

Національна Академія Наук України
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National Academy of Sciences of Ukraine
M.G. Kholodny Institute of Botany

**КОЛЕКЦІЯ КУЛЬТУР
ШАПИНКОВИХ ГРИБІВ**

ІВК

**MUSHROOM CULTURE
COLLECTION**

Н.А. Бісько, М.Л. Ломберг,
Н.Ю. Митропольська, О.Б. Михайлова

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Київ - 2016

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Н.А. Бісько, М.Л. Ломберг, Н.Ю. Митропольська, О.Б. Михайлова

THE IBK MUSHROOM CULTURE COLLECTION

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Ювілейне видання „Колекція культур шапинкових грибів (ІВК)”, присвячене 50-річчю заснування колекції культур Інституту ботаніки імені М.Г. Холодного НАН України, містить відомості про 1110 штамів, що належать до 186 видів, 88 родів шапинкових грибів Basidiomycota та Ascomycota. Культури грибів ізольовані з природного матеріалу або одержані з інших колекцій і організацій. В Колекції підтримуються культури 123 видів з відомими лікувальними властивостями.

Видання буде корисним для широкого кола мікологів, біотехнологів, мікробіологів, грибоводів-аматорів, фармацевтів, генетиків, біохіміків, викладачів та студентів біологічних факультетів.

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The jubilee edition “The IBK Mushroom Culture Collection”, dedicated to the 50th anniversary of the Culture Collection foundation, contains the information about 1110 strains of 186 species, belonging to 88 genera (Basidiomycota and Ascomycota). Cultures were isolated from natural material or obtained from other Collections and Institutions. The Collection includes 123 species with medicinal properties. The edition is intended for mycologists, biotechnologists, microbiologists, mushroom growers, students and lecturers of biological faculties.

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*Пам'яті відомого українського міколога,
доктора біологічних наук, професора Асі Сергіївни Бухало –
засновника і першого куратора
Колекції культур шапинкових грибів (ІВК)*

*To the memory of a famous Ukrainian mycologist,
Sc.D., Professor Asya Sergiivna Buchalo –
a founder and the first curator of The IBK Mushroom Culture Collection*



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ВСТУП

Шапинкові гриби (макрогриби), до яких відносяться понад 10 тисяч видів, є представниками класів *Basidiomycota* та *Ascomycota*. Ці гриби відіграють надзвичайно важливу роль у природних екосистемах як редуценти лігноцелюлозних рослинних та тваринних залишків, мікоризоутворювачі, паразити рослин тощо. Шапинкові гриби мають велике економічне значення як об'єкти грибівництва і біотехнологій. Сьогодні з них отримують лікарські речовини з онкостатичними, імуномодулюючими, антивірусними, радіопротекторними, тонізуючими та іншими властивостями, а також дієтичні та функціональні продукти, ферменти, антибіотики та інші цінні продукти метаболізму.

Визначальну роль у вирішенні проблеми збереження мікобіоти шапинкових грибів поза їх природними місцезростаннями *ex situ* відіграють колекції культур, де зберігається генофонд макроміцетів у чистій культурі. Колекція культур шапинкових грибів Інституту ботаніки ім. М.Г. Холодного НАН України (ІВК) була сформована у 1966 р. на базі відділу мікології Інституту ботаніки. Засновником та першим куратором Колекції ІВК була д.б.н., професор А.С. Бухало (1932-2014 рр.), яка визначила стратегію формування колекційного фонду та запропонувала основні принципи виділення та збереження мікобіоти шапинкових грибів.

В Колекції підтримується 1110 штамів 186 видів, що належать до 88 родів грибів відділів *Basidiomycota* та *Ascomycota*. Колекція ІВК є найбільшою офіційною спеціалізованою колекцією культур макроміцетів в Україні і однією з найбільших за кількістю видів та штамів у Європі. Згідно з постановою Кабінету Міністрів України від 19 грудня 2001 р. № 1709 Колекцію культур шапинкових грибів

Інституту ботаніки було внесено до реєстру наукових об'єктів, що становлять Національне надбання України. Основним напрямом роботи Колекції є збереження генофонду макроміцетів у чистій культурі та проведення фундаментальних наукових досліджень у галузі біології та біотехнології їстівних та лікарських шапинкових грибів. У Колекції зберігаються дикаріотичні штами базидієвих та сумчастих макроміцетів різних таксономічних та екологічних груп грибів широкого географічного походження. Колекція має важливе природоохоронне значення для збереження генофонду макроміцетів. Важливим напрямом роботи Колекції є інтродукція в культуру і збереження рідкісних видів макроміцетів мікобіоти України. Особлива увага приділяється культурам видів, занесених до Червоної книги України, а також зникаючих видів грибів. Зокрема, в Колекції підтримуються види аскоміцетів – *Morchella steppicola* Zerova (зморшка степового), *M. crassipes* (Vent.) Pers. (зморшка товстоногого) та *Gyromitra slonevskii* Heluta (строчка Слоневського), базидієвих грибів – *Fomitopsis officinalis* (Vill.) Bondartsev & Singer (модринової губки), *Hericium coralloides* (Fr.) Gray (гериція коралоподібного), *Grifola frondosa* (Dicks.) Gray (грифоли листуватої), *Sparassis crispa* (Wulfen) Fr. (спарасиса кучерявого). Крім того, в Колекції зберігаються штами виду *Pleurotus nebrodensis* (Inzenga) Quel. – донедавна єдиного представника царства грибів, внесеного до Червоного списку Міжнародного союзу охорони природи. За достатнього штамового різноманіття рідкісних видів у Колекції існує можливість реінтродукції цих видів у природні біотопи та їх відновлення на територіях, де за різних причин вони були назавжди втрачені.

Велика увага приділяється створенню в Колекції видового та штамового різноманіття їстівних та лікарських макроміцетів. На відміну від інших колекцій макроміцетів, у Колекції ІВК зберігається велика кількість штамів широко культивованих у світі видів їстівних грибів та продуцентів біологічно активних і фармакологічних речовин з родів *Pleurotus* (Fr.) P. Kumm., *Agaricus* L., *Lentinula* Fr., *Oudemansiella* Speg., *Flammulina* P. Karst., *Hericium* Pers., *Piptoporus* Karst., *Omphalotus*

Fayod, *Schizophyllum* Fr., *Ganoderma* P.Karst., *Trametes* Fr., *Laetiporus* Murrill, *Lycoperdon* Pers., *Coprinus* Pers., *Macrolepiota* Singer та ін. Колекція шапинкових грибів – важливий ресурс розвитку вітчизняного грибівництва та біотехнологій отримання дієтичних лікувально-профілактичних харчових додатків, біологічно активних та фармацевтичних речовин. В ній представлені культури 123 видів, що мають відому фармакологічну дію і використовуються в світовій народній і традиційній медицині.

Методи отримання і зберігання чистих культур сумчастих та базидієвих грибів визначаються особливостями морфології та еколого-біологічними властивостями цих грибів, які в культурі розвиваються переважно у вигляді неспорозного вегетативного міцелію. Виділення чистих культур з тканини плодового тіла або з базидіо- та аскоспор здійснюється за загальноприйнятими та модифікованими методиками. Для ізолювання культур та їх зберігання здебільшого використовується агаризований солодовий екстракт, мальц-агар, компостне, картопляно-декстрозне та інші агаризовані середовища, в т.ч. з додаванням рослинних екстрактів. Культури зберігаються в холодильниках за температури $4\pm 1^{\circ}\text{C}$.

Проблема створення системи ідентифікації видів базидієвих грибів у вегетативній стадії розвитку потребує пошуку критеріїв для ідентифікації та верифікації окремих таксономічних і екологічних груп макроміцетів у культурі. Особливості росту міцелію та утворення плодових тіл культур досліджуються за розробленою співробітниками Колекції програмою, яка включає в себе дослідження культурально-морфологічних ознак із застосуванням сканувальної електронної мікроскопії, умов культивування, фізіологічних та біохімічних характеристик штамів, які можуть бути використані для визначення приналежності культур до певного виду. Встановлено, що при культивуванні на еталонному агаризованому живильному середовищі суттєве таксономічне значення на рівні виду мають: здатність до утворення стадії телеоморфи, наявність та тип безстатевого спорозношення, наявність, форма та розташування на міцелії пряжок,

хламідоспор, утворення та інкрустація кристалів і аномальних структур на гіфах, а також тип міцеліальної колонії та радіальна швидкість її росту, характер кольорових тестових реакцій на наявність певних ферментів. Розроблена співробітниками Колекції методика пересіву, підбору елективних живильних середовищ для окремих видів з підвищеними вимогами щодо поживних речовин, система візуального та мікроскопічного контролю культур на відсутність сторонньої мікрофлори дозволяє підтримувати життєздатність штамів Колекції, зокрема ферментативну та фізіологічну активність, протягом десятків років.

