

# Susanna Michael Badalyan

## Research Institute of Biology

Laboratory of Fungal Biology and Biotechnology

Head of laboratory

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✉ s.badalyan@ysu.am

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## 🎓 Education

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<b>Institution</b>	Yerevan State University
<b>Faculty</b>	Faculty of Biology, Department of Botany
<b>Date</b>	1975 - 1980
<b>Degree name</b>	Qualified specialist

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## 🎓 Scientific Rank/degree

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<b>Institution</b>	Yerevan State University
<b>Date</b>	2005
<b>Degree name</b>	Professor
<b>Specialty</b>	Biological sciences

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<b>Institution</b>	Yerevan State University
<b>Date</b>	2000
<b>Degree name</b>	Associate professor
<b>Specialty</b>	Biological sciences

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<b>Institution</b>	Yerevan State University
<b>Date</b>	1998
<b>Degree name</b>	Doctor
<b>Specialty</b>	Biological sciences
<b>Research Topic</b>	Biological characteristics of several basidiomycetes macrofungi (morphology, ecology and physiological activity)

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<b>Institution</b>	Yerevan State University
<b>Date</b>	1988
<b>Degree name</b>	Candidate
<b>Specialty</b>	Biological sciences
<b>Scientific Supervisor</b>	Prof. Melik-Khachatryan J.H.
<b>Research Topic</b>	Taxonomy, bio-ecology and physiological activity of <i>Nematoloma fasciculare</i> (Huds. : Fr.) Karst.

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## 🌐 Language skills

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## Work experience

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<b>Institution</b>	Yerevan State University
<b>Period of time</b>	2005 - 2024
<b>Rank/degree</b>	Head of Laboratory of Fungal Biology and Biotechnology

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## Scientific interests

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- Fungal Biology and Biotechnology, medicinal mushrooms
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## Publications

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*Article*

**Antimicrobial Activity of Three Italian Strains of Morchella esculenta (Ascomycota)**

Susanna M. Badalyan, Narine Gharibyan, Mirco Iotti, Alessandra Zambonelli

International Journal of Medicinal Mushrooms 2024 43-55

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*Article*

**Antimicrobial Activity of Different Collections of Medicinal Polypore Fungus Fomitopsis pinicola (Agaricomycetes)**

Susanna M. Badalyan, Anush Barkhudaryan, Alla V. Shnyreva

International Journal of Medicinal Mushrooms 2024 33-48

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*Article*

**Morphological observation and biomass formation in different edible medicinal Morchella collections (Pezizomycetes, Ascomycota)**

Susanna M. Badalyan, Narine Gharibyan, Carmelo Gianchino, Mirco Iotti, Alessandra Zambonelli

Italian Journal of Mycology 2023 50-61

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*Article*

**Sterols Content of Fruiting Bodies of Medicinal Artist's Bracket Mushroom Ganoderma applanatum (Agaricomycetes) Collected in Armenia**

Susanna M. Badalyan, Sergey S. Hayrapetyan

International Journal of Medicinal Mushrooms 2023 65-74

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*Article*

**The Potential of Mushrooms in Developing Healthy Food and Biotech Products**

Badalyan Susanna, Zambonelli Alessandra

Fungi and Fungal Products in Human Welfare and Biotechnology 2023 307-344

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*Article*

**Mushrooms as Promising Therapeutic Resources: Review and Future Perspectives**

Susanna M. Badalyan, Sylvie Morel, Anush Barkhudaryan, Sylvie Rapior

Mushrooms with Therapeutic Potentials Recent Advances in Research and Development 2023 1-54

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Article

**Flammulina velutipes (Curtis) Singer - PHYSALACRIACEAE**

Susanna Badalyan, Yusufjon Gafforov, Milena Rašeta, Sylvie Rapior, Manzura Yarasheva

Ethnobiology of Uzbekistan Ethnomedicinal Knowledge of Mountain Communities 2023 1011-1043

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Article

**Մակրոսկոպիկ սնկերի կիրառման հեռանկարները կոսմետոլոգիայում**

Բաղայան Սուսաննա, Ղարիբյան Նարինե

Գավառի պետական համալսարանի գիտական հոդվածների ժողովածու 2023 113-123

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Article

**Genetic and Morphological Polymorphism in Wood-Decaying Fungi**

Badalyan S.M., Vladykina V.D., Zhuykova E.V., Diyarova D.K., Mukhin V.A.

