a position paper on computer vision and *Arabidopsis thaliana*. *IET Computer Vision.* Volume 11., p. 113 – 121.

**DOI: 10.1049/iet-cvi.2016.0127**

#### **PLANTSCREEN™ XYZ SYSTEM:**

DE DIEGO N., FÜRST T., HUMPLÍK J. F., ET AL. (2017). An Automated Method for High-Throughput Screening of *Arabidopsis* Rosette Growth in Multi-Well Plates and Its Validation in Stress Conditions. *Frontiers in Plant Science.* Volume 8.

**DOI: 10.3389/fpls.2017.01702**

#### **PLANTSCREEN™ TRANSECT XZ SYSTEM:**

MISHRA K. B., MISHRA A, NOVOTNÁ K., ET AL. (2016). Chlorophyll a fluorescence, under half of the adaptive growth-irradiance, for high-throughput sensing of leaf-water deficit in *Arabidopsis thaliana* accessions. *Plant Methods.* 12:46.

**DOI: 10.1186/s13007-016-0145-3**

#### **REVIEW PLANTSCREEN™ SYSTEMS:**

ROUPHAEL Y., SPÍCHAL L., PANZAROVÁ K., ET AL. (2018). High-throughput Plant Phenotyping for Developing Novel Biostimulants: From Lab to Field or From Field to Lab? *Front. Plant Sci.*, 9:1197.

**DOI: 10.3389/fpls.2018.01197**

SYTAR O., ŽIVČAK M., OLŠOVSKA K., BRESTIC M. (2018) Perspectives in High-Throughput Phenotyping of Qualitative Traits at the Whole-Plant Level. In: Sengar R., Singh A. (eds) *Eco-friendly Agro-biological Techniques for Enhancing Crop Productivity.* Springer, Singapore.

**DOI: 10.1007/978-981-10-6934-5\_10**

LOBOS G. A., CAMARGO A. V., DEL POZO A., ET AL. (2017). Editorial: Plant Phenotyping and Phenomics for Plant Breeding. *Front. Plant Sci.* 8.

**DOI: 10.3389/fpls.2017.02181**

WEBER J., KUNZ, C., PETEINATOS, G., ET AL. (2017). Utilization of Chlorophyll Fluorescence Imaging Technology to Detect Plant Injury by Herbicides in Sugar Beet and Soybean. *Weed Technology*, 1-13.

**DOI:10.1017/wet.2017.22**

CRUZ J. A., SAVAGE L. J., ZEGARAC R., ET AL (2016). Dynamic Environmental Photosynthetic Imaging Reveals Emergent Phenotypes. *Cell Systems*. Volume 2. Issue 6. Pages 365-377.

**DOI: 10.1016/j.cels.2016.06.001**

DA SILVA J. M. (2016). Monitoring Photosynthesis by In Vivo Chlorophyll Fluorescence: Application to High-Throughput Plant Phenotyping. *The Arabidopsis Book 14*: e0185. 2016

**DOI: 10.5772/62391**

RUNGRAT T., AWLIA M., BROWN M. ET AL. (2016). Using Phenomic Analysis of Photosynthetic Function for Abiotic Stress Response Gene Discovery. *The Arabidopsis Book 14*: e0185.

**DOI: 10.1199/tab.0185**

HUMPLIK J.F., LAZAR D., HUSICKOVA A. AND SPICHAL L. (2015): [b]Automated phenotyping of plant shoots using imaging methods for analysis of plant stress responses – a review. *Plant Methods* 11:29,

**DOI:10.1186/s13007-015-0072-8.**

BROWN T.B., CHENG R., SIRALT R.R., ET AL. (2014): TraitCapture: genomic and environment modelling of plant phenomic data. *Current Opinion in Plant Biology* 18: pp. 73-79.

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