За наукові розробки нових способів культивування штамів Колекції культур ІВК, співробітникам відділу мікології Інституту ботаніки були присуджені Державні премії України в галузі науки і техніки (1989, 2005 рр.), премія Національної академії наук України, Академії наук Білорусі та Академії наук Молдови (2009 р.). У Києві в 2001р. співробітниками Колекції була організована та проведена 1 Міжнародна конференція „Perspectives of medicinal mushrooms in care health and nutrition in 21st century”, присвячена проблемам біології та біотехнології лікарських грибів.

Колекція регулярно поповнюється за рахунок нових надходжень. Виділення макроміцетів у культуру для поповнення колекційного фонду проводиться в польових умовах під час експедиційних поїздок і в умовах лабораторії. Весь мікологічний матеріал для виділення ідентифікується мікологами-систематиками з відповідних груп грибів. Більшість культур була ізольована з природного матеріалу, зібраного на території України, Росії, Білорусі, Чехії, Ізраїлю, США. Частина культур одержана з інших колекцій, організацій та від спеціалістів-мікологів.

Колекція культур шапинкових грибів надає консультативну допомогу у методичних питаннях та ідентифікації культур, здійснює обмін з колекціями різних країн світу. Колекція ІВК є головною науково-інформаційною базою для фундаментальних та прикладних наукових досліджень, підготовки магістерських, бакалаврських та

дисертаційних робіт з біології та біотехнології макроміцетів в науково-дослідних установах та вищих навчальних закладах України, Білорусі, Росії, Молдови, Латвії та інших країн. За 50 років існування колекції види та штами Колекції були об'єктами дослідження для виконання 22 кандидатських та 7 докторських дисертацій, основою для видання 11 монографій, численних статей у вітчизняних та закордонних виданнях.

Найважливіші публікації, які містять інформацію про Колекцію та досліджені штами, наведені у списку публікацій.

За передачу чистих культур штамів шапинкових грибів у Колекцію ІВК, допомогу в ідентифікації та верифікації мікологічного матеріалу із застосуванням морфологічних та молекулярно-генетичних методів висловлюємо щиро подяку колегам: В.Г. Бабицькій, І.І. Бандурі, В.Т. Білаю, М.І. Бойко, С.П. Вассеру, В.П. Гелюті, А.П. Григанському, М.Ю. Дьякову, М.О. Зиковій, О.В. Камзолкіной, Т.А. Круподеровій, В.Б. Маланюку, С.М. Озерській, М.В. Пасайлюк, Ю.В. Петричуку, М.П. Придюку, Е.Ф. Соломко, М.М. Сухомлін, В.В. Трухоновцю, О.В. Федотову, В.І. Фоміной, В. Шашеку, И. Яблонському. Також щиро дякуємо Т.А. Круподеровій та М.П. Придюку за надані фотографії грибів.

INTRODUCTION

Over 10 thousand species of *Basidiomycota* and *Ascomycota* are macrofungi, or mushrooms. Mushrooms play an important role in natural environment decomposing a huge lignocellulose biomass and plant litter, forming mycorrhiza, etc. They also have considerable economic significance as objects of mushroom growing industry and as a source of pharmacological substances with oncostatic, immunomodulating, radioprotective, antiviral and other properties, dietary supplements, enzymes, antibiotics, etc.

Regarding conservation of mycobiota outside natural habitats of mushrooms, *ex situ* culture collections are crucial in maintaining the gene pool of macrofungi in pure culture. The Mushroom Culture Collection (acronym IBK) was established at the M.G. Kholodny Institute of Botany, NASU in 1966 on the basis of the Department of Mycology. A founder and first curator of the IBK Collection was Dr. Professor A.S. Bukhalo (1932-2014) who defined the strategy for development of collection funds and proposed basic principles of selection and preservation of mushroom diversity.

The Collection includes a total number of 1110 strains belonging to 186 species of 88 genera of *Basidiomycota* and *Ascomycota*. The IBK Collection is the largest official specialized culture collection of macromycetes in Ukraine and one of the largest in number of species and strains in Europe. According to the Decree of the Cabinet of Ministers of Ukraine № 1709 of 19 December 2001, the Mushroom Culture Collection of the M.G. Kholodny Institute of Botany was registered as a scientific object of national heritage of Ukraine.

The Culture Collection activities are focused on preservation of genofund of macrofungi in pure culture and fundamental research on biology and biotechnology of edible and medicinal mushrooms. Dikaryotic strains of macromycetes from

various taxonomic and ecological groups of broad geographical origin are maintained in the Collection. The collection has a great environmental importance for *ex situ* conservation of the fungal genetic resource. Therefore introduction to culture and preservation of rare and endangered species of fungi in Ukraine are emphasized, particularly those species which are listed in the Red Data Book of Ukraine. Among them, there are ascomycetes *Morchella steppicola* Zerova, *M. crassipes* (Vent.) Pers., *Gyromitra slonevskii* Heluta and basidiomycetes *Fomitopsis officinalis* (Vill.) Bondartsev et Singer, *Hericium coralloides* (Fr.) Gray, *Grifola frondosa* (Dicks.) Gray, *Sparassis crispa* (Wulfen) Fr. maintained in the IBK Collection. In addition, strains of *Pleurotus nebrodensis* (Inzenga) Quel., until recently the only representative of the Kingdom Fungi in the IUCN Red List of Threatened Species, are preserved in the Collection. Due to sufficient strain diversity, it is possible to reintroduce rare species into natural habitats where they have been extinct for various reasons.

A special attention has been paid to the introduction of species and strain diversity of edible and medicinal mushrooms. Unlike other macromycetes collections, in the IBK Collection contains a large number of strains commonly cultivated worldwide by producers of edible mushrooms as well as dietary and pharmacological substances. They belong to the genera *Pleurotus* (Fr.) P. Kumm., *Agaricus* L., *Lentinus* Fr., *Oudemansiella* Speg., *Flammulina* P. Karst., *Hericium* Pers., *Piptoporus* Karst., *Omphalotus* Fayod, *Schizophyllum* Fr., *Ganoderma* P.Karst., *Trametes* Fr., *Laetiporus* Murrill, *Lycoperdon* Pers., *Coprinus* Pers., *Macrolepiota* Singer, etc. and are represented in the Collection by a wide diversity of strains.

Culture collection of mushrooms is an important resource for development of mushroom growing in Ukraine and biotechnologies of dietary treatment and prevention supply, food supplements, pharmaceutical and biologically active substances. Cultures of 123 species with known pharmacological properties used in international folk and traditional medicine are represented in the Collection.

Methods and storage of pure cultures of ascomycetes and basidiomycetes are determined by peculiarities of morphology, ecological and biological properties of

the fungi developing in culture mainly as asporous vegetative mycelium. Isolation of pure cultures from fruit body tissue or basidio- and ascospores are made using conventional and modified methods. For isolation and preservation of cultures, the wort, malt, compost, potato-dextrose and other agar media, including added herbal extracts, are used. Cultures are preserved in refrigerator at $4\pm 1^{\circ}\text{C}$.

For species identification of basidiomycetes in vegetative stage of their development, specific criteria for identification and verification of macromycetes of certain taxonomic and ecological groups in culture are required. Peculiarities of mycelium growth and formation of fruiting bodies in culture are investigated within special program developed by the Collection staff. This program includes research on cultural-morphological characteristics using scanning electron microscopy, cultivation conditions, physiological and biochemical characteristics of strains that can be used to determine species identity of the culture.

It has been established that during cultivation period on reference agar nutrient medium, taxonomically significant characters at species level are the following: ability to form teleomorph stage; presence and type of asexual sporification; presence, shape and location on the mycelium of clamp connections, chlamydospores; formation of crystals inlays and abnormal structures on hyphae; type of filamentous colony and its radial growth rate; nature of the colored test reactions in presence of certain enzymes.

The Collection staff has developed methods of passaging, choosing selective nutrient media for some species with higher requirements for nutrients and microscopic visual system control cultures in absence of extraneous microflora which allow to maintain the viability of cultures in the Collection, including enzymatic and physiological activity, over decades.