Ecology of Macrofungi An Overview 2023 311-332

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Article

**BIOMASS FORMATION BY DIFFERENT COLLECTIONS OF PLEUROTUS SPP. DURING SUBMERGED GROWTH**

S. M. BADALYAN, N. G. GHARIBYAN

Proceedings of the YSU B: Chemical and Biological Sciences 2023 222-229

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Article

**Medicinal Macrofungi as Cosmeceuticals: A Review**

Badalyan S.M., A. Barkhudaryan, Rapior S.

International Journal of Medicinal Mushrooms 2022 1-13

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Article

**AGARICOMYCETES MUSHROOMS DISTRIBUTED IN ARMENIA - SOURCE OF COSMETIC BIOINGREDIENTS**

Badalyan S.M., Barkhudaryan A.L., Gharibyan N.G.

Proceedings of the YSU B: Chemical and Biological Sciences 2022 74-83.

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Article

**The phylogenetic analysis of Armenian collections of medicinal tinder polypore Fomes fomentarius (Agaricomycetes, Polyporaceae)**

Badalyan S.M., Zhuykova E.V., Mukhin V.A.

Italian Journal of Mycology 2022 23-33

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Monograph

**Fungal biotechnology: Prospects and Avenues**

Susanna M. Badalyan, Sunil K. Deshmukh, Kandikere R. Sridhar

2022 450

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Article

**The Cardioprotective Properties of Agaricomycetes Mushrooms Growing in the Territory of Armenia: Review**

Susanna M. Badalyan, Barkhudaryan Anush, Sylvie Rapior

International Journal of Medicinal Mushrooms 2021 21-31

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Article

**The Neurotrophic and Neuroprotective Potential of Macrofungi**

Susanna M. Badalyan, Sylvie Rapior

Medicinal Herbs and Fungi 2021 37-79

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*Article*

**Agaricomycetes mushrooms (Basidiomycota) as potential neuroprotectants.**

Susanna M. Badalyan, Sylvie Rapior

Italian Journal of Mycology 2021 30-43

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*Article*

**Medicinal Coprinoid Mushrooms (Agaricomycetes) Distributed in Armenia (Review).**

Susanna M. Badalyan

International Journal of Medicinal Mushrooms 2020 257 - 267

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*Article*

**Notes on Medicinal Polypore Species from the Genus Daedaleopsis (Agaricomycetes), Distributed in the Asian Part of Russia**

Susanna M. Badalyan, Viktoria D. Vladykina, Victor A. Mukhin, Elena V. Zhuykova

International Journal of Medicinal Mushrooms 2020 775-780

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*Article*

**Pharmacological Properties and Resource Value of Hymenochaetoid Fungi (Agaricomycetes) Distributed in Armenia: Review.**

Susanna M. Badalyan, Narine Gharibyan

International Journal of Medicinal Mushrooms 2020 1135 - 1146

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*Article*

**Perspectives of Biomedical Application of Macrofungi**

Susanna M. Badalyan, Sylvie Rapior

Current Trends in Biomedical Engineering & Biosciences 2020 00136-00139

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*Article*

**Agaricomycetes medicinal mushrooms with potential neuroprotective activity growing in Armenia**

Susanna M. Badalyan, Sylvie Rapior

Proceedings of the YSU B: Chemical and Biological Sciences 2020 196-203

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*Article*

**The Role of Fungal Culture Collections and Databases to Study and Preserve Mycobiodiversity**

Badalyan S. M., Gharibyan N. G.

Информационные технологии в исследовании биоразнообразия 2020 45-47

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*Article*

**О формировании базы данных Fomes fomentarius на Урале**

Жуйкова Е. В., Мухин В. А., Бадалян С. М.

Информационные технологии в исследовании биоразнообразия 2020 210-212

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*Article*

**Daedaleopsis Genus in Siberia and the Far East of Russia**

Badalyan S.M., Vladykina V.D., Mukhin V.A.

*Article*

**Morphological and ecological screening of different collections of medicinal white-rot bracket fungus *Ganoderma adspersum* (Schulzer) Donk (Agaricomycetes, Polyporales)**

Badalyan S.M., Gharibyan N.G., M. Iotti, A. Zambonelli

Italian Journal of Mycology 2019 1-15

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*Article*

**Analysis of Intraspecies Genetic Variability among Collections of Medicinal Red Belt Conk Mushroom, *Fomitopsis pinicola* (Agaricomycetes)**

Badalyan S.M., Shnyreva A.V., Shnyreva A.A.

