

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>

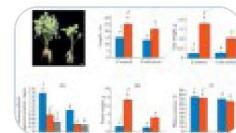


PLEIADES GROUP OF COMPANIES

Distributed by **SPRINGER NATURE**

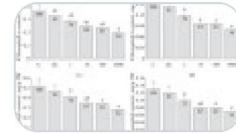
32 articles in this issue

Divergent Physiological and Biochemical Responses of Roots and Shoots in *Saposhnikovia divaricata* to Cold Stress



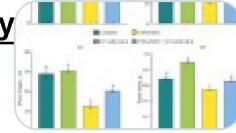
RESEARCH PAPERS | 27 January 2026 | Article: 32

Ecotoxicological Effects of Triclosan on Seedling Development and Antioxidant System of Canola Plants (*Brassica napus* L.)



RESEARCH PAPERS | 27 January 2026 | Article: 31

Exogenous Allantoin Enhances Maize (*Zea mays* L.) Resilience to Salinity Stress: Physiological and Biochemical Insights



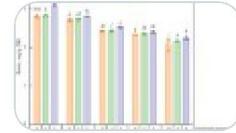
RESEARCH PAPERS | 27 January 2026 | Article: 30

Priming Induced Cell Cycle Arrest: A Strategy for Enhancing Seed Storability in Cucumber (*Cucumis sativus* L.)



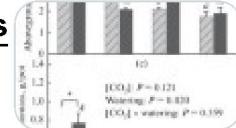
RESEARCH PAPERS | 27 January 2026 | Article: 29

Mitigation of Drought Stress in Licorice (*Glycyrrhiza glabra* L.) by Seaweed Extract (*Ascophyllum nodosum*): Effects on Morphological Traits, Pigments, and Biochemical Properties

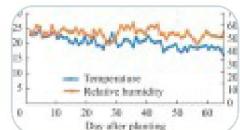


RESEARCH PAPERS | 27 January 2026 | Article: 28

Elevated Atmospheric CO₂ Concentration Mitigates the Negative Impacts of Soil Water Deficiency on Leaf Photosynthesis of Soybeans

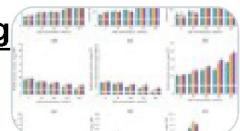


Impact of SiO₂ Nanoparticles on Radish Growth, Enzyme Activity, and Nutrient Content under Saline Water Stress



RESEARCH PAPERS | 27 January 2026 | Article: 26

Silicon Improves Salt Tolerance through Osmotic Adjustment, Enhancing Antioxidant Capacity and Up-Regulating Ions Transporter Genes Expression in *Vigna radiata* L.



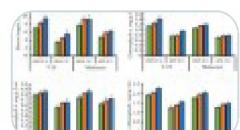
RESEARCH PAPERS | 27 January 2026 | Article: 25

Chitosan-Silver Nanocomposites in Combination with *Bacillus subtilis* for Control PVY and Induction of Plant Defense Mechanisms



RESEARCH PAPERS | 27 January 2026 | Article: 24

Salicylic Acid Enhances Yield and Alleviates Drought-Induced Oxidative Damage in Two Carrot Cultivars with Contrasting Tolerance



RESEARCH PAPERS | 27 January 2026 | Article: 23

State of the Antioxidant System and Photosynthetic Apparatus of Barley after Gamma-Irradiation at Different Growth Stages



RESEARCH PAPERS | 27 January 2026 | Article: 22

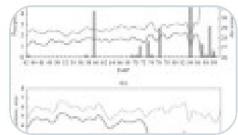
Antioxidant Enzyme Activity in the Leaves of Halophytes under the White Sea Coast Environmental Conditions

RESEARCH PAPERS | 27 January 2026 | Article: 21

Genetic Engineering of C₄ Pathway Enzymes Enhances Limited Water Tolerance in C₃ Rice

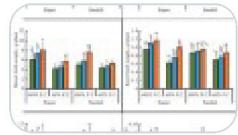


Enhanced Productivity and Water-Use Efficiency in Grapevines Using Calcium Oxide Particle Films



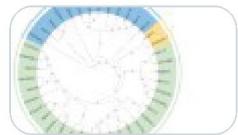
RESEARCH PAPERS | 27 January 2026 | Article: 19

Comparative Effects of Externally Applied Glycinebetaine and Neem (*Azadirachta indica*) Leaf Extract on Plant Growth, Physio-Biochemical Characteristics and Yield Production of Canola (*Brassica napus L.*) Subjected to Drought Stress



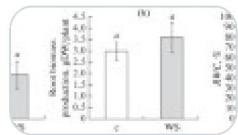
RESEARCH PAPERS | 27 January 2026 | Article: 18

