ISSN 1021-4437 CODEN: RJPPE2

RUSSIAN JOURNAL OF PLANT PHYSIOLOGY

Pleiades
Publishing Group
over 50
years
in the service of
science and education

Editor-in-Chief Vladimir V. Kuznetsov

> https://pleiades.online https://link.springer.com



Distributed by **SPRINGER NATURE**



Volume 72, Issue 1 February 2025

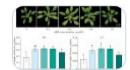
(i) reserve seems or community

33 articles in this issue

AtELS1 Plays an Important Role in Keeping the Balance of Iron Homeostasis in Arabidopsis

RESEARCH PAPERS | 26 April 2025 | Article: 33

Exogenous ABA Inhibits the Accumulation of Ni, Zn, and Cd in *Arabidopsis*, but Fails to Minimize Pb Accumulation



RESEARCH PAPERS | 26 April 2025 | Article: 32

Effect of Nitrogen Application Rate on Blueberry Seedling Growth



RESEARCH PAPERS | 26 April 2025 | Article: 31

Physiological Basis of Seed Priming Induced Improvement in Germination and Seedling Vigor in Onion



RESEARCH PAPERS | 26 April 2025 | Article: 30

Integrated Transcriptomic and Metabolomic Analyses Uncover
Regulatory Networks and Metabolite Dynamics in Cibotium
barometz Leaf Development



RESEARCH PAPERS | 26 April 2025 | Article: 29

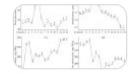
Exogenous Spermidine Enhanced the Drought Tolerance in the Root of *Hordeum jubatum* by Modulating Root System Architecture and Anatomical Structure



<u>Pisum sativum</u> (Pea) and <u>Zea mays</u> (Maize) Primary Roots Differentially Respond to Exogenous H₂O₂ Regulation of Their Growth

RESEARCH PAPERS | 26 April 2025 | Article: 27

Alleviation of Salt Stress in Pea: Biochemical, Germination and Seedling Responses Depending on Putrescine and Salicylic Acid



RESEARCH PAPERS | 26 April 2025 | Article: 26

<u>Development Studies on Four Asian Pear Varieties Using Different Biochemical and</u> Physiological Analysis

RESEARCH PAPERS | 26 April 2025 | Article: 25

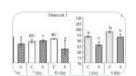
<u>Transcriptome Analysis Reveals the Involvement of Phenylpropane</u>

Metabolic Pathway in Cold Tolerance of *Cinnamomun bodinieri*



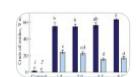
RESEARCH PAPERS | 26 April 2025 | Article: 24

Influence of Soil Drought on Physiological Indicators of Soft Spring
Wheat Varieties with Contrasting Stress Resistance



RESEARCH PAPERS | 26 April 2025 | Article: 23

Adaptation of Jimsonweed to Crude Oil: Physiological and Morphoanatomical Responses



RESEARCH PAPERS | 26 April 2025 | Article: 22

The Phenological Performance and Low-Temperature Physiological Responses Revealed the Adaptability of Eight Rose Species in the Eastern of the Tibetan Plateau



Naringenin Enhanced Antioxidant Potential and Osmoprotectant Accumulation to Induce Salt Tolerance in Mungbean

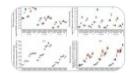
RESEARCH PAPERS | 26 April 2025 | Article: 20

Key Genes Related to the Cold Resistance of *Bougainvillea* glabra "Elizabeth Angus"



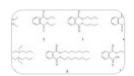
RESEARCH PAPERS | 26 April 2025 | Article: 19

A Comparative Analysis of Phytochemical, Physio-Biochemical, and Enzymatic Responses of Different Capsicum Species (Capsicum spp.) to Salt Stress



RESEARCH PAPERS | 26 April 2025 | Article: 18

Ortho-Phthalic Acid Esters: A New Group of Secondary Plant Metabolites



REVIEWS 26 April 2025 Article: 17

Nano-Priming with MnFe₂O₄ NMs Enhances Resistance to Drought Stress and Salt Stress in Maize