International Journal of Medicinal Mushrooms 2019 291-300

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*Article*

**The diversity and distribution of edible and medicinal mushrooms from Mazandaran province of northern Iran**

Badalyan SM, A. Borhani

Proceedings of the YSU B: Chemical and Biological Sciences 2019 33-41

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*Article*

**Morphological and growth characteristics of mycelial collections of medicinal xylotrophic mushrooms (Agaricomycetes) distributed forests in northern of Iran**

Badalyan S.M., A. Borhani

Proceedings of the YSU B: Chemical and Biological Sciences 2019 97-106

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*Article*

**The morphological observation of mycelia of several Armenian strains of medicinal bracket fungus *Fomes fomentarius* (L.) Fr. (Polyporales, Agaricomycetes)**

Badalyan S.M., Shahbazyan T.A., Gharibyan N.G.

Proceedings of the YSU B: Chemical and Biological Sciences 2019 91-96

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*Article*

**Medicinal, Nutritional and Cosmetic Values of Macrofungi Distributed in Mazandaran Province of Northern Iran. Review.**

Susanna M. Badalyan, Ali Borhani

International Journal of Medicinal Mushrooms 2019 1099 -1106

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*Article*

**Исследование антифунгальной активности мицелия некоторых штаммов лекарственного трутового гриба *Trametes versicolor* (L.) Lloyd в совместной культуре. Москва, Россия**

Бадалян С.М., Шахбазян Т.А., Гарибян Н.Г

Успехи медицинской микологии 2019 387-390

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*Monograph*

**Recent progress in research on the pharmacological potential of mushrooms and prospects for their clinical application.**

Badalyan SM, Barkhudaryan A, Rapior S

2019 70

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*Monograph*

**Biotechnological exploitation of macrofungi for the production of food, pharmaceuticals and cosmeceuticals**

Badalyan SM, A. Zambonelli

2019 31

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*Article*

**Genetic Variability of the Medicinal Tinder Bracket Polypore, *Fomes fomentarius* (Agaricomycetes), from the Asian Part of Russia**

Victor A. Mukhin, Elena V. Zhuykova, Susanna M. Badalyan

International Journal of Medicinal Mushrooms 2018 561–568

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*Article*

**Morphological Characteristics of Monokaryotic and Dikaryotic Collections of Three Medicinal *Coprinellus* Species (Agaricomycetes)**

Susanna M. Badalyan

International Journal of Medicinal Mushrooms 2018 665–676

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*Monograph*

**ՏԱՐԲԵՐ ՄԼԿԱՅԻՆ ԿՈՒՆՏՈՒՐԱԼԵՐԻ ՄԻՑԵԼԻՈՒՄԻ ԿԱՌՈՒՑՎԱԾՔԱՅԻՆ ԱՌԱՆՁՆԱՀԱՏԿՈՒԹՅՈՒՆՆԵՐԸ  
հայ./անգլ.**

Բաղայան ՍՄ, Ղարիբյան ՆԳ

2017 174

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*Monograph*

**Making use of genomic information to explore the biotechnological potential of medicinal mushrooms**

Kües U, Badalyan SM

2017 397-437

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*Article*

**Diversity of Polypore Bracket Mushrooms, Polyporales (Agaricomycetes), Recorded in Armenia and Their Medicinal Properties**

Badalyan SM, Gharibyan NG

International Journal of Medicinal Mushrooms 2016 347-354

<http://www.begellhouse.com/journals/medicinal-mushrooms.html>

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*Article*

**Fatty acid composition of different collections of coprinoid mushrooms (Agaricomycetes) and their nutritional and medicinal values**

Susanna M. Badalyan

International Journal of Medicinal Mushrooms 2016 883-893

<http://www.begellhouse.com/journals/medicinal-mushrooms.html>

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*Monograph*

**Asexual sporulation in Agaricomycetes. The Mycota. Growth, Differentiation and Sexuality**

Badalyan SM, Kües U., Gießler A., Dörnte B.

2016 59

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*Article*

**Genetic resources and mycelial characteristics of several medicinal polypore mushrooms (Polyporales, Basidiomycetes).**

Badalyan SM, A.V. Shnyreva, M. Iotti, A. Zambonelli

International Journal of Medicinal Mushrooms 2015 371-384

<http://www.begellhouse.com/journals/medicinal-mushrooms.html>

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*Article*

**Biochemical characterization, antioxidant and antiproliferative activities of different Ganoderma collections**

Saltarelli R., P. Ceccaroli, M. Buffalini, L. Vallorani, L. Casadei, A. Zambonelli, M. Iotti, Badalyan SM,