Comprehensive Genome-Wide Analysis and Expression Profiling of the Heat Shock Transcription Factor (Hsf) Gene Family, and Function Detection of *BpHsf11* in Heat Stress Response in Paper Mulberry (*Broussonetia papyrifera*)



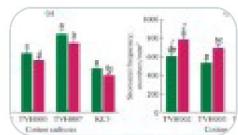
RESEARCH PAPERS | 27 January 2026 | Article: 17

Combining Proteomic Approach with Morpho-Physiological Changes to Assess the Effect of Drought Stress on Olive Plants at Young Stage of Development



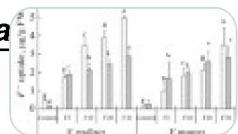
RESEARCH PAPERS | 27 January 2026 | Article: 16

Unlocking the Stomatal Regulation, Gas Exchange Traits and Metabolite Profiles to Dissect the Drought Tolerance in Cotton



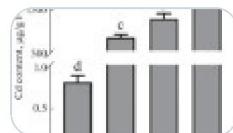
RESEARCH PAPERS | 23 January 2026 | Article: 15

Effects of Fluoride during the Early Growth Phase in Indian Pulses (*Vigna radiata* and *Vigna mungo*): Physiological Alterations and Cytotoxicity



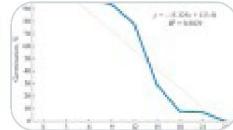
RESEARCH PAPERS | 23 January 2026 | Article: 14

Effects of Cadmium Stress on Polyamine Content, Antioxidant Defense and Nutrient Uptake in Tissue-Cultured *Potamogeton crispus* L. Seedlings



RESEARCH PAPERS | 23 January 2026 | Article: 13

Comprehensive Assessment of Seed Vigor in Common Bean (*Phaseolus vulgaris* L.) Using Tetrazolium Test and Antioxidant Biomarkers



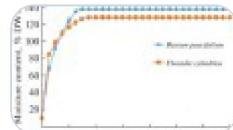
RESEARCH PAPERS | 23 January 2026 | Article: 12

Exogenous Arginine as a Potential Biostimulant for Enhancing Salinity Stress Tolerance in Maize (*Zea mays* L.)



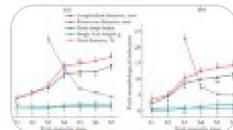
RESEARCH PAPERS | 23 January 2026 | Article: 11

Unraveling Divergent Morphophysiological Dormancy Strategies in *Bunium paucifolium* and *Elwendia cylindrica* Seeds (Apiaceae)



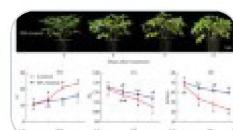
RESEARCH PAPERS | 23 January 2026 | Article: 10

Blueberry Flavor Stems from Dynamic Shifts in Sugars, Acids, and Nutrient Properties during Fruit Ripening



RESEARCH PAPERS | 23 January 2026 | Article: 9

Humic Acid Improves High-Temperature Tolerance in Herbaceous Peony



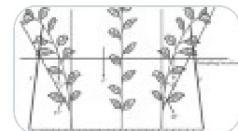
RESEARCH PAPERS | 23 January 2026 | Article: 8

Physiological and Transcription Analyses Reveal the Regulatory Mechanism of Melatonin in Inducing Drought Resistance in Blueberry (*Vaccinium* spp.) Seedlings



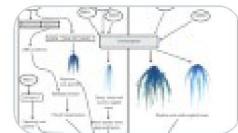
RESEARCH PAPERS | 23 January 2026 | Article: 7

Antioxidant Responses Related to Flexure Wood Formation in Poplar



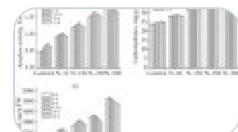
RESEARCH PAPERS | 23 January 2026 | Article: 6

Smart Water Crops: Physiological and Genetic Innovations for Maximizing Water Productivity



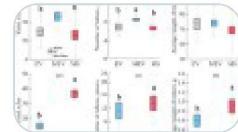
REVIEWS | 23 January 2026 | Article: 5

ROS Burst and Enhanced α -Amylase Activity Promoted Germination in Radish Seeds Nanoprimed with MgO-NPs



RESEARCH PAPERS | 23 January 2026 | Article: 4

The Relationship between the Physiological Parameters of Leaves and the Yield and Quality of Potato Tubers



RESEARCH PAPERS | 23 January 2026 | Article: 3

Deciphering Dark Proteome of Grapevine Geminivirus: Molecular Insights and Evolutionary Tactics of a Rising Viral Threat in Grapevine and Global Agriculture



RESEARCH PAPERS | 23 January 2026 | Article: 2

Enhancement of Physiological, Phytochemical, and Antioxidant Characteristics in Artificial Tetraploid *Viola odorata*



RESEARCH PAPERS | 23 January 2026 | Article: 1