For the development of new methods of cultivation, based on selected strains from the IBK Culture Collection, the staff of the Department of Mycology of the M.G. Kholodny Institute of Botany was twice awarded by the State Prize of Ukraine in Science and Technigue (1989, 2005) and the Award of the National Academy of Sciences of Ukraine, Academy of Sciences of Belarus and the Academy of Sciences of Moldova (2009). The staff of the Collection has organized the First

International Conference “Perspectives of Medicinal Mushrooms in Care Health and Nutrition in 21st century” devoted to issues of biology and biotechnology of medicinal mushrooms, held in Kiev in 2001.

The Collection regularly integrates new strains. Isolation of macromycetes into the Culture Collection to enrich the fund is performed in the field during expedition trips and in laboratory. All mycological material before the isolation is identified by mycologists, experts in taxonomy of relevant groups of fungi. The majority of cultures were isolated from the natural material in Ukraine, Russia, Belarus, Czech Republic, Israel and the USA. Some cultures were obtained from other collections, institutions and mycologists.

The Mushroom Culture Collection provides consulting on methodological issues and identification of cultures, exchanges of culture collections around the world. The IBK Collection is a major scientific and information basis for fundamental and applied research, training of master, bachelor and PhD theses in biology and biotechnology of macromycetes in research institutions and universities of Ukraine, Belarus, Russia, Moldova, Latvia and other countries. For the last 50 years, the species and strains of IBK Collection were used as the research objects for 22 PhD and 7 DrSci theses, as well as the basis for publication of 11 monographs, numerous articles in national and international journals.

The most important publications which include information about the Collection and investigated strains are cited in the List of publications.

For supplying pure cultures of mushroom strains to the IBK Collection, help in identification and verification of mycological material using morphological and molecular genetic techniques, we express sincere gratitude to the colleagues: V.G. Babytska, I.I. Bandura, V.T. Bilay, M.I. Boyko, M.Yu. Dyakov, O.V. Fedotov, V.I. Fomina, A.P. Gryganskyi, V.P. Heluta, I. Jablonskiy, O.V. Kamzolkina, T.A. Krupoderova, V.B. Malanyuk, S.M. Ozerska, M.V. Pasaylyuk, Yu.V. Petrychuk, M.P. Prydiuk, V. Shashek, E.F. Solomko, M.M. Sukhomlin, V.V. Truhonovets, S.P. Wasser, M.O. Zykova,. T.A. Krupoderova and M.P. Prydiuk are also thanked for providing original photos of mushrooms.

ВКАЗІВКИ ДЛЯ КОРИСТУВАННЯ

Культури грибів (Basidiomycota та Ascomycota) розташовані в алфавітному порядку латинських назв видових таксонів. Для кожної культури наведено такі відомості: латинська назва виду та прізвище автора (авторів), що вперше описали цей вид; найбільш вживаний синонім; інформація про наявність лікувальних властивостей, їстівність та можливість культивування в штучних умовах; номер штаму в колекції IBK, місце та дата збору вихідного матеріалу в природі (для деяких штамів - субстрат). Для штамів, одержаних з інших установ, наводяться також відомості про джерело отримання культури та її оригінальний номер, зазначається рік надходження в колекцію IBK.

USE INSTRUCTIONS

Cultures of mushrooms (Basidiomycota and Ascomycota) are presented in the alphabet order of species names. For each strain, the following information is given: Latin name of the species and name of author (authors) who first described the taxon; commonly used synonym; information about the presence of medicinal properties, edibility and the possibility of industrial cultivation; number of strains in IBK; place and data of isolation (sometimes including substrate on which the carpophore was found). For the strains obtained from other Institutions the additional information is also given: the source of culture and its original number, year of its receipt in IBK Collection.

СПИСОК СКОРОЧЕНЬ ABBREVIATION LIST

- BIN - V.L. Komarov Botanical Institute, Russian Academy of Sciences, St.-Petersburg, Russia
- CBS - Central Bureau of Fungal Cultures (Centraalbureau voor Schimmelculture), Netherlands
- CCBAS - Culture Collection of Basidiomycetes, Institute of Microbiology, Prague, Czech Republic
- DNU – Donetsk National University, Donetsk, Ukraine.
- KPDR – Korean Peoples Democratic Republic
- FCKU - Culture Collection of Fungi at Kyiv University, Kyiv, Ukraine
- FIE – Institute of Forest Science (Institut für Forstwissenschaften), Eberswalde, Germany
- HAI – International Centre for Cryptogamic Plants and Fungi. Institute of Evolution, University of Haifa, Haifa, Israel
- IFB – Institute of Forestry, National Academy of Sciences of Belarus, Gomel, Belarus
- IMB - International Myco Biologics, Inc., Texas, USA
- InMi NASB – Institute of Microbiology, National Academy of Sciences of Belarus, Minsk, Belarus
- MMRI - Mori Mushroom Research Institute, Japan
- MS - Mycological Station, Prague, Czech Republic
- MSU – Moscow State University, Moscow, Russia
- TSAU - Tavria State Agrotechnological University, Melitopol, Ukraine
- V.f.P. - Laboratory of Mushroom Cultivation Chamber of Agriculture NRW (Versuchsanstalt für Pilzanbau), Krefeld, Germany
- VKM - Russian Collection of Microorganisms, Moscow, Russia

- SEM – Scanning Electron Microscope

LIST OF SPECIES AND STRAINS

- Abortiporus biennis* (Bull.) **Mushroom with Medicinal properties**
Singer (= *Bjerkandera*
puberula (Berk. & M.A.
Curtis) Murrill
5093 Obtained from BIN (055),
St.-Petersburg, Russia, 1987.
Isolated from a carpophore,
Russia, Leningrad Region, 1963.
- Agaricus abruptibulbus* Peck **Edible Mushroom**
284 Obtained from BIN (0628),
St.-Petersburg, Russia, 1992.
Received from CCBAS (301), Prague, Czech
Republic, 1963.
- Agaricus arvensis* Schaeff. **Edible Mushroom**
14 Isolated from a carpophore,
Ukraine, Kyiv Region, Novoselki, 1971.
15 Obtained from CCBAS (302), Prague, Czech
Republic, 1967.
Isolated from a carpophore, Czech Republic,
Bohemia, 1964.
- Agaricus bernardiiformis* **Edible Mushroom**
Bohus
156 Obtained from Hungarian Natural History
Museum, Budapest, Hungary, 1978.
- Agaricus bisporus* (J.E.
Lange) Imbach **Cultivated Edible Mushroom with Medicinal
properties**
(= *Agaricus hortensis*
(Cooke) S. Imai)
4 Obtained from VKM (VKMF-1998),
Moscow, Russia, 1969.

- 708 Obtained from Company "Pilzbrut Dieskau" (S-408), Germany, 1995.
- 709 Obtained from Company "Pilzbrut Dieskau" (S-409), Germany, 1995.
- 710 Obtained from Company "Pilzbrut Dieskau" (S-410), Germany, 1995.
- 720 Obtained from CCBAS (X-20), Prague, Czech Republic, 1994.
- 928 Obtained from HAI, Haifa, Israel, 1995.
Isolated from a carpophore, Israel, 1995.
- 1514 Obtained from HAI (6), Haifa, Israel, 1996.
- 1680 Obtained from HAI (18), Haifa, Israel, 2000.
Isolated from a carpophore, Israel, Daliya-et-Carmel, 1995.
- 2017 Isolated from a cultivated fruit body, San Antonio, USA, 2010.
- 2193 Isolated from a cultivated fruit body (X-20), Germany, 1995.
- 2194 Isolated from a cultivated fruit body (9), Ukraine, 1993.
- 2195 Isolated from a cultivated fruit body (Korona 158), 2002.
- 2198 Isolated from a cultivated fruit body (Sylvan A-15), 2002.
- 2199 Isolated from a cultivated fruit body (7207), Belgium, 2002.
- 2200 Isolated from a cultivated fruit body (72a), Belgium, 2002.
- 2202 Isolated from a cultivated fruit body (Italspawn F-50), 2002.
- 2203 Obtained from Company "Pilzbrut Dieskau" (B-32), Germany, 2002.