V. Stocchi

Journal of Molecular Microbiology and Biotechnology 2015 16-25

<https://www.karger.com/Journal/Home/228391>

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*Conference*

**Antifungal activity of different Trametes collections against potentially pathogenic filamentous fungi.**

Badalyan SM, Shahbazyan TA

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*Conference*

**Chemical composition of mycelia of different collections of coprinoid mushrooms.**

Badalyan SM

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*Conference*

**Morphological characteristics of vegetative mycelia and anamorphs in different collections of xylotrophic basidiomycetous mushrooms**

Badalyan SM, Kues U

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*Conference*

**Характеристика биологически активных экстрактов трутовых грибов.**

Шнырева АВ, Бадалян С.М

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*Conference*

**Лекарственные свойства двух полипоровых видов: Fomes fomentarius и Fomitopsis pinicola.**

Бадалян С.М, Шахбазян Т.А.

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*Conference*

**Протеолитическая и молокосвертывающая активность мицелия некоторых полипоровых грибов.**

Бадалян С.М, Гарибян Н.Г.

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*Conference*

**Distribution of polypore bracket fungi in Armenia and their medicinal potential**

Badalyan SM, Gharibyan NG

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*Conference*

**Antifungal activity of different Trametes collections against potentially pathogenic filamentous fungi.**

Badalyan SM

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*Conference*

**Антифунгальная активность некоторых армянских штаммов *Fomes fomentarius* в отношении потенциально патогенных для человека и животных микромицетов.**  
Бадалян С.М., Гарибян Н.Г., Шахбазян Т.А.

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*Conference*

**МОЛОКОСВЕРТЫВАЮЩАЯ И ТРОМБОЛИТИЧЕСКАЯ АКТИВНОСТЬ МИЦЕЛИЯ ОКАЙМЛЕННОГО ТРУТОВИКА *FOMITOPSIS PINICOLA***  
Бадалян С.М., Гарибян Н.Г., Шахбазян Т.А., Шнырева А.В.

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*Conference*

**Asexual spores as means for de-dikaryotization of mycelia**  
Badalyan SM, Khonsuntia W, Subba S, Mandira Sen M, U. Kües

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*Conference*

**Антифитопатогенная активность мицелия полипоровых грибов (*Agaricomycetes, Polyporales*).**  
Бадалян С.М., Гарибян Н.Г.

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*Conference*

**Внутривидовое генетическое разнообразие природных штаммов лекарственного трутовика окаймленного, *Fomitopsis pinicola***  
Шнырева А.В., Шнырева А.А., Бадалян С.М.

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*Conference*

**СИНТЕЗ И БИОЛОГИЧЕСКАЯ АКТИВНОСТЬ НЕКОТОРЫХ ПРОИЗВОДНЫХ 1,2,4- И 1,2,3-ТРИАЗОЛОВ**  
А.С. Галстян, Т.В. Кочикян, И.Л. Базукян, С.М. Бадалян, Т.А. Шахбазян

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*Conference*

**Asexual sporulation in *Agaricomycetes* - distribution among species, modes of mitospore generation, spore functions and genetic consequences**  
S.M. Badalyan, U. Kües, W. Khonsuntia, B. Dörnte

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*Conference*

**Antifungal activity of mycelia of medicinal mushrooms *Fomes fomentarius* and *Fomitopsis pinicola* (*Agaricomycetes, Polyporales*) against potentially pathogenic for humans and animals keratinophilic fungi**  
Badalyan S.M., T.A. Shahbazyan, V.A. Mukhin

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*Conference*

**Proteolytic/thrombolytic effect of mycelia of medicinal mushroom *Fomitopsis pinicola* (*Agaricomycetes, Polyporales*)**  
Badalyan S.M., Shahbazyan T.A., Shnyreva A., Zambonelli A.

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*Conference*

**Biological potential of medicinal mushrooms to develop pharmaceuticals and other healthcare biotech products**

Badalyan S., Gharibyan N.

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*Conference*

**Исследование антифунгальной активности мицелия некоторых штаммов лекарственного трутового гриба *Trametes versicolor* (L.) Lloyd в совместной культуре**

Бадалян С.М., Шахбазян Т.А., Гарибян Н.Г.

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*Conference*

**Mushrooms as valuable source of organic cosmetic ingredients**

Susanna M. Badalyan

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*Conference*

**In Vitro Antibacterial Activity of Mycelia of Several Medicinal Trametes Species (Polyporales, Agaricomycetes).**

Susanna M. Badalyan, Shahbazyan T.A., Gharibyan N.G.

