

Bella G. Babayan

Research Institute of Biology
Ecological Monitoring Group
Researcher

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Education

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| Institution | SPC "Armbiotechnology" NAS RA |
| Faculty | Microbiology, Blotechnology |
| Date | 2017 - 2024 |
| Degree name | Applicant |

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|--------------------|-----------------------------|
| Institution | Russian-Armenian University |
| Faculty | Medical Blochemistry |
| Date | 2008 - 2011 |
| Degree name | PhD student |

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|--------------------|--------------------------|
| Institution | Yerevan State University |
| Faculty | Biology/ Biochemistry |
| Date | 2006 - 2008 |
| Degree name | Masters |

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|--------------------|--------------------------|
| Institution | Yerevan State University |
| Faculty | Biology/ Biochemistry |
| Date | 2002 - 2006 |
| Degree name | Bachelor |

Scientific Rank/degree

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| Institution | SPC "Armbiotechnology" NAS RA |
| Date | 2024 |
| Degree name | Postgraduate |
| Scientific Supervisor | N.A. Hovhannisyan |
| Research Topic | The study of Multi-Drug Resistance in Bacteria of Pseudomonas, Stenotrophomonas, Xanthomonas Genera Several Species and The Overcoming of It by L-tartaric Acid Synthetic Derivatives. |

Language skills

Русский English Հայերեն

Work experience

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| Institution | Yerevan State University |
| Period of time | 2023 till now |
| Rank/degree | researcher |

Scientific interests

- Biochemistry, Biotechnology, Ecology, Molecular Biology, Genetics, Toxicology, Pharmacology, Cave Microbiome
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Membership

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| Institution | SPELEOLOGICAL CENTER OF ARMENIA, Secretary, member of council, |
| Period of time | 2019 - 2023 |

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| Institution | BAA |
| Period of time | 2017 - 2024 |

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| Institution | BAA Secretary |
| Period of time | 2017 - 2019 |

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| Institution | FEMS |
| Period of time | 2018 - 2024 |

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| Institution | FEBS |
| Period of time | 2023 - 2024 |

State awards and honorary titles

- 2010 "Synopsys" foundation I prize in IT TEchnologies
2010 The Presidential Award "The Best PhD Student"
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Publications

Article

Tartaric acid new derivatives as prospective and safe alternative to antimicrobials for food products packing

Mikaelyan A.R., Babayan B.G., Grigoryan A.L., Grigoryan A.M., Asatryan N.L., Melkumyan M.A.

Functional Foods in Health and Disease 2024 33-50.

Article

Carnivorous fungi application for pesticide-free vegetable cultivation

Alexander Yesayan, Tigran Yesayan, Bella Babayan, Syuzanna Esoyan, Ani Hayrapetyan,
Garegin Sevoyan, Armine Chakhmakhchyan, Siranush Nanagulyan, Marina Melkumyan
Functional Food Science 2024 325-336

Article

Strategic food reserves storage, safety and risk minimization: Problems and perspectives

Samvel M. Shahinyan, Ani Yu. Badasyan, Bella G. Babayan, Marina A. Melkumyan, Tigran A. Yesayan,
Alexandr H. Yesayan
Functional Foods in Health and Disease 2024 615-629

Article

Crops biological protection: Phytopathogens growth inhibition by the entomopathogens

Marina Melkumyan, Bella Babayan, Anna Grigoryan, Alexander Yesayan
Bioactive Compounds in Health and Disease 2024 361-374

Article

Traditional vegetarian food products in villages of Syunik, Armenia: Technogenic contamination risks assessment

Garegin G. Sevoyan, Karen A. Ghazaryan, Tigran A. Yesayan, Ani K. Hayrapetyan, Seyran H. Minasyan,
Bella G. Babayan, Ivan G. Gabrielyan, Syuzanna S. Esoyan, Armine D. Chakhmakhchyan,
Anna M. Grigoryan, Marina A. Melkumyan, Alexander H. Yesayan
Functional Food Science 2024 380-389

Article

Impact of ceramic packaging on the quality and safety of Armenian fermented dairy product Matsoun

Syuzanna S. Esoyan, Ani K. Hayrapetyan, Tigran A. Yesayan, Armine E. Sargsyan,
Armine D. Chakhmakhchyan, Bella G. Babayan, Garegin G. Sevoyan, Aleksandr H. Yesayan
Functional Food Science 2024 370-379

Article

The safety of animal-derived food products in areas of technogenic pollution

Garegin G. Sevoyan, Seyran H. Minasyan, Tigran A. Yesayan, Bella G. Babayan, Syuzanna S. Avetisyan,
Alexander H. Yesayan
Functional Foods in Health and Disease 2024 704-712

Article

The preliminary study of antifungal and antibacterial properties of wine by-products

Ani K. Hayrapetyan, Tigran A. Yesayan, Armine D. Chakhmakhchyan, Bella G. Babayan,
Garegin G. Sevoyan, Alexander H. Yesayan, Syuzanna S. Esoyan
Bioactive Compounds in Health and Disease 2024 570-580

Article

Colamine and tartaric acid based innovative antioxidant and anti-spoilage food additive for fish product industry

Aram R. Mikaelyan, Tigran Soghomonyan, Bella G. Babayan, Samvel A. Bagdasaryan, Nona L. Asatryan,
Anna M. Grigoryan, Marina A. Melkumyan
Bioactive Compounds in Health and Disease 2024 489-499

Article

New functionally substitutes cyclopropanecarboxylic acids as ethylene biosynthesis innovative regulators

Aram Mikaelyan, Samvel Bagdasaryan, Bella Babayan, Nona Asatryan, Marina Melkumyan,

Anna Grigoryan

Bioactive Compounds in Health and Disease 2024 500-510

Article

The epigenetic impact of daily diet food choices on human health and chronic diseases

Yesayan A. H., Chetta M., Babayan B. G., Yesayan T. A., Esoyan S. S., Sevoyan G. G.

Functional Foods in Health and Disease 2024 739-750

Article

Sustainable methods for producing food-derived bioactive compounds

Aram R. Mikaelyan, Samvel A. Bagdasaryan, Alexander H. Yesayan, Tigran A. Yesayan,

Ani K. Hayrapetyan, Bella G. Babayan, Marina A. Melkumyan, Vardan Sargsyan

Bioactive Compounds in Health and Disease 2024 525-535

Article

THE STUDY OF PROTEOLYTIC ACTIVITY OF PHYTOPATHOGENIC RHODOCOCCUS, PSEUDOMONAS AND XANTHOMONAS SOME STRAINS

Melkumyan M., Babayan B.

EUROPEAN SCIENCE REVIEW 2023 3-7

Article

Assessment of 'Complex-co' preparation efficiency for some cereal crops growth stimulation

H.S. Martirosyan, A.R. Mikaelyan, N.L. Asatryan, B.G. Babayan

Agronomy Research 2023 1213-1220

Article

Tartaric acid synthetic derivatives effect on phytopathogenic bacteria

A.R. Mikaelyan, B.G. Babayan, A.A. Vartanyan, H.V. Tokmajyan

Agronomy Research 2022 644-659

Article

Analysis of genome sequence and trehalose lipid production peculiarities of the thermotolerant *Gordonia* strain

Yanina Delegan, Armen Sargsyan, Nelli Hovhannisyan, Bella Babayan, Kirill Petrikov, Mikhail Vainstein

Journal of Basic Microbiology 2020 14-21

Article

Исследования стабильности плазмид антибиотикорезистентности у почвенных условно-патогенных штаммов *Stenotrophomonas* и *Pseudomonas*

Бабаян Б.Г., Саргсян А.С., Багдасарян С.А, Мелкумян М.А., Давидян Т.С, Оганесян Н.А,

Оганесян А.М.

Авиценна 2019 13-17

Article

RESISTANCE TO β -LACTAM ANTIBIOTICS IN SOME SOIL STENOTROPHOMONAS AND PSEUDOMONAS.

Article

Inactivation of *Macrovipera lebetina obtusa* snake venom by enzymes of multidrug resistant *Pseudomonas*

Bella G. Babayan, N.A. Hovhannisyan, M.A. Melkumyan, A. Sargsyan

Toxicon 2019 S20

Article

СОВРЕМЕННЫЕ ТЕНДЕНЦИИ В РАЗРАБОТКЕ ЭФФЕКТИВНЫХ КОМБИКОРМОВ ДЛЯ РЫБ

В. Ю. Агеец, А. Р. Микаелян, Ж. В. Кошак, Б. Г. Бабаян, С. М. Дегтярик

Весті Нацыянальнай акадэміі навук Беларусі. Серыя аграрных навук 2019 323–333

Conference

The Research of Aminoglycoside Resistance Spread in Non-Pathogenic Strains of *Pseudomonas* Isolated From Soil

A.Hovhannisyan, N. Hovhannisyan, A.Sargsyan, B. Babayan, M. Kinosyan, T.Davidyan, S. Bagdasaryan, M.Melkumyan, G.Oganezova

Conference

“Study on stability of soil *Pseudomonas* and *Xanthomonas* plasmids possessing antibiotic resistance genes”

Hovhannisyan N.A., Babayan B.G., Sargsyan A.S., Bagdasaryan S.A, Hovhannisyan A.M.

Conference

Antimicrobial Activity of Newly Synthesized Derivatives of Tartaric Acid Against the Multidrug Resistant Soil Strains of *Pseudomonas* and *Stenotrophomonas*

Aram R. Mikaelyan, Nona L. Asatryan, Samvel A. Bagdasaryan, Bella G. Babayan

Patent

Համակցված ազդեցության հակաբորբոքային քսուրք
Գազիկ Ներսիսյան, Արամ Միքաելյան, Բելլա Բաբայան

Conference

The Effect of Tartaric Acid New Derivatives Against the Multidrug Resistant Opportunistic Pathogenic Soil Strains of *Pseudomonas Fluorescens*

Bella G. Babayan, Aram R. Mikaelyan, Nona L. Asatryan, Samvel A. Bagdasaryan, Marina A. Melkumyan

Conference

Tartaric Acid New Synthetic Derivatives Antibacterial Activity against the Phytopathogenic *Pseudomonas syringae*

Bella G. Babayan, Aram R. Mikaelyan, Nona L. Asatryan, Marina A. Melkumyan, Samvel A. Bagdasaryan,

Anna M. Grigoryan

Conference

Carnivorous Fungi: Innovative Safe Alternative Against The Agricultural Worm Pests

A. H. Yesayan, T. A. Yesayan, B. G. Babayan, G. G. Sevoyan, S. S. Esoyan, A. K. Hayrapetyan,

A. D. Chakhmakhchyan

Conference

“Complex-Co” Innovative Ecologically Safe Agropreparation

A.R. Mikaelyan, B.G. Babayan, M.A. Melkumyan, T.M. Soghomonyan, N.L. Asatryan, A.M. Grigoryan,
S.A. Bagdasaryan, H.S. Martirosyan, A.S. Melikyan

Conference

The Preliminary Research of Magellan’s Cave Microbiome

Samvel M. Shahinyan, Bella G. Babayan, Smbat Davtyan, Tigran A. Yesayan, Alexander H. Yesayan,
Marina A. Melkumyan

Conference

CARNIVOROUS FUNGI APPLICATION PERSPECTIVES FOR PESTICIDE- FREE VEGETABLES CULTIVATION

Alexander Yesayan, Tigran Yesayan, Bella Babayan, Syuzanna Esoyan, Ani Hayrapetyan,
Garegin Sevoyan, Armine Chakhmakhchyan, Siranush Nanagulyan, Marina Melkumyan

Conference

The prospectives of crops biological protection based on *Pseudomonas fluorescens* non-pathogenic bacteria

Marina A. Melkumyan, Bella G. Babayan, Marina H. Kinosyan, Tamara S. Davidyan

Conference

Innovative Green Agents Against the Pathogens of Crops Based On *Brevibacillus Laterosporus*

Bella G. Babayan, Marina A. Melkumyan, Gagik S. Mikaelyan

Conference

Carnivorous Fungi: Innovative Green Alternative Against the Worm-pests of Crops

Tigran A. Yesayan, Alexander H. Yesayan, Bella G. Babayan