- 2204 Isolated from a cultivated fruit body (Sylvan 737), 2006.
- 2205 Isolated from a cultivated fruit body (Amycel Maxx), 2007.
- 2206 Isolated from a cultivated fruit body (Italspawn F-60), 2008.
- 2221 Isolated from a cultivated fruit body (Euromycel 58), 2010.
- 2389 Isolated from a cultivated fruit body, Ukraine, 2015.
- 2438 Isolated from a cultivated fruit body (Euromycel 25), 2010.
- 2439 Isolated from a cultivated fruit body (Italspawn FB-29), 2015.
- 2440 Isolated from a cultivated fruit body (Italspawn F-57), 2015.
- 2441 Isolated from a cultivated fruit body (Italspawn F-599), 2015.
- 5401 Isolated from a carpophore, Ukraine, Kyiv, 1988.
- 5402 Isolated from a carpophore, Ukraine, Kyiv, environs, 1999.
- 5404 Obtained from State farm "Zarechje" (273), Moscow, Russia, 1995.
- 5406 Isolated from a carpophore, Ukraine, Kyiv, environs, 1995.
- 5407 Isolated from a cultivated fruit body (Italspawn F-44), 1995.
- 5408 Isolated from a cultivated fruit body (SP-24), 1995.
- 5409 Obtained from State farm "Zarechje" (Somycel 53), Moscow, Russia, 1992.
- 5410 Obtained from Laboratory "Bio-nc" (217), Kharkiv, Ukraine, 1993.

- 5411 Isolated from a cultivated fruit body (S-258), Poland, 1995.
- 5412 Obtained from State farm "Zarechje" (GDR-2), Moscow, Russia, 1992.
- 5413 Obtained from State farm "Zarechje" (U-3), Moscow, Russia, 1992.
- 5414 Obtained from Laboratory "Bio-nc" (1021), Kharkov, Ukraine, 1993.
- 5415 Obtained from Institute of Plant (A-1), Pyongyang, KPDR, 1992.
- 5416 Obtained from a cultivated fruit body (Le Lion C33), Horst, Netherlands, 1992.
- 5417 Obtained from a cultivated fruit body (Somycel 153), Horst, Netherlands, 1992.
- 5419 Isolated from a carpophore, Ukraine, Kyiv, environs, 1993.
- 5420 Obtained from MSU (Somycel-512), Moscow, Russia, 1997.
- 5421 Obtained from MSU (Somycel-300), Moscow, Russia, 1997.
- 5422 Isolated from a cultivated fruit body (Sylvan 130), 2000.
- 5424 Obtained from Company "Pilzbrut Dieskau" (S-11), Germany, 1995.
- 5425 Obtained from Company "Pilzbrut Dieskau" (S-407), Germany, 1995.
- 5426 Obtained from Company "Pilzbrut Dieskau" (S-245), Germany, 1995.
- 5429 Obtained from Company "Pilzbrut Dieskau" (B-399), Germany, 1995.
- 5431 Isolated from a cultivated fruit body (32), Poland, 1996.
- 5433 Isolated from a cultivated fruit body (U-217), 1996.

5435	Isolated from a cultivated fruit body, Ukraine, 1998.
5436	Isolated from a cultivated fruit body (K-52), 2000.
<i>Agaricus bitorquis</i> (Quél.) Sacc. (= <i>Fungus bitorquis</i> (Quél.) Kuntze)	Cultivated Edible Mushroom with Medicinal properties
143	Isolated from a carpophore, Ukraine, Kyiv, park, 1977.
285	Isolated from a carpophore, Moldova, Strashenski region, 1985.
291	Obtained from BIN (0329), St.-Petersburg, Russia, 1998. Isolated Russia, St.-Petersburg, 1976.
1681	Obtained from HAI (31) Haifa, Israel, 2000. Isolated from a carpophore, Israel, Haifa, park, 1994.
2196	Obtained from Company «Korona» (B10), Hungary, 2000.
2197	Obtained from Company «Korona» (B1), Hungary, 2000.
2201	Obtained from HAI (798) Haifa, Israel, 2006.
<i>Agaricus blazei</i> Murrill	Cultivated Edible Mushroom with Medicinal properties
2225	Obtained from TSAU (837), Ukraine, Melitopol, 2012.
2226	Obtained from TSAU (838), Ukraine, Melitopol, 2012.
<i>Agaricus bonii</i> Wasser	Edibility and Medicinal properties not known
1682	Obtained from HAI (36), Haifa, Israel, 2000. Isolated from a carpophore, Israel, Haifa, park, 2000.

<i>Agaricus bresadolanus</i> Bohus (= <i>Agaricus romagnesii</i> <i>Wasser</i>)	Edible Mushroom. Rare Mushroom Included in the Red Data Book of Ukraine
104	Isolated from a carpophore, Ukraine, Kherson Region, Tsjurupinsk, acacia forest, 1989.
1809	Obtained from HAI (791), Haifa, Israel, 2002. Isolated from a carpophore, Israel, Haifa, Mt. Carmel National Park, University of Haifa, 2000.
<i>Agaricus gennadii</i> (Chatin & Boud.) P.D. Orton (= <i>Agaricus cellaris</i> (Bres.) Contu)	Edible Mushroom
1801	Obtained from HAI (218), Haifa, Israel, 2002. Isolated from a carpophore, Israel, Mt. Carmel National Park, University of Haifa, 2000.
<i>Agaricus nevoi</i> Wasser	Edible Mushroom
1807	Obtained from HAI (402), Haifa, Israel, 2002. Isolated from a carpophore, Israel, Mt. Carmel National Park, University of Haifa, 2001.
<i>Agaricus osecanus</i> Pilát (= <i>Agaricus nivesceus</i> F.H. Möller)	Edible Mushroom
1810	Obtained from HAI (473), Haifa, Israel, 2002.
<i>Agaricus pequinii</i> (Boud.) Singer	Edible Mushroom
1779	Obtained from HAI (473), Haifa, Israel, 2002. Isolated from a carpophore, Israel, Mt. Carmel National Park, University of Haifa, 2001.

<i>Agaricus sylvaticus</i> Schaeff.	Edible Mushroom
37	Isolated from a carpophore, Ukraine, Kyiv, environs, 1968.
<i>Agaricus xanthodermus</i> Genev (= <i>Fungus</i> <i>xanthodermus</i> (Genev.) Kuntze)	Poisonous Mushroom with Medicinal properties
27	Isolated from a carpophore, Ukraine, Kyiv, environs, 1995.
294	Isolated from a carpophore, Ukraine, Kyiv, environs, 1979.
1517	Isolated from a carpophore, Ukraine, Kyiv, park, 1995.
<i>Amanita citrina</i> Pers.	Poisonous Mushroom with Medicinal properties
2474	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Halych, Halych National Nature Park, 2015.
<i>Amanita muscaria</i> (L.) Lam.	Poisonous Mushroom with Medicinal properties
25	Isolated from a carpophore, Ukraine, Lviv Region, 1988.
<i>Amanita phalloides</i> Secr.	Poisonous Mushroom with Medicinal properties
225	Isolated from a carpophore, Ukraine, Boguslav Region, 1983.
<i>Amanita rubescens</i> Pers.	Not Edible Mushroom
38	Isolated from a carpophore, Ukraine, Kyiv, environs, 1967.
1516	Obtained from HAI (1), Haifa, Israel, 1996. Isolated from a carpophore, Israel, 1995.
<i>Amanita vaginata</i> (Bull.) Lam. (= <i>Amanitopsis vaginata</i>)	Not Edible Mushroom
5	Isolated from a carpophore, Ukraine, Kyiv, environs, 1967.

*Auricularia auricula-
judae* (Bull.) Quél. (= *Auricula tremellosa* (Fr.)
Kuntze)

**Cultivated Edible Mushroom with Medicinal
properties**

- 961 Obtained from WCh (1), Germany, 1996.
1671 Obtained from HAI (330), Haifa, Israel, 2000.
Isolated from a carpophore,
Israel, Akko, park, on *Ficus sycomotus*, 1997.
1858 Obtained from HAI (1036), Haifa, Israel, 2005.
2232 Obtained from TSAU (M),
Melitopol, Ukraine, 2012.
2233 Obtained from TSAU (548),
Melitopol, Ukraine, 2012.
2234 Obtained from TSAU (559),
Melitopol, Ukraine, 2012.
2235 Obtained from TSAU (657),
Melitopol, Ukraine, 2012.

Auricularia nigricans
(Sw.) Birkebak, Looney &
Sánchez-García
(= *Auricularia*
polytricha (Mont.) Sacc.)

**Cultivated Edible Mushroom with Medicinal
properties**

- 517 Isolated from a cultivated fruit body
(Au-3), China, 1995.
975 Obtained from CCBAS (str.4),
Prague, Czech Republic, 1994.
Isolated from a carpophore, Vietnam, 1971.

Auriporia aurea (Peck)
Ryvarden (= *Poria aurea*
Peck; *Leptoporus aureus*
(Peck) Pat.