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*Conference*

**Probing life cycles of some lignicolous coprinellus species in the laboratory**

Susanna Badalyan, Kües Ursula, Lakkireddy K., Subba S., Khonsuntia W.

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*Conference*

**Материалы III Национальной конференции с международным участием**

Владыкина В. Д., Мухин В. А., Бадалян С. М.

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*Conference*

**THE ROLE OF FUNGAL CULTURE COLLECTIONS AND DATABASES TO STUDY AND PRESERVE MYCOBIODIVERSITY**

Badalyan S. M., Gharibyan N. G.

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*Conference*

**О ФОРМИРОВАНИИ БАЗЫ ДАННЫХ FOMES FOMENTARIUS НА УРАЛЕ**

Жуйкова Е.В, Мухин В.А., Бадалян С.М.

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*Conference*

**Medicinal Hymenochaetales mushrooms (Agaricomycetes) distributed in Armenia**

Badalyan SM, Gharibyan N.G.

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*Conference*

**Morphological features of dikaryons of Coprinellus species**

Badalyan SM, W. Khonsuntia, S. Subba, K. Lakkireddy, U. Kües

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*Conference*

**ИССЛЕДОВАНИЕ АНТИФУНГАЛЬНОЙ АКТИВНОСТИ МИЦЕЛИЯ ЩЕТИНИСТОВОЛОСОГО ТРУТОВИКА *INONOTUS HISPIDUS***

Бадалян С.М, Гарибян Н.Г

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*Conference*

**Chlamydospores in the life cycle of Agaricomycetes fungi**

Susanna Badalyan, Ursula Kües

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*Conference*

**Antiviral potential of *G. adpersum* crude extract and pharmacological properties of its butanol fraction**

Badalyan SM, Hamrouni S, Kües U, Dogan HH, Sbissi I, Trigui M, Zouari Bouassida K

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*Conference*

**Knowledge on the biomedical and cosmetic usage of macrofungi**

Susanna M. Badalyan, Françoise Fons, Morel Sylvie, Luis Portillo-Lemus, Sylvie Rapior

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*Conference*

**Морфо-экологические особенности мицелия некоторых лекарственных гименохетоидных грибов**

Бадалян С.М., Гарибян Н.Г.

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*Conference*

**Исследование антифунгальной активности мицелия армянской коллекции полипорового гриба *Fomesinzengae* (Agaricomycetes) в отношении дерматофитов**

Бадалян С.М., Гарибян Н.Г., Гаспарян А.К.

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*Conference*

**Asexual sporulation in the life cycle of Agaricomycetes fungi**

Susanna M. Badalyan

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*Conference*

**Therapeutic Potential of Ganoderma Species: Traditional Medicine and Evidence of Effectiveness**

S. M. Badalyan, S. Morel, S. Rapior, F. Fons

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*Conference*

**Recent Advances in Biotechnological and Biomedical Research of Macrofungi**

S. M. Badalyan, S. Rapior, A. Zambonelli

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*Conference*

**The Perspectives of Usage of Mushrooms in Nanomedicine**

Susanna M. Badalyan

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*Conference*

**The Collections of Medicinal Mushrooms of the Yerevan State University**

Susanna Badalyan, Narine Gharibyan

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*Conference*

**The Potential of Mushrooms to Develop Healthy Food and Biotech Products**

Susanna Badalyan, Mirco Iotti, Alessandra Zambonelli

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*Conference*

**Medicinal Mushrooms as a Protective Strategy Against Doxorubicin-Induced Cardiotoxicity**

Susanna Badalyan, Sylvie Rapior, Anush Barkhudaryan

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*Conference*

**Xylotrophic Fungi as A Biotic Factor in Biological Combustion of Woody Debris**

Victor A. Mukhin, Susanna M. Badalyan, Daria K. Diyarova, Elena V. Zhuykova

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*Conference*

**ОСОБЕННОСТИ НАКОПЛЕНИЯ МИЦЕЛИАЛЬНОЙ БИОМАССЫ АРМЯНСКИМИ ШТАММАМИ  
FOMES INZENGAE (POLYPORACEAE, AGARICOMYCETES)**

Бадалян С.М., Арстамян С.С., Гарибян Н.Г.

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*Conference*

**ИССЛЕДОВАНИЕ АНТИБАКТЕРИАЛЬНОЙ АКТИВНОСТИ МИЦЕЛИЯ ТРУТОВЫХ ГРИБОВ  
FOMES FOMENTARIUS S.S. И F. INZENGAE (POLYPORALES, AGARICOMYCETES)**

Гарибян Н.Г., Бархударян А.Л., Бадалян С.М.

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