PLANT PHYSIOLOGY AND BIOCHEMISTRY
Integrating molecular, cellular, and organismal plant biology

TABLE OF CONTENTS

- Description p.1
- Audience p.1
- Impact Factor p.1
- Abstracting and Indexing p.2
- Editorial Board p.2
- Guide for Authors p.6

DESCRIPTION

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Drought, Irrigation, ABA, Stomata, Root-Shoot communication, Vertical Farming, Root Soil Structure (Rather buzzy editing his own journal), Plant-soil interaction, rooth, nutrients

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Cereal Senescence, Nitrogen Metabolism, QTL, Transcriptome, NILs, senescence, proteases, nutrient remobilization, nitrogen metabolism

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heavy metal toxicity, heavy metal tolerance, iron uptake, iron deficiency, iron chelates, iron reduction, ferric chelate reductase

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Abiotic stress, antioxidants, plant priming, signal transduction, biotechnology

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Heat stress; abiotic stress; rice biotechnology

**Björn Hamberger**, Michigan State University, East Lansing, Michigan, United States of America

plant specialised metabolites of phenylpropanoid origin terpenoid biosynthesis and metabolites

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Abiotic stress, Antioxidant defense, Oxidative stress, Nitric oxide, Salt stress

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Plant protection science

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Photosynthesis, Chlorophyll fluorescence, Stress physiology, Plant talk, Machine learning

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Plant hormone signaling, Abiotic stress, Photosynthesis, Sulfur/Nitrogen assimilation

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seed, vegetable and fruit physiology, postharvest physiology, plant growth regulators, fruit tree culture and management

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Physiology and proteomics of abiotic and biotic stresses in plants with a focus on cereal crops. Stress-responsive proteins, dehydrins.

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Abiotic Stress, B-Carotene, Antioxidants, Genetics, HKT, Antiporters, Kinase, Transcriptome, SNP, Metabolic Engineering

**Guojing Li**, Inner Mongolia Agricultural University, College of Life Sciences, Hohhot, China

Abiotic stress; Plant physiology; Biochemistry; Gene function; Bioinformatics

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Low Oxygen Stress, Drought stress, Metabolism, Amino Acids , Nitrate Transporters, Legumes

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Plant physiology, Environmental soil chemistry, Nanotoxicology, Nano-agriculture; Emerging contaminants

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Mechanism of lignin metabolism; plant hormone regulation and gene engineering

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Abiotic stress, cold tolerance, gene expression, cold responses, protective metabolites

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Molecular Markers, Fruits Breeding, Fruit Genomics, Fruit Transcriptomics, Vegetable Breeding, Biotic and Abiotic stresses

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Molecular Plant-Pest Interactions, Comparative Genomics, Signaling Networks, Proteases and Protease Inhibitors

**Autar Mattoo**, USDA-ARS Beltsville Agricultural Research Center, Beltsville, Maryland, United States of America

Biotic-, abiotic-, environmental stress, antimicrobial peptide, polyamine, metabolomics, seed dormancy, plant hormones, fruit ripening, senescence, photosystem II reaction center proteins, genetically engineered crops, sustainable alternative agriculture

**Kenji Miura**, University of Tsukuba, Tsukuba, Japan

Plant abiotic stress responses such as cold stress, drought stress and salt stress, Plant biotechnology, Protein expression

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Plant Physiology, Plant stress, Photosynthesis, Chlorophyll a fluorescence, Ecotoxicology
Kirk Overmyer, University of Helsinki, Helsinki, Finland
Biotic stress, plant immunity, plant-fungal interactions, plant and fungal genomics, fungal pathogenicity, ROS signaling

Jutta Papenbrock, Leibniz University Hanover, Hannover, Germany
Plant Physiology, Plant Environmental Stress Physiology, Abiotic Stress, Stress Tolerance, Enzyme Activity, Halophytes, Phytoremediation

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terrestrial plants, especially crop plants, and the use of green technologies for environmental remediation,

Sheo Mohan Prasad, University of Allahabad, Ranjan Plant Physiology and Biochemistry Laboratory, Department of Botany, Prayagraj, India
Abiotic stress; Antioxidants; Photosynthesis; Oxidative stress; Reactive oxygen species

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Abiotic stress, Castor bean, Crop Physiology, Metabolomics, Transcriptomics, Gene Expression, Seed germination and seedling development, Bioinformatics

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Root development, Organellar proteases, Organellar biogenesis, Plant stress response, Gene expression

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Donatella Serafini-Fracassini, University of Bologna Department of Biological and Environmental Geology, Bologna, Italy
Polyamines, transglutamininase, their role in plant growth, differentiation, senescence, programmed cell death, germination and incompatibility of pollen, and structural organization.

Sergey Shabala, University of Tasmania, Hobart, Australia
stress physiology (salinity; waterlogging; drought; oxidative stress; soil acidity; Al toxicity); membrane transport (ion channels and pumps); plant nutrition; stomata physiology; circadian and ultradian rhythms and oscillations

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Lipids, Surface Lipids, Regulation of Wax Synthesis, Abiotic Stress

Akira Suzuki, INRAE, Institut Jean-Pierre Bourgin (IPB), UMR1318 INRAE-AgroParisTech INRA Centre de Versailles-Grignon, Versailles, France
Nitrogen metabolism in higher plants related to ammonium assimilation, amino acid synthesis, nitrogen translocation from sources to sinks, seed filling with nitrogen

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plant metabolic engineering, transgenic plant, plant biotechnology , flax biotechnology

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Stress, Molecular physiology, Bioinformatics, Transcription factor, Transporter

Paraskevi Tavladoraki, Roma Tre University Department of Sciences, Roma, Italy
Polyamine metabolism, Polyamine oxidase, Thermospermine, Root growth, Xylem differentiation, Stomata movement, Hormones, Abiotic stress, Biotic stress, Reactive oxygen species.

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Lipids, oleosin

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