

НАУЧНЫЕ ПУБЛИКАЦИИ СОТРУДНИКОВ ВИР В ЖУРНАЛАХ, ИНДЕКСИРУЕМЫХ В БАЗАХ ДАННЫХ
«СЕТЬ НАУКИ» (WEB OF SCIENCE) И SCOPUS. 2025 г. (на 10.08.2025)

- Abdullaev F., Churikova D., Pirogova P., Lysov M., Vodeneev V., Sherstneva O. Search of Reflectance Indices for Estimating Photosynthetic Activity of Wheat Plants Under Drought Stress. *Plants*. 2025;14(1):91. DOI: 10.3390/plants14010091
- Bagmet L.V., Kurashev O.V. Nomenclatural standards of gooseberry cultivars developed at the Russian Research Institute of Fruit Crop Breeding. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):160-170. DOI: 10.30901/2227-8834-2025-2-160-170
- Barabanov I.V., Vasilieva M.V., Anisimova I.N., Rakhmangulov R.S. Snapdragon (*Antirrhinum majus* L.): a retrospective review of contemporary breeding. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):210-223. DOI: 10.30901/2227-8834-2025-1-210-223
- Batalova G.A., Loskutov I.G. Some results of oat breeding under the conditions of the Volga-Vyatka region of Russia. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):114-120. DOI: 10.30901/2227-8834-2025-2-114-120
- Bemova V.D., Porokhovinova E.A., Yakusheva T.V., Podolnaya L.P., Gavrilova V.A. Interaction between plant characters in peanut (*Arachis hypogaea* L.) and the expression level of the cucumopine synthase gene. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):79-91. DOI: 10.30901/2227-8834-2025-2-79-91
- Burlyaeva M.O., Gurkina M.V., Krylova E.A., Ukhatova Yu.V. Selection of source material and agricultural practices for cowpea cultivation in order to ensure uninterrupted production of vegetables for food processing enterprises. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):80-92. DOI: 10.30901/2227-8834-2025-1-80-92
- Burlyaeva M.O., Krylova E.A., Kotseruba V.V., Chebukin P.A., Sabitov A.Sh. Crop wild relatives in the south of Primorsky Territory and the Yanbian Korean Autonomous Prefecture of China: studying and mobilization (based on the results of VIR's collecting missions). *Proceedings on applied botany, genetics and breeding*. 2025;186(2):9-24. DOI: 10.30901/2227-8834-2025-2-9-24
- Deng S., Kong C., Ma H., Ji J., Wang Y., Zhang Y., Zhuang M., Yang L., Fang Z., Taranov V., Artemyeva A.M., Lv H. Genetic and Cellular Basis of Resistance to Black Rot Caused by *Xanthomonas campestris* pv. *campestris* in *Brassica rapa*. *Horticulturae*. 2025;11(6):626. DOI: 10.3390/horticulturae11060626
- dos Reis S.R.R., Gomes-da-Silva N.C., Alencar L.M.R., de Menezes A.S., de Menezes F.D., Golokhvast K.S., Ricci-Junior E., Santos-Oliveira R. Eco-Friendly Approaches in Oncology: Developing Holmium (^{166}Ho) Glass Microspheres for Hepatocellular Radioembolization. *ACS Omega*. 2025;10(22):22426–22433. DOI: 10.1021/acsomega.4c08734
- Gnutikov A.A., Nosov N.N., Loskutov I.G., Rodionov A.V., Shneyer V.S. Participation of Wild Species Genus *Avena* L. (Poaceae) of Different Ploidy in the Origin of Cultivated Species According to Data on Intragenomic Polymorphism of the ITS1-5.8S rRNA Region. *Plants*. 2025;14(10):1550. DOI: 10.3390/plants14101550
- Gulyaeva E.I., Shaydayuk E.L., Abdullaev K.M., Aydemirova Z.S. Monitoring the virulence of the wheat yellow rust pathogen in Dagestan. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):204-217. DOI: 10.30901/2227-8834-2025-2-204-217
- Gulyaeva E.I., Shaydayuk E.L., Zuev E.V. The potential of modern Russian winter and spring wheat (*Triticum aestivum* L.) varieties for genetic protection against leaf and yellow rust. *Sel'skokhozyaistvennaya Biologiya [Agricultural Biology]*, 2025;60(3):485-502. DOI: 10.15389/agrobiology.2025.3.485eng
- Kharchenko A.A., Novikova L.Yu. Comparison of winter hardiness components in *Fragaria* L. accessions with different phenorhythmotypes in an artificial climate chamber. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):121-130. DOI: 10.30901/2227-8834-2025-1-121-130
- Kim I. V., Nawaz M. A., Volkov D. I., Klykov A. G., Razgonova M. P., Golokhvast K. S. Identification and Quantification of Anthocyanins in Various Organs of Potato Varieties (*Solanum tuberosum* L.) as Potential Visual Selection Markers During Breeding. *Plants*. 2025;14(13):2042. DOI: 10.3390/plants14132042
- Kolesnikov L.E., Fokina M.I., Kolesnikova Yu.R., Chernikova N.V., Yakhyaev G.G.R. Effect of pre-sowing seed treatment with semiconductor laser radiation on soft wheat productivity and its resistance to diseases. In: *BIO Web of Conferences. International Scientific and Practical Conference "Agriculture and Food Security: Technology, Innovation, Markets, Human Resources" (FIES 2024)*. Kazan; 2025. Vol. 161. p.00022. DOI: 10.1051/bioconf/202516100022

