

Список публикаций

Федерального государственного бюджетного учреждения науки Института физиологии растений им. К.А. Тимирязева Российской академии наук за 2019-2022 гг. по профилю диссертации Батаевой Юлии Викторовны «Особенности микробных комплексов аридной зоны в условиях агро- и техногенеза и их биотехнологическая значимость», представленную на соискание ученой степени доктора биологических наук по специальностям
1.5.11. Микробиология и 1.5.6. Биотехнология

1. Синетова М.А., Сидоров Р.А., Стариков А.Ю., Воронков А.С., Медведева А.С., Кривова З.В., Пахолкова М.С., Бачин Д.В., Бедбенков В.С., Габриелян Д.А., Заядан Б.К., Болатхан К., Лось Д.А. Характеристика биотехнологического потенциала штаммов цианобактерий и микроводорослей коллекции IPPAS // *Биотехнология*. **2019**. Т. 35. № 3. С. 12–29. doi: 10.21519/0234-2758-2019-35-3-12-29.
2. Voronkov A., Sinetova M. Polyphosphate accumulation dynamics in a population of *Synechocystis* sp. PCC 6803 cells under phosphate overplus // *Protoplasma* **2019**. V. 256. P. 1153–1164. doi: 10.1007/s00709-019-01374-2. JCR IF = 3.186.
3. Zavřel T., Faizi M., Loureiro C., Poschmann G., Stühler K., Sinetova M., Zorina A., Steuer R., Červený J. Quantitative insights into the cyanobacterial cell economy // *e-Life* **2019**. V. 8: e42508. doi: 10.7554/eLife.42508. JCR IF = 8.713.
4. Rimet F., Gusev E., Kahlert M., Kelly M., Kulikovskiy M., Maltsev Y., Mann D., Pfannkuchen M., Trobajo R., Vasselon V., Zimmermann J., Bouchez A. Diat.barcode, an open-access curated barcode library for diatoms // *Sci. Rep.* **2019**. V. 9. P. 15116. doi: 10.1038/s41598-019-51500-6. JCR = 4.379.
5. Maltsev Y., Maltseva I., Maltseva S., Kulikovskiy M.S. Fatty acid content and profile of the new strain of *Coccomyxa elongata* (Trebouxiophyceae, Chlorophyta) cultivated at reduced nitrogen and phosphorus concentrations // *J. Phycol.* **2019**. V. 55. P. 1154–1165. doi: 10.1111/jpy.12903. JCR IF = 2.923.
6. Glushchenko A., Kulikovskiy M.S., Kuznetsova I.V., Kociolek J.P. *Karthickia verestigmata* gen. et. sp. nov. – an interesting diatom frustular morphology similar to several different cymbelloid genera // *Phycologia* **2019**. V. 58. № 6. P. 605–613. doi: 10.1080/00318884.2019.1626605. JCR IF = 2.857.
7. Kulikovskiy M., Maltsev E., Glushchenko A., Gusev E., Kapustin D., Kuznetsova I., Frolova L., Kociolek J.P. Preliminary molecular phylogeny of the diatom genus *Nupela* with the description of a new species and consideration of the interrelationships of taxa in the suborder Neidiineae D.G. Mann sensu E.J. Cox // *Fottea* **2020**. V. 20. № 2. P. 192–204. doi: 10.5507/fot.2020.009. JCR IF = 2.429.
8. Kulikovskiy M., Maltsev Ye., Glushchenko A., Kuznetsova I., Kapustin D., Gusev E., Lange-Bertalot H., Genkal S., Kociolek J.P. *Gogorevia*, a new monoraphid diatom genus for *Achnanthes exigua* and allied taxa described on the basis of an integrated molecular and morphological approach // *J. Phycol.* **2020**. V. 56. P. 1601–1613. doi: 10.1111/jpy.13064. JCR IF = 2.923.