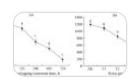
RESEARCH PAPERS | 26 April 2025 | Article: 16

Hydrogen Sulfide's Role in Enhancing Antioxidant Defense and Biochemical Resilience in Salt-Stressed Lavender (Lavandula angustifolia) Plants

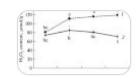


RESEARCH PAPERS | 26 April 2025 | Article: 15

Physio-Biochemical Characteristics and Quality Evaluation in Upper Leaves of Tobacco *Nicotiana tabacum* L. under Waterlogging Stress

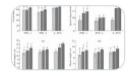


Effect of Cold on Oxidative Damage and Transcript Accumulation of Salicylic Acid-Biosynthetic Genes in Chickpea



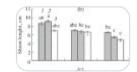
RESEARCH PAPERS | 26 April 2025 | Article: 13

Nanopriming with TiO₂ Enhances Germination by Affecting Chlorophyll Content, Osmolytes and Antioxidant Defense System in Lentil (*Lens culinaris* Medik.)



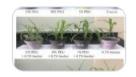
RESEARCH PAPERS | 26 April 2025 | Article: 12

Interactive Impacts of Salicylic Acid and UV-B Radiation on Biochemical and Anatomical Characteristics of the Moldavian Dragonhead (Dracocephalum moldavica L.)



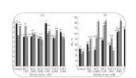
RESEARCH PAPERS | 26 April 2025 | Article: 11

Enhancing Metabolic Processes and Water Deficit Stress Tolerance of Maize Plants through Biochar Addition and Foliar Application of Zinc Nanoparticles



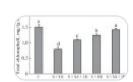
RESEARCH PAPERS | 26 April 2025 | Article: 10

Improving the Germination and Growth of Basil Seed (*Ocimum basilicum* L.) under Salinity Stress Conditions with the Use of Priming Salicylic Acid and Potassium Nitrate



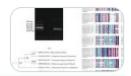
RESEARCH PAPERS | 26 April 2025 | Article: 9

Alleviating Salt-Induced Effects in Tomato via Simultaneous Application of Salicylic Acid and Potassium

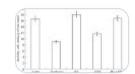


RESEARCH PAPERS | 14 April 2025 | Article: 8

Molecular Mechanism of the *PpDOG1* Gene Regulating Bud-Break in Peach

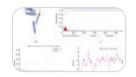


The Role of DNA Methyltransferases of Different Families in Changing the Methyl Status of DNA in Corn Leaves under Irradiation with Light of Different Wavelengths



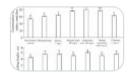
RESEARCH PAPERS | 14 April 2025 | Article: 6

Characterization of the CsMUTE Gene from Cucumis sativus and Its Function in Response to Salt Stress



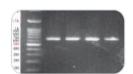
RESEARCH PAPERS | 14 April 2025 | Article: 5

Biostimulant Enhances Growth, Herbage Yield, and Physio-Biochemical Characteristics of Sweet Basil Plants under Drought Stress



RESEARCH PAPERS | 14 April 2025 | Article: 4

Improving the Production of Glycyrrhizin and Glycyrrhetinic Acid by Eliciting Hairy Root of *Glycyrrhiza glabra*



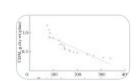
RESEARCH PAPERS | 14 April 2025 | Article: 3

Impacts of Artificial Night Light Pollution on Photosynthetic Efficiency, Biochemical Profiles, Nutrient Dynamics, and Ultrastructural Dynamics in Solanum melongena



RESEARCH PAPERS | 14 April 2025 | Article: 2

Potential Allelopathic Effects of Two Multipurpose Trees on Germination,
Seedling Performance, and Antioxidant Activity of Alfalfa in
Mediterranean Arid Lands



RESEARCH PAPERS | 14 April 2025 | Article: 1