Федеральный исследовательский центр Всероссийский институт генетических ресурсов растений имени Н.И. Вавилова
N.I. Vavilov All-Russian Institute of Plant Genetic Resources

- Krivenko D.A., Barsukova I.N., Chepinoga V.V., Gnutikov, A.A. Gudkova P.D., Leonova, T.V. Myakoshina Yu.A., Olonova M.V., Pavlichenko V.V., Protopopova M.V. Botanica Pacifica plant chromosome data 4. *Botanica Pacifica: a Journal of Plant Science and Conservation*. 2025;14(1):187-194. DOI: 10.17581/bp.2025.14101
- Kuzmina D, Samarina L, Malyukova L, Koninskaya N, Shkhalakhova R, Ryndin A, Wang S, Wang Y, Tong W, Xia E, Khlestkina E. *In vitro* VS *in vivo* transcriptional approach provides new insight on temporal cold response which works without root system in tea plant (*Camellia sinensis* (L.) Kuntze). *Plant Physiology and Biochemistry*. 2025;225:109934. DOI: 10.1016/j.plaphy.2025.109934
- Loskutov I.G., Ukhatoeva Y.V., Khlestkina E.K. VIR: from a small Bureau in the Russian Empire to the present-day National Center for Plant Genetic Resources. *Genetic Resources*. 2025;(S2):58-69. DOI: 10.46265/genresj.EVEF5522
- Ma H., Deng S., Kong C., Zhang Y., Zhao T., Ji J., Wang Y., Zhang Y., Zhuang M., Yang L., Lebedeva M., Taranov V., Artemyeva A. M., Fang Z., Yu J., Hu Z., Lv H. Multi-Time Point Transcriptome Analysis and Functional Validation Revealed *Bol4CL41* Negatively Regulates Black Rot Resistance in Cabbage. *International Journal of Molecular Sciences*. 2025;26(13):6179. DOI: <https://doi.org/10.3390/ijms26136179>
- Novoselskaya-Dragovich A.Y., Fisenko A.V., Konovalov F.A., Lyapunova O.A., Kudryavtsev A.M., Badaeva E.D., Goncharov N.P. Assessment of genetic diversity of tetraploid wheat *Triticum dicoccum* Schrank ex Schübl. based on long terminal repeat (LTR) retrotransposon integration sites and C-banding analysis. *Genetic Resources and Crop Evolution*. 2025. DOI: 10.1007/s10722-025-02487-9
- Okhlopko, Z.M., Razgonova, M.P., Egorova, P.S., Golokhvast, K.S. Polyphenolic Complex of the Above-Ground Phytomass of *Dryopteris fragrans* (L.) Schott. from Yakutia: Supercritical Carbon Dioxide Extraction and Identification by Tandem Mass Spectrometry. *Russian Journal of Plant Physiology*. 2025;72(2):54. DOI: 10.1134/S1021443724610140
- Razgonova M.P., Navaz M.A., Butovets E.S., Lukyanchuk L.M., Chunikhina O.A., Ercişli S., Emelyanov A.N., Golokhvast K.S. Autofluorescence and Metabotyping of Soybean Varieties Using Confocal Laser Microscopy and High-Resolution Mass Spectrometric Approaches. *Plants*. 2025;14(13):1995. DOI: 10.3390/plants14131995
- Razgonova M.P., Nawaz M.A., Rusakova E.A., Golokhvast K.S. Application of Supercritical CO₂ Extraction and Identification of Polyphenolic Compounds in Three Species of Wild Rose from Kamchatka: *Rosa acicularis*, *Rosa amblyotis*, and *Rosa rugosa*. *Plants*. 2025;14(1):59. DOI: 10.3390/plants14010059
- Razgonova M.P., Okhlopko Zh.M., Nawaz M.A., Egorova P.S., Golokhvast K.S. Supercritical Extraction and Identification of Bioactive Compounds in *Dryopteris fragrans* (L.) Schott. *Pharmaceuticals*. 2025;18(3):299. DOI: 10.3390/ph18030299
- Razgonova M.P., Rusakova E.A., Zinchenko Y.N., Golokhvast K.S. Newly Identified Groups of Polyphenolic Compounds Found in Wild *Rosa* extracts: *Rosa acicularis*, *Rosa amblyotis*, *Rosa rugosa*. *Russian Journal of Plant Physiology*. 2025;72(2):51. DOI: 10.1134/S1021443724609789
- Razgonova M.P., Shinkaruk P.A., Maksimenko A.A., Podvolotskaya A.B., Tekutyeva L.A. Supercritical CO₂ Extraction of Bioactive Compounds from Corn Grains (*Zea mays* L., Hybrid *Pri-15-7-16*) with Metabolomic Profiling and Confocal Laser Microscopy. *Plants*. 2025;14(6):913. DOI: 10.3390/plants14060913
- Rozanova I.V., Vodiasova E.A. Modern methods in peach (*Prunus persica*) genome research. *Vavilovskii Zhurnal Genetiki i Seleksii* = *Vavilov J Genet Breed*. 2025;29(3):358-369. DOI: 10.18699/vjgb-25-39
- Semenova A.G., Radchenko E.E. Genetic control of frit fly resistance in spring barley cultivars. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):108-113. DOI: 10.30901/2227-8834-2025-2-108-113
- Semenova E.V., Novikova L.Yu., Boyko A.P., Vishnyakova M.A. The effect of weather factors on seed productivity components in pea accessions from VIR during their reproduction at Adler Experiment Station. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):106-120. DOI: 10.30901/2227-8834-2025-1-106-120
- Shelenga T.V., Malyshev L.L., Belousova M.Kh., Ivanova Yu.V., Kerv Yu.A., Popov V.S., Khoreva V.I., Chikida N.N. The use of metabolomic profiling to evaluate *Aegilops tauschii* Coss accessions of various geographical origin from the VIR collection. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):57-67. DOI: 10.30901/2227-8834-2025-2-57-67
- Shelenga T.V., Nikiforov A.A., Burlyaeva M.O., Perchuk I.N., Popov V.S. Rapid assessment of nutritional value indicators in *Vigna unguiculata* (L.) Walp. seed accessions from the VIR collection using NIR spectroscopy. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):68-78. DOI: 10.30901/2227-8834-2025-2-68-78

Федеральный исследовательский центр Всероссийский институт генетических ресурсов растений имени Н.И. Вавилова
N.I. Vavilov All-Russian Institute of Plant Genetic Resources

- Shelenga T.V., Salikova A.V., Popov V.S., Egorova G.P., Malyshev L.L., Vishnyakova M.A. Interrelations between the main seed quality characteristics of narrowleaf lupine from the VIR collection. *Vavilovskii Zhurnal Genetiki i Seleksii = Vavilov Journal of Genetics and Breeding*. 2025;29(1):35-43. DOI: 10.18699/vjgb-25-05
- Shelenga T.V., Solovyeva A.E., Sokolova D.V., Vasipov V.V., Smolenskaya A.E., Popov V.S. Rapid assessment of biochemical indicators of agronomic value in amaranth seed accessions from the VIR collection using NIR spectroscopy. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):52-60. DOI: 10.30901/2227-8834-2025-1-52-60
- Shen G., Zhou L., Zheng F., Yu Z., Yang Y., Zhang W., Kon'kova N.G. Study on seed quality testing of Russian dandelion. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):61-70. DOI: 10.30901/2227-8834-2025-1-61-70
- Sherstobitov V.V., Kolesova M.A. Resistance of cherry plum cultivars developed at Maikop Experiment Station of VIR to fungal diseases. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):202-209. DOI: 10.30901/2227-8834-2025-1-202-209
- Shilova O.A., Kovalenko A.S., Khamova T.V., Nikolaev A.M., Myakin S.V., Kopitsa G.P., Udalova O.R., Korniyukhin D.L., Artemyeva A.M., Zhuravleva A.S., Panova G.G. Properties of Photocatalytically Active TiO₂ Nanoparticles and Prospects for Their Applications in Agriculture. In: J. Prakash, J. Cho, O. Ruzimuradov, D. Fang (eds). *Titanium Dioxide-Based Multifunctional Hybrid Nanomaterials. Engineering Materials*. Springer, Cham; 2025. DOI: 10.1007/978-3-031-80625-4_9
- Shlyavas A.V. Rudolf J. Kordon: in memory of the chief custodian of VIR's seed collection during the Great Patriotic War. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):240-245. DOI: 10.30901/2227-8834-2025-2-240-245
- Shvachko N.A., Semilet T.V., Popov V.S., Blinova E.V., Loskutov I.G. Studying polymorphism of the gene *CslF6* associated with β -D-glucan biosynthesis in diploid oat accessions of *Avena strigosa* Schreb. from the VIR collection. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):191-201. DOI: 10.30901/2227-8834-2025-1-191-201
- Slobodkina A.A., Pavlov A.V., Porokhovina E.A. The *f3'5'h (d)* gene for pink coloring of flax flowers is a member of the CYP75 family within the CYP450 gene class: from class function to gene function. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):242-256. DOI: 10.30901/2227-8834-2025-1-242-256
- Sokolova D. The potential of the VIR grain amaranth collection for cultivation in the northern regions. *Crop Breeding and Applied Biotechnology*. 2025;25(2):e52252527. DOI: 10.1590/1984-70332025v25n2a07
- Sokolova D.V., Solovyeva A.E. Biochemical characteristics of tea from amaranth leaves (*Amaranthus cruentus* L.) of the 'Frant' variety. *Food Systems*. 2025;8(2):260-266. DOI: 10.21323/2618-9771-2025-8-2-260-266
- Sulima A.S., Zhuravlev I.Y., Alexeeva E.A., Kliukova M.S., Zorin E.A., Rakova V.A., Gordon M.L., Kulaeva O.A., Romanyuk D.A., Akhtemova G.A., Zhernakov A.I., Semenova E.V., Vishnyakova M.A., Tikhonovich I.A., Zhukov V.A. The Genomic and Phenotypic Characterization of the *Sym2^A* Introgression Line A33.18 of Pea (*Pisum sativum* L.) with the Increased Specificity of Root Nodule Symbiosis. *Plants*. 2025;14(3):427. DOI: 10.3390/plants14030427
- Talovina G.V., Kutukova A.S., Sleptsov T.S. Taxonomic, floristic and ecogeographic analyses of crop wild relatives in Yakutia, and the list of species for priority conservation. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):25-36. DOI: 10.30901/2227-8834-2025-2-25-36
- Tikhonova O.A. Ekaterina V. Volodina (1925–2015): a dedication to her 100th birthday. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):228-239. DOI: 10.30901/2227-8834-2025-2-228-239
- Tikhonova O.A., Smolenskaya A.E., Popov V.S. Main indicators of nutritional and biological value in black currant berries under the conditions of North. *Proceedings on applied botany, genetics and breeding*. 2025;186(2):92-107. DOI: 10.30901/2227-8834-2025-2-92-107
- Tolegen A.B., Romadanova N.V., Aralbayeva M.M., Rymkhanova N.K., Ukhatova Y.V., Agahanov M.M., Mikhailenko N.V., Kushnarenko S.V. Utilizing Plant Preservative Mixture™ to eliminate endophytic bacterial contamination and establish *in vitro* cultures of blackberry varieties. *International Journal of Biology and Chemistry*. 2025;18(1):89-99. DOI: 10.26577/IJBCh20251818
- Verzhuk V.G., Khokhlenko A.A., Georgadze N.S. Post-cryogenic regeneration of pollen of pear (*Pyrus* L.) cultivars from the VIR field genebank. *BIO Web Conf*. 2025;179:12001. DOI: 10.1051/bioconf/202517912001

Федеральный исследовательский центр Всероссийский институт генетических ресурсов растений имени Н.И. Вавилова
N.I. Vavilov All-Russian Institute of Plant Genetic Resources

Vishnyakova M.A., Dzyubenko E.A., Kocherina N.V., Agakhanov M.M., Shaukharov R.A. Phenotyping of guar accessions from the VIR collection under irrigation and artificial drought conditions in Volgograd Province. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):93-105. DOI: 10.30901/2227-8834-2025-1-93-105

Yakovleva O.V. Genetic control of the aluminum resistance trait in barley hybrids. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):170-176. DOI: 10.30901/2227-8834-2025-1-170-176

Zhao C., Liu X., Zhou A., Ji J., Wang Y., Zhuang M., Zhang Y., Yang L., Ma L., Chellappan B. V., Artemyeva A. M., Lv H. Transcriptome Analysis of Cabbage Near-Isogenic Lines Reveals the Involvement of the Plant Defensin Gene *PDF1.2* in *Fusarium* Wilt Resistance. *International Journal of Molecular Sciences*. 2025;26(8):3770. DOI: 10.3390/ijms26083770

Zhernakov A.I., Gordon M.L., Zorin E.A., Sulima, A.S., Zhukov V.A. Application of Quantitative Trait Loci (QTL) mapping to study the interactions of pea (*Pisum sativum* L.) with rhizosphere microorganisms. *Ecological Genetics*. 2025;23(1):65-79. DOI: 10.17816/ecogen642710

Zhuravlev I.Yu., Menkov M.T., Markova E.N., Dobarkina N.A., Evlash A.Ya., Shipilina L.Yu., Rozanov A.S. Current methods for identifying plant hybrids: a case study of blackberry. *Proceedings on Applied Botany, Genetics and Breeding*. 2025;186(1):224-241. DOI: 10.30901/2227-8834-2025-1-224-241