9. Kulikovskiy M., Glushchenko A., Kuznetsova I., Genkal S., Kociolek J.P. *Gololobovia* gen. nov. – a new genus from Lake Baikal with comments on pore occlusion in monoraphid diatoms // *Phycologia* **2020**. V. 59. № 6. P. 616–633. doi: 10.1080/00318884.2020.1830596. JCR IF = 2.857.
10. Kezlya E., Glushchenko A., Kociolek J.P., Maltsev E., Martynenko N., Genkal S., Kulikovskiy M. *Mayamaea vietnamica* sp. nov.: a new terrestrial diatom (Bacillariophyceae) species from Vietnam // *Algae* **2020**. V. 35. № 4. P. 1–11. doi: 10.4490/algae.2020.35.11.23. JCR IF = 2.839.
11. Bolatkhan K., Sadvakasova A.K., Zayadan B.K., Kakimova A.B., Sarsekeyeva F.K., Kossalbayev B.D., Bozieva A.M., Alwasel S., Allakhverdiev S.I. Prospects for the creation of a waste-free technology for wastewater treatment and utilization of carbon dioxide based on cyanobacteria for biodiesel production // *J. Biotechnol.* **2020**. V. 324. P. 162–170. doi: 10.1016/j.jbiotec.2020.10.010. JCR IF = 3.307.
12. Maltsev Y., Kezlya E., Maltseva S., Karthick B., Dvorak P., Kociolek J.P., Kulikovskiy M. A new species of the previously monotypic genus *Iningainema* (Cyanobacteria, Scytonemataceae) from the Western Ghats, India // *Eur. J. Phycol.* **2021**. V. 56. № 3. P. 348–358. doi: 10.1080/09670262.2020.1834147. JCR IF = 2.804.
13. Maltsev Y., Maltseva S., Maltseva I. Diversity of cyanobacteria and algae during primary succession in iron ore tailing dumps // *Microbial Ecol.* **2021**. V. 83. № 2. P. 408–423. doi: 10.1007/s00248-021-01759-y. JCR IF = 4.552.
14. Maltsev Y., Maltseva K. Fatty acids of microalgae: diversity and applications // *Rev. Environ. Sci. Biotechnol.* **2021**. V. 20. P. 515–547. doi: 10.1007/s11157-021-09571-3. IF JCR = 12.751.
15. Maltsev Y., Maltseva K., Kulikovskiy M., Maltseva S. Influence of light conditions on microalgae growth and content of lipids, carotenoids and fatty acid composition // *Biology* **2021**. V. 10. P. 1060. doi: 10.3390/biology10101060. IF JCR = 5.168.
16. Maltseva I.A., Maltsev Y.I. Diversity of cyanobacteria and algae in dependence to forest-forming tree species and properties rocks of dump // *Intern. J. Environ. Sci. Technol.* **2021**. V. 18. P. 545–560. doi: 10.1007/s13762-020-02868-w. IF JCR = 2.860.
17. Samylina O.S., Tourova T.P., Sinetova M.A., Kupriyanova E.V., Starikov A.Y., Sukhacheva M.V., Dziuba M.V. Ecology and biogeography of the 'marine geitlerinema' cluster and a description of *Sodalinema orleanskyi* sp. nov., *Sodalinema gerasimenkoae* sp. nov., *Sodalinema stali* sp. nov. and *Baaleninema simplex* gen. et sp. nov. (Oscillatoriales, Cyanobacteria) // *FEMS Microbiol. Ecol.* **2021**. V. 97. № 8. P. 104. doi: 10.1093/femsec/fiab104. IF JCR = 4.519.
18. Maltsev Y., Maltseva I., Maltseva S., Kociolek J.P., Kulikovskiy M. A new species of freshwater algae, *Nephrochlamys yushalensis* sp. nov. (Selenastraceae, Sphaeropleales), and its lipid accumulation during nitrogen and phosphorus starvation // *J. Phycol.* **2021**. V. 57. № 2. P. 606–618. JCR IF = 2.923.
19. Lobus N.V., Kulikovskiy M.S., Maltsev Y.I. Multi-element composition of diatom *Chaetoceros* spp. from natural phytoplankton assemblages of the Russian Arctic Seas // *Biology* **2021**. 10. 1009. doi: 10.3390/biology10101009. JCR IF = 5.168.

20. Kezlya E., Glushchenko A., Maltsev Ye., Gusev E., Genkal S., Kociolek J.P., Kulikovskiy M. Three new species of *Placoneis* Mereschkowsky (Bacillariophyceae: Cymbellales) with comments on cryptic diversity in the *P. elginensis*-group // *Water* **2021**. V. 13. P. 3276. doi: 10.3390/w13223276. JCR IF = 3.628.
21. Maltsev Y., Krivova Z., Maltseva S., Maltseva K., Gorshkova E., Kulikovskiy M. Lipid accumulation by *Coelastrella multistriata* (Scenedesmaceae, Sphaeropleales) during nitrogen and phosphorus starvation // *Sci. Rep.* **2021**. V. 11. P. 19818. doi: 10.1038/s41598-021-99376-9. JCR IF = 4.379.
22. Sinetova M.A., Sidorov R.A., Medvedeva A.A., Starikov A.Y., Markelova A.G., Allakhverdiev S.I., Los D.A. Effect of salt stress on physiological parameters of microalgae *Vischeria punctate* strain IPPAS H-242, a superproducer of eicosapentaenoic acid // *J. Biotechnol.* **2021**. V. 331. P. 63–73. doi: 10.1016/j.jbiotec.2021.03.001. JCR IF = 3.307.
23. Maltseva S., Bachura Y., Erst T., Kulikovskiy M., Maltsev Y. Description of *Desmonostoc caucasicum* sp. nov. (Cyanobacteria) using an integrative taxonomic approach // *Phycologia* **2022**. V. 61. №5. P. 514–527. doi: 10.1080/00318884.2022.2086428. JCR IF = 2.857.
24. Kezlya E., Maltsev Ye., Genkal S., Krivova Z., Kulikovskiy M. Phylogeny and fatty acid profiles of new *Pinnularia* (Bacillariophyta) species from soils of Vietnam // *Cells* **2022**. V. 11. P. 2446. doi: 10.3390/cells11152446. JCR IF = 6.70.
25. Glushchenko A., Kezlya E., Maltsev Y., Genkal S., Kociolek J.P., Kulikovskiy M. Description of the soil diatom *Sellaphora terrestris* sp. nov. (Bacillariophyceae, Sellaphoraceae) from Vietnam, with remarks on the phylogeny and taxonomy of *Sellaphora* and systematic position of *Microcostatus* // *Plants* **2022**. V. 11. P. 2148. doi: 10.3390/plants11162148. JCR IF = 4.658.
26. Gabrielyan D.A., Gabel, B.V., Sinetova M.A., Gabrielian A.K., Markelova A.G., Shcherbakova N.V., Los D.A. Optimization of CO₂ supply for intensive cultivation of *Chlorella sorokiniana* IPPAS C-1 in the laboratory and pilot-scale flat-panel photobioreactors // *Life* **2022**. V. 12. № 10. P. 1469. doi: 10.3390/life12101469. JCR IF = 3.251
27. Gabrielyan D.A., Sinetova M.A., Gabel, B.V., Gabrielian A.K., Markelova A.G., Rodionova M.V., Bedbenov V.S., Shcherbakova N.V., Los D.A. Cultivation of *Chlorella sorokiniana* IPPAS C-1 in flat-panel photobioreactors: From a laboratory to a pilot scale // *Life* **2022**. V. 12. P. 1309. doi: 10.3390/life12091309. JCR IF = 3.251.
28. Nagarajan D., Lee D.J., Varjani S., Lam S.S., Allakhverdiev S.I., Chang J.S. Microalgae-based wastewater treatment – Microalgae-bacteria consortia, multi-omics approaches and algal stress response // *Sci. Total Environ.* **2022**. V. 845. P. 157110. doi: 10.1016/j.scitotenv.2022.157110. JCR IF = 10.753.

И.о. директора ИФР РАН
Чл.-корр. РАН



Д.А. Лось