Mushroom with Medicinal properties

- 5048 Obtained from Central Science-Research Institute
of wood mechanical processing (063), Russia.

<i>Chlorophyllum rachodes</i> (Vittad.) Vellinga (= <i>Macrolepiota rachodes</i> (Vittad.) Singer)	Edible Mushroom
209	Isolated from a carpophore, Ukraine, Kyiv, environs, 1982.
2379	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Nadvirna, Gorgany Nature Reserve, 2014.
<i>Chondrostereum purpureum</i> (Pers.) Pouzar (= <i>Stereum</i> <i>purpureum</i> Pers.)	Not Edible Mushroom
1696	Obtained from InMi NASB (149), Minsk, Belarus, 2000.
5102	Obtained from BIN (030), St.-Petersburg, Russia, 1979.
<i>Cerrena unicolor</i> (Bull.) Murrill (= <i>Boletus unicolor</i> Bull.; <i>Daedalea unicolor</i> (Bull.) Fr.; <i>Coriolus unicolor</i> (Bull.) Pat.)	Mushroom with Medicinal properties
310	Obtained from BIN (0681), St.-Petersburg, Russia, 1986. Isolated from a carpophore, Leningrad Region, Priozersky District, on <i>Betula</i> sp. 1959.
1847	Isolated from a carpophore, Ukraine, 2004.
5101	Obtained from BIN (0060), St.-Petersburg, Russia, 1996. Isolated from a carpophore, 1981.
<i>Clathrus archeri</i> (Berk.) Dring (= <i>Anthurus</i> <i>archeri</i> (Berk.) E. Fisch.)	Not Edible Mushroom Rare Mushroom Included in the Red Data Book of Ukraine
2405	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Kosiv, Hutsulshchyna National Nature Park, 2015.

- Clitocybe nebularis* (Batsch) P. Kumm.** (= *Lepista nebularis* (Batsch) Harmaja) **Edible Mushroom with Medicinal properties**
- 2005 Obtained from MSU (3921), Moscow, Russia, 2007.
- 2172 Isolated from a carpophore, Ukraine, Kyiv Region, pine-tree forest, 2011.
- Coprinellus ephemerus* (Bull.) & Moncalvo** (= *Agaricus ephemerus* Bull., = *Coprinus ephemerus* (Bull.) Fr.) **Mushroom with Medicinal properties**
- 8 Isolated from spores, Ukraine, Kyiv, Feofania, forest, 1974.
- 49 Obtained from BIN (3372 str.1), St.-Petersburg, Russia, 1969.
Isolated from spores, St.-Petersburg, Russia, 1965.
- 245 Isolated from spores, Ukraine, Zakarpattya Region, Svalyava District, Ploske, 1987.
- Coprinopsis atramentaria* (Bull.) & Moncalvo** (= *Coprinus atramentarius* (Bull.) Fr.) **Mushroom with Medicinal properties**
- 2336 Isolated from a carpophore, Ukraine, Kyiv, Feofania, park, 2013.
- Coprinopsis cinerea* (Schaeff.) & Moncalvo** (= *Agaricus cinereus* Schaeff., *Coprinus cinereus* (Schaeff.) Gray) **Mushroom with Medicinal properties**
- 200 Isolated from a carpophore, Russia, Primorsky Territory, Sichote-Alinsky Reserve, 1980.
- 262 Isolated from a carpophore, Ukraine, Kyiv, environs, 1982.

*Coprinellus
xanthothrix* (Romagn.)
Vilgalys, Hopple & Jacq.
Johnson (= *Coprinus
xanthothrix* Romagn.)

1946

Edibility and Medicinal properties not known

Isolated from spores,
Ukraine, Kyiv, environs, 2007.

Coprinus comatus (O.F.
Müll.) Pers. (= *Agaricus
comatus* O.F. Müll.)

**Cultivated Edible Mushroom with Medicinal
properties**

137

Obtained from BIN (0369 str.4),
St.-Petersburg, Russia, 1979.
Isolated from a carpophore,
Russia, Leningrad, park, 1970.

138

Isolated from a carpophore,
Ukraine, Crimea, 1989.

173

Obtained from BIN (0370),
St.-Petersburg, Russia, 1980.
Received from FIE, Germany, 1969.

1544

Isolated from a carpophore, Ukraine, Kyiv, 1997.

1687

Isolated from a carpophore, Ukraine, Kyiv, 2000.

1727

Obtained from HAI (252), Haifa, Israel, 2000.
Isolated from a carpophore,
Israel, Haifa, park, 2000.

2000

Obtained from MSU (3922),
Moscow, Russia, 2009.
Isolated from a carpophore, 2007.

2141

Obtained from TSAU (FB),
Melitopol, Ukraine, 2011.
Isolated from a cultivated fruit body, USA.

2237

Obtained from TSAU (42),
Melitopol, Ukraine, 2012.
Isolated from a carpophore, USA.

2238

Isolated from a cultivated fruit body, China,
2012.

2278

Isolated from a carpophore, Ukraine, Kyiv, 2012.

- 2325 Isolated from a carpophore, Ukraine, Kyiv, Feofania, park, 2013.
- Cordyceps militaris* (L.) Fr. Mushroom with Medicinal properties**
(= *Clavaria granulose* Bull.)
- 1862 Obtained from HAI (1035), Haifa, Israel, 2005.
- 2029 Obtained from TSAU, Ukraine, Melitopol, 2010.
- Crinipellis schevczenkoi* Buchalo Not Edible Mushroom**
- 31 Isolated from *Beta vulgaris*, Kyrgyzstan, Chuyskaya valley, 1972.
- Cyathus olla* (Batsch) Pers. Not Edible Mushroom**
(= *Peziza olla* (Batsch) Pers.)
- 1964 Isolated from a carpophore, Ukraine, Ukrainian Steppe Reserve, 2008.
- 1965 Isolated from a carpophore, Ukraine, Ukrainian Steppe Reserve, 2008.
- Cyathus striatus* (Huds.) Willd. (= *Peziza striata* Huds.) Mushroom with Medicinal properties**
- 1966 Isolated from a carpophore, Ukraine, Khmelnitcki Region, Kamenetz-Podolskyi, Kitaygorod, 2008.
- Cyclocybe aegerita* (V. Brig.) Vizzini (= *Agrocybe aegerita* (V. Brig.) Singer) Cultivated Edible Mushroom with Medicinal properties**
- 12 Obtained from MS (NN), Prague, Czech Republic, 1978.
- 166 Obtained from MS (A-8), Prague, Czech Republic, 1977.
- 167 Obtained from CCBAS (319), Prague, Czech Republic, 1980.
Isolated from a carpophore, Bulgaria, Lauta near Plovdiv, on *Populus* sp., 1979.

- 168 Obtained from MS (1401),
Prague, Czech Republic, 1979.
- 217 Obtained from CCBAS (B-4),
Prague, Czech Republic, 1983.
- 218 Obtained from CCBAS (315),
Prague, Czech Republic, 1983.
Isolated from a carpophore,
Slovakia, Harbanovo, 1971.
- 960 Obtained from Company “Weser-Champignon”,
Germany, 1996.
- 1511 Obtained from HAI (4), Haifa, Israel, 1996.
Isolated from a carpophore, Israel, 1995.
- 1512 Obtained from HAI (5), Haifa, Israel, 1996.
Isolated from a carpophore, Israel, 1995.
- 1513 Obtained from HAI (6), Haifa, Israel, 1996.
Isolated from a carpophore, Israel, 1995.
- 1853 Obtained from HAI (1038), Haifa, Israel, 2005.
- 2229 Obtained from TSAU (370),
Melitopol, Ukraine, 2012.
Isolated from a carpophore, USA.
- 2230 Obtained from TSAU (440),
Melitopol, Ukraine, 2012.
Isolated from a carpophore, USA.
- 2231 Obtained from TSAU (991),
Melitopol, Ukraine, 2012.
Isolated from a carpophore, USA.

Cyclocybe cylindracea **Cultivated Edible Mushroom with Medicinal**
(DC.) Vizzini & Angelini (= **properties**
Agrocybe cylindracea (DC.)
 Maire; others)

- 5127 Obtained from CCBAS (AA-009),
Prague, Czech Republic, 1981.

***Fistulina hepatica* (Schaeff.) Edible Mushroom with Medicinal properties
With.**

- 302 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 315 Isolated from a carpophore,
Ukraine, Sumy Region, Klementovo, 1986.
- 1819 Isolated from a carpophore,
Ukraine, Kyiv, environs, on *Quercus* sp., 2001.
- 2079 Obtained from DNU (Fh-08),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, Ukraine,
Krasnolimanske Forestry, on *Salix alba*, 2008.
- 2080 Obtained from DNU (Fh-18),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, Ukraine,
Krasnolimanske Forestry, on *Salix alba*, 2008.
- 2280 Isolated from a carpophore,
Ukraine, Kyiv, park, 2012.
- 5061 Obtained from BIN (0107),
St.-Petersburg, Russia, 1978.

***Flammulina velutipes*
(Curtis) Singer Cultivated edible mushroom with Medicinal
properties**

- 29 Obtained from CCBAS (F-3),
Prague, Czech Republic, 1977.
- 72 Obtained from BIN (0383),
St.-Petersburg, Russia, 1979.
Isolated from spores,
Russia, St.-Petersburg, Botanical garden, 1957.
- 112 Isolated from spores,
Ukraine, Kyiv, environs, 1969.
- 118 Obtained from MS (1009),
Prague, Czech Republic, 1979.
- 126 Obtained from MS (1010),
Prague, Czech Republic, 1979.
- 261 Isolated from spores, Russia,
Primorsky Territory, Usuriysk Reserve, 1980.

- 1668 Isolated from spores,
Ukraine, Mykolaiv Region, 1999.
- 1669 Isolated from spores,
Ukraine, Mykolaiv Region, 2000.
- 1860 Obtained from HAI (1046),
Haifa, Israel, 2005.
- 1878 Obtained from DNU (600),
Donetsk, Ukraine, 2009.
Isolated from spores,
Ukraine, Donetsk, on *Robinia pseudoacacia*, 2005.
- 1879 Obtained from DNU (F-204),
Donetsk, Ukraine, 2009.
Isolated from spores, Ukraine, Donetsk,
Botanical garden, on *Acer negundo*, 2005.
- 1880 Obtained from DNU (F-БОР),
Donetsk, Ukraine, 2009.
Isolated from spores,
Ukraine, Donetsk, on *Robinia pseudoacacia*, 2005.
- 1881 Isolated from spores, Ukraine, Kyiv, 2005.
- 1882 Isolated from spores,
Ukraine, Kyiv, on the stump, 2005.
- 1883 Obtained from DNU (F-202),
Donetsk, Ukraine, 2009.
Isolated from spores,
Ukraine, Donetsk, on *Fraxinus lanceolata*, 2005.
- 1884 Isolated from spores,
Ukraine, Kyiv Region, 2007.
- 1885 Obtained from DNU, (F-202),
Ukraine, Donetsk, 2005.
- 1974 Isolated from a cultivated fruit body, Japan, 2009.
- 1986 Obtained from MSU, Moscow, Russia, 2009.
Isolated from spores,
Russia, Moscow Region, Zvenigorod, 2007.
- 1994 Isolated from a cultivated fruit body, Japan, 2009.
- 2038 Obtained from TSAU (21),
Melitopol, Ukraine, 2010.

- 2039 Obtained from TSAU (3),
Melitopol, Ukraine, 2010.
- 2050 Obtained from DNU (F-107),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Svjati Gory
National Park, on *Acer tataricum*, 2004.
- 2051 Obtained from DNU (F-101),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer negundo*, 2009.
- 2052 Obtained from DNU (F-102),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Svjati Gory National Park, 2002.
- 2054 Obtained from DNU (F-103),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Donetsk,
Botanical garden, on *Acer negundo*, 2010.
- 2055 Obtained from DNU (F-104),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Svjati Gory
National Park, on *Acer tataricum*, 2004.
- 2058 Obtained from DNU (F-vv),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 2002.
- 2060 Obtained from DNU (F-v1),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 2001.
- 2061 Obtained from DNU (F-3),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 1998.
- 2070 Obtained from DNU (F-03),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, Botanical garden, 2002.

- 2071 Obtained from DNU (F-04),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, Botanical garden, 2002.
- 2072 Obtained from DNU (F-06),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Donetsk,
Botanical garden, on *Acer negundo*, 2002.
- 2073 Obtained from DNU (F-073),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Donetsk,
Botanical garden, on *Acer negundo*, 2002.
- 2074 Obtained from DNU (F-074),
Donetsk, Ukraine, 2011.
Isolated from spores, Ukraine, Donetsk,
Botanical garden, on *Acer negundo*, 2002.
- 2075 Obtained from DNU (F-1),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 1998.
- 2076 Obtained from DNU (F-1v),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 2009.
- 2077 Obtained from DNU (F-2),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 2009.
- 2078 Obtained from DNU (F-202),
Donetsk, Ukraine, 2011.
Isolated from spores,
Ukraine, Donetsk, on *Acer saccharum*, 2003.
- 2166 Isolated from spores, Ukraine, Kyiv, 2011.
- 2283 Isolated from spores,
Ukraine, Kyiv, environs, 2012.
- 2337 Isolated from a cultivated fruit body,
Ukraine, 2013.

<i>Fomes fomentarius</i> (L.) Fr.	Mushroom with Medicinal properties
355	Obtained from BIN (0112), St.-Petersburg, Russia, 1987. Isolated from a carpophore, Belarus, Belovezskaya puscha, 1971.
1003	Obtained from BIN (0831), St.-Petersburg, Russia, 1987. Isolated from a carpophore, Mongolia.
1528	Isolated from a carpophore, Ukraine, Kyiv, environs, 1997.
1573	Isolated from a carpophore, Ukraine, Chernigiv Region, Jaroslavka, 1997.
1591	Isolated from a carpophore, Ukraine, Kyiv, environs, 1997.
2147	Obtained from TSAU (AM2), Melitopol, Ukraine, 2011.
2148	Isolated from a carpophore, Ukraine, Kyiv, Puscha-Vodica, on <i>Betula</i> sp., 2011.
2244	Obtained from TSAU (38), Melitopol, Ukraine, 2011.
2344	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2345	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2346	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2347	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2367	Isolated from a carpophore, Ukraine, Kyiv, on <i>Aesculus hippocastanum</i> , 2014.
2400	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Halych, Halych National Nature Park, on <i>Betula</i> sp., 2015.

***Fomitiporia robusta* (P. Karst.) Fiasson & Niemelä**
(= *Phellinus robustus* (P. Karst.) Bourdot & Galzin)

Mushroom with Medicinal properties

- 1551 Isolated from a carpophore, Ukraine, Kyiv Region, Teteriv, on *Quercus* sp., 1997.
- 1695 Obtained from IFB (148), Gomel, Belarus, 2000.

***Fomitopsis betulina* (Bull.) B.K. Cui, M.L. Han & Y.C. Dai**
(= *Piptoporus betulinus* (Bull.) P. Karst.)

Mushroom with Medicinal properties

- 311 Obtained from BIN (0247), St.-Petersburg, Russia, 1980.
- 327 Isolated from a carpophore, Russia, Primorsky Territory, Sichote-Alinsky Reserve, 1980.
- 978 Isolated from a carpophore, Ukraine, Kyiv, environs, 1996.
- 988 Isolated from a carpophore, Ukraine, Kyiv, environs, 1996.
- 989 Isolated from a carpophore, Ukraine, Kyiv, environs, 1996.
- 1554 Isolated from a carpophore, Ukraine, Kyiv Region, Teteriv, 1997.
- 1555 Isolated from a carpophore, Ukraine, Kyiv Region, Teteriv, on *Betula* sp., 1997.
- 1556 Isolated from a carpophore, Ukraine, Kyiv Region, Teteriv, 1997.
- 1647 Isolated from a carpophore, Ukraine, Kyiv Region, Klavdievo, 1999.
- 1648 Isolated from a carpophore, Ukraine, Kyiv Region, Klavdievo, 1999.
- 1649 Isolated from a carpophore, Ukraine, Kyiv Region, Klavdievo, 1999.

- 1650 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, 1999.
- 1651 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, 1999.
- 1652 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, 1999.
- 1653 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, 1999.
- 1654 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, 1999.
- 1934 Isolated from a carpophore,
Ukraine, Kyiv Region, 2009.
- 2020 Isolated from a carpophore,
Ukraine, Zitomir Region, on *Betula* sp., 2009.
- 2269 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2012.
- 2290 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2013.
- 2363 Isolated from a carpophore,
Ukraine, Kyiv, Golosevo, on *Betula* sp., 2014
- 2364 Isolated from a carpophore,
Ukraine, Kyiv, Golosevo, 2014.
- 2366 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2014.
- 2399 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.
- Fomitopsis officinalis* (Vill.)
Bondartsev & Singer
(=*Laricifomes officinales*
(Vill.:Fr.) Kotl.)** **Mushroom with Medicinal properties
Rare Mushroom Included in the Red Data Book of
Ukraine**
- 5004 Obtained from BIN, St.-Petersburg, Russia, 1981.

***Fomitopsis pinicola* (Sw.) P. Mushroom with Medicinal properties**

Karst

- 1523 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1997.
- 2129 Obtained from DNU (TO-09),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, Ukraine, Donetsk,
Botanical garden, on *Salix alba*, 1991.
- 2261 Isolated from a carpophore,
Russia, Moscow Region, Zvenigorod, 2012.
- 2291 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2013.
- 2338 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2013.
- 2341 Isolated from a carpophore,
Ukraine, Lviv Region, 2013.
- 2397 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.
- 5142 Obtained from BIN (0137),
St.-Petersburg, Russia, 1981.

***Ganoderma applanatum*
(Pers.) Pat.**

Mushroom with Medicinal properties

- 920 Obtained from InMi NASB (920),
Minsk, Belarus, 1995.
Isolated from a carpophore,
Belarus, Minsk environs, 1989.
- 1530 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1997.
- 1552 Isolated from a carpophore, Ukraine,
Kyiv Region, Teterev, on *Carpinus* sp., 1997.
- 1553 Isolated from a carpophore, Ukraine,
Kyiv Region, Teterev, on *Quercus robur*, 1997.

- 1572 Isolated from a carpophore, Ukraine, Chernigiv Region, Jaroslavka, on *Quercus robur*, 1997.
- 1593 Isolated from a carpophore, Ukraine, Kyiv, on *Carpinus* sp., 1997.
- 1672 Obtained from HAI (287), Haifa, Israel, 2000. Isolated from a carpophore Israel, Tel-Aviv, on *Ficus* sp., 1997.
- 1701 Obtained from IFB (176), Gomel, Belarus, 2000. Isolated from a carpophore, Belarus, Gomel, on *Populus tremula*, 2000.
- 1895 Isolated from a carpophore, Ukraine, Vinnitsa, 2006.
- 1896 Isolated from a carpophore, Ukraine, Kyiv Region, Koncha-Zaspa, 2006.
- 1897 Isolated from a carpophore, Ukraine, Kyiv Region, Koncha-Zaspa, 2006.
- 1898 Isolated from a carpophore, Ukraine, Crimea, Yalta Forestry, Lavrove, on *Carpinus* sp., 2006.
- 1899 Isolated from a carpophore, Ukraine, Crimea, Yalta Forestry, Lavrove, on *Fagus* sp., 2006.
- 1981 Isolated from a carpophore, Ukraine, Kyiv Region, Jurivka, on *Quercus* sp., 2009.
- 1982 Isolated from a carpophore, Ukraine, Kyiv, park, on *Robinia pseudoacacia*, 2009.
- 2021 Isolated from a carpophore, Ukraine, Zitomir Region, on *Carpinus* sp, 2009.
- 2043 Isolated from a carpophore, Ukraine, Kyiv, Syretzki park, on *Robinia pseudoacacia*, 2010.
- 2272 Isolated from a carpophore, Ukraine, Kyiv Region, Irpin, environs, 2012.
- 2330 Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Sheshory, environs, 2013.

- 2342 Isolated from a carpophore,
Ukraine, Kyiv, park on *Populus* sp., 2013.
- 2350 Isolated from a carpophore,
Ukraine, Kyiv, park on *Populus* sp., 2013.

***Ganoderma lucidum*
(Curtis) P. Karst.**

Mushroom with Medicinal properties

- 331 Isolated from a carpophore,
Ukraine, Kharkiv Region, Korobov Khutor, 1986.
- 921 Obtained from InMi NASB, Minsk, Belarus, 1995.
Isolated from a carpophore, Belarus, Minsk, 1989.
- 922 Obtained from CCBAS (707),
Prague, Czech Republic, 1985.
- 1607 Obtained from Institute of Plant (358),
Pyongyang, KPDR, 1998.
- 1608 Obtained from Institute of Plant (NB-2),
Pyongyang, KPDR, 1998.
- 1621 Obtained from IMB (6 Led 007),
Texas, USA, 1998.
- 1670 Obtained from HAI (447), Haifa, Israel, 2000.
Isolated from a carpophore,
Tel-Aviv, Israel, on *Quercus* sp.
- 1683 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2000.
- 1787 Obtained from Company “Weser-Champignon”
(1722), Germany, 2000.
- 1788 Obtained from Company “Weser-Champignon”
(1720), Germany, 2000.
- 1887 Obtained from HAI (545), Haifa, Israel, 2006.
Isolated from a carpophore, Israel, Masaada, 2003.
- 1888 Obtained from HAI (626), Haifa, Israel, 2006.
Isolated from a carpophore,
Germany, Stutgard, Botanical garden, 2003.
- 1889 Isolated from a carpophore,
Slovenia, Rogacchek, 2004.

- 1900 Obtained from IMB, Texas, USA, 2002.
- 1901 Obtained from IMB, Texas, USA, 2000.
- 1902 Obtained from Institute of New Antibiotics Search, (LH-1), Moscow, Russia, 2001.
- 1903 Obtained from Institute of New Antibiotics Search, (L-1), Moscow, Russia, 2001.
- 1904 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Carpinus* sp., 2006 .
- 1905 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1906 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1907 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1908 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Acer campestre*, 2006.
- 1909 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1910 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1911 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Carpinus* sp., 2006.
- 1912 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1913 Isolated from a carpophore, Ukraine, Crimea, Lavrove, Yalta Forestry, on *Quercus* sp., 2006.
- 1914 Isolated from a carpophore,
Ukraine, Kyiv, Botanical garden, 2006.
- 1980 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 2009.
- 2030 Isolated from a carpophore,
Turkey, Retchie, National park, 2010.

- 2066 Obtained from DNU (GI-1),
Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Snizne, on *Robinia pseudoacacia*, 2008.
- 2067 Obtained from DNU (GI-2),
Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Snizne, on *Robinia pseudoacacia*, 2008.
- 2068 Obtained from DNU (GI-3),
Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Snizne, on *Robinia pseudoacacia*, 2008.
- 2157 Obtained from TSAU (Pecan),
Melitopol, Ukraine, 2012.
- 2170 Obtained from TSAU (S-10),
Melitopol, Ukraine, 2011.
- 2171 Obtained from TSAU (Cro),
Melitopol, Ukraine, 2011.
- 2392 Isolated from a carpophore,
Ukraine, Dnipropetrivsk Region, Poljakiv forest,
on *Quercus* sp., 2015.
- 2455 Isolated from a carpophore, Ukraine,
Zitomir Region, Kornin, on *Quercus* sp., 2012.
- 2476 Isolated from a carpophore
Ukraine, Bila Tserkva, Oleksandriya park, on
Fraxinus sp., 2016.
- Ganoderma resinaceum* Boud. Mushroom with Medicinal properties**
- 2477 Isolated from a carpophore
Ukraine, Odessa Region, Vilkovo, 2016.
- Ganoderma tsugae* Murrill Mushroom with Medicinal properties**
- 1848 Obtained from HAI (1033), Haifa, Israel, 2005.
- 1859 Obtained from HAI (1032), Haifa, Israel, 2005.
- 2024 Obtained from TSAU, Melitopol, Ukraine, 2010.

<i>Gloeophyllum odoratus</i> (Wulfen) Imazeki	Mushroom with Medicinal properties
1691	Obtained from IFB (134), Gomel, Belarus, 2000. Isolated from a carpophore, Belarus, Minsk, environs, 1993.
<i>Gloeophyllum sepiarium</i> (Wulfen) P.Karst.	Mushroom with Medicinal properties
305	Obtained from BIN (0160), St.-Petersburg, Russia, 1969. Isolated from a carpophore, Russia, Leningrad Region, 1966.
325	Obtained from VKM (F-433), Moscow, Russia, 1979.
2265	Isolated from a carpophore, Russia, Moscow Region, Zvenigorod, 2012.
<i>Grifola frondosa</i> (Dicks.) Gray	Cultivated Edible Mushroom with Medicinal properties Rare Mushroom Included in the Red Data Book of Ukraine
332	Isolated from a carpophore, Ukraine, Zakarpattya Region, Tyssa locality, 1967.
923	Obtained from CCBAS (653), Prague, Czech Republic, 1995.
962	Obtained from Company “Weser-Champignon” (USA), Germany, 1996.
976	Obtained from Company “Weser-Champignon” (Jap), Germany, 1996.
1705	Obtained from IBF (202), Gomel, Belarus, 2000.
1707	Obtained from IBF, Gomel, Belarus, 2000.
1790	Isolated from a carpophore, Ukraine, Zakarpattya Region, 2002.
1794	Isolated from a carpophore, Ukraine, Zakarpattya Region, 2002.

- 1798 Obtained from Uzhgorod National University (K.g), Uzhgorod, Ukraine, 2002.
- 1799 Obtained from Uzhgorod National University (K.g.B.), Uzhgorod, Ukraine, 2002.
- 1800 Obtained from Uzhgorod National University (K.g 501), Uzhgorod, Ukraine, 2002.
- 1871 Obtained from HAI (527), Haifa, Israel, 2005.
- 1990 Isolated from a cultivated fruit body, Japan, 2009.
- 2018 Isolated from a cultivated fruit body, USA, 2010.
- 2046 Isolated from a carpophore, Ukraine, Kyiv Region, 2010.
- 2164 Obtained from TSAU (Aurora), Melitopol, Ukraine, 2012.
- 2222 Obtained from TSAU (828), Melitopol, Ukraine, 2012.
- 2223 Obtained from TSAU (905), Melitopol, Ukraine, 2012.
- 2224 Obtained from TSAU (922), Melitopol, Ukraine, 2012.

Gymnopus androsaceus
(L.) Della Maggiora &
Trassinelli (= *Marasmius*
androsaceus (L.) Fr.)

Mushroom with Medicinal properties

- 136 Obtained from BIN (0424), St.-Petersburg, Russia, 1979.
 Isolated from spores,
 Russia, Petrozavodsk, environs, 1977.

***Gyromitra esculenta* (Pers.)**
Fr.

Poisonous Mushroom

- 2384 Isolated from spores,
 Ukraine, Kyiv Region, Brovary, 2014.

***Gyromitra infula* (Schaeff.)**
Quél.

Poisonous Mushroom

- 1996 Obtained from MSU, Moscow, Russia, 2009.
 Isolated from a carpophore,
 Russia, Moscow Region, Zagorsk.

<i>Gyromitra slonevskii</i> V.P. Heluta	Edibility and Medicinal properties not known. Rare Mushroom Included in the Red Data Book of Ukraine
1932	Isolated from a carpophore, Ukraine, Kyiv Region, Lesniki, 2009.
<i>Hericum abietis</i> (Weir ex Hubert) K.A. Harrison (=<i>Hydnum abietis</i> Weir ex Hubert)	Edible Mushroom with Medicinal properties. Rare Mushroom of Ukraine
2376	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Nadvirna, Gorgany Nature Reserve, on <i>Abies</i> sp., 2014.
<i>Hericum alpestre</i> Pers. (=<i>Hericum abietis</i> f. <i>alpestre</i> (Pers.) D. Hall & D.E. Stuntz)	Edible Mushroom with Medicinal properties. Rare Mushroom of Ukraine
2407	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Kosiv, Hutsulshchyna National Nature Park, Rocky Ridge, on <i>Abies</i> sp., 2015.
<i>Hericum cirrhatum</i> (Pers.) Nikol. (= <i>Creolophus cirrhatum</i> (Pers.) P. Karst.)	Edible Mushroom with Medicinal properties. Rare Mushroom of Ukraine
339	Isolated from a carpophore, Ukraine, Znamenka, on <i>Quercus</i> sp., 1988.
1609	Isolated from a carpophore, Ukraine, Kyiv, on <i>Populus</i> sp., 1998.
2393	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Vorokhta, Carpathian National Nature Park, on <i>Fagus sylvatica</i> , 2015.
<i>Hericum clathroides</i> (Pall.) Pers. (= <i>Hydnum clathroides</i> Pall)	Edible Mushroom with Medicinal properties
977	Obtained from CCBAS (550), Prague, Czech Republic, 1997. Isolated from a carpophore, Czech Republic, Moravia, on <i>Fagus sylvatica</i> , 1981.

***Hericium coralloides* (Scop.) Edible Mushroom with Medicinal properties.**
Pers. (= *Hydnum coralloides* Rare Mushroom Included in the Red Data Book of
 Scop., *Hydnum ramosum* **Ukraine**
 Bull)

1876 Isolated from a carpophore, Ukraine, 2008.

2332 Isolated from a carpophore,
 Ukraine, Ivano-Frankivsk Region, Kosiv,
 Hutsulshchyna National Nature Park,
 Rocky Ridge, on *Fagus* sp. 2013.

2333 Isolated from a carpophore,
 Ukraine, Ivano-Frankivsk Region, Sheshory,
 Hutsulshchyna National Nature Park,
 Cross Stone, 2013.

Hericium erinaceus
(Bull.) Pers. (= *Hericium*
caput-medusae (Bull.) Pers.) **Cultivated Edible Mushroom with Medicinal**
properties. Rare Mushroom of Ukraine

963 Obtained from Company “Weser-Champignon”
 (He-13), Germany, 1996.
 Received from Company “Hocuto Corporation”
 (MH 17509), Nagano, Japan.

964 Obtained from Company “Weser-Champignon”
 (He-14), Germany, 1996.
 Received from Company “Hocuto Corporation”
 (MH 17510), Nagano, Japan.

965 Obtained from Company “Weser-Champignon”
 (He-7), Germany, 1996.
 Received from CBS (302.89), Netherlands.
 Originally collected Taiwan, 1989.

966 Obtained from Company “Weser-Champignon”
 (He-9), Germany, 1996.
 Received from Company “Hocuto Corporation”
 (MH 17503), Nagano, Japan.

967 Obtained from Company “Weser-Champignon”
 (He-12), Germany, 1996.
 Received from Company “Hocuto Corporation”
 (MH 17507), Nagano, Japan.

- 968 Obtained from Company “Weser-Champignon”
(He-8), Germany, 1996.
Received from Company “Hocuto Corporation”
(MH 17502), Nagano, Japan.
- 969 Obtained from Company “Weser-Champignon”
(He-10), Germany, 1996.
Received from Company “Hocuto Corporation”
(MH 17504), Nagano, Japan.
- 970 Obtained from Company “Weser-Champignon”
(He-5), Germany, 1996.
Received from CBS (204.76), Netherlands.
Originally collected USA, 1976.
- 971 Obtained from Company “Weser-Champignon”
(He-11), Germany, 1996.
Received from Company “Hocuto Corporation”
(MH 17505), Nagano, Japan.
- 986 Obtained from Company “Weser-Champignon”
(He-15), Germany, 1996.
Received from Company “Hocuto Corporation”
(MH 17511), Nagano, Japan.
- 991 Obtained from Company “Weser-Champignon”
(He-1), Germany, 1997.
Received from Company “Mycelia” (M 9514),
Gent, Belgium
- 992 Obtained from Company “Weser-Champignon”
(He-2), Germany, 1997.
Received from V.f.P. (280), Krefeld, Germany.
- 993 Obtained from Company “Weser-Champignon”
(He-4), Germany, 1997.
Received from CBS (260.74), Netherlands.
Originally collected Groesbeeksebos near
Nijmegen, Netherlands on the *Fagus sylvatica*.
- 1606 Obtained from Chinese University of Hong Kong
(M-9), Hong Kong, China, 1998.
Isolated from a carpophore, China, 1995.
- 1706 Obtained from IFB (203), Gomel, Belarus, 2000.

- 1866 Obtained from HAI (310), Haifa, Israel, 2005.
 2016 Isolated from a cultivated fruit body,
 USA, San Antonio, 2010.
 2239 Obtained from TSAU (442),
 Melitopol, Ukraine, 2013.
 Isolated from a carpophore, Nevada, USA.

Heterobasidion annosum
 (Fr.) Bref. (= *Boletus*
annosus (Fr.) Spreng.;
Fomes annosus (Fr.) Cooke;
Fomitopsis annosa (Fr.) P.
 Karst.)

Mushroom with Medicinal properties

361

Obtained from BIN (0112),
 St.-Petersburg, Russia, 1987.
 Isolated from a carpophore,
 Belarus, Belovezskaya Puscha, 1971.

Hohenbuehelia myxotricha
(Lév.) Singer (= *Agaricus*
myxotrichus Lév., =
Pleurotus myxotrichus (Lév.)
 Gillet)

Edibility and Medicinal properties not known

1599

Isolated from a carpophore, Ukraine, Kyiv, 1997..

Hygrophorus hypothejus
 (Fr.) Fr. (= *Agaricus*
hypothejus Fr.)

Edible Mushroom

139

Obtained from BIