

# Bella G. Babayan

## Research Institute of Biology

Laboratory of Applied Biology and Ecology  
Researcher

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## Education

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<b>Institution</b>	SPC "Armbiotechnology" NAS RA
<b>Faculty</b>	Microbiology, Blotechnology
<b>Date</b>	2017 - 2024
<b>Degree name</b>	Applicant

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<b>Institution</b>	Russian-Armenian University
<b>Faculty</b>	Medical Blochemistry
<b>Date</b>	2008 - 2011
<b>Degree name</b>	PhD student

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology/ Biochemistry
<b>Date</b>	2006 - 2008
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Biology/ Biochemistry
<b>Date</b>	2002 - 2006
<b>Degree name</b>	Bachelor

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## Scientific Rank/degree

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<b>Institution</b>	SPC "Armbiotechnology" NAS RA
<b>Date</b>	2024
<b>Degree name</b>	Postgraduate
<b>Scientific Supervisor</b>	N.A. Hovhannisyan
<b>Research Topic</b>	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.

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## Language skills

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Русский English Հայերեն

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## Work experience

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2023 till now
<b>Rank/degree</b>	researcher

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## Scientific interests

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

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<b>Institution</b>	SPELEOLOGICAL CENTER OF ARMENIA, Secretary, member of council,
<b>Period of time</b>	2019 - 2023

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<b>Institution</b>	BAA
<b>Period of time</b>	2017 - 2024

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<b>Institution</b>	BAA Secretary
<b>Period of time</b>	2017 - 2019

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<b>Institution</b>	FEMS
<b>Period of time</b>	2018 - 2024

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<b>Institution</b>	FEBS
<b>Period of time</b>	2023 - 2024

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## 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.

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*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

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*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

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*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

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*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

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*Article*

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

Melkumyan M., Babayan B.  
EUROPEAN SCIENCE REVIEW 2023 3-7

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*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

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*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

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*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

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*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

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*Article*

**RESISTANCE TO  $\beta$ -LACTAM ANTIBIOTICS IN SOME SOIL STENOTROPHOMONAS AND PSEUDOMONAS.**

Hovhannisyan A.M., Hovhannisyan N. A., Babayan B.G., Sargsyan A.S., Davidyan T.S.

The scientific heritage 2019 32-38

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*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

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*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

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*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

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*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.

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*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

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*Patent*

**Համակցված ադրեցուրթյան հակաբորբոքային քսուլ**

Գազիկ Ներսիսյան, Արամ Միքաելյան, Բելլա Բաբայան

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*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

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*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

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*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

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*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

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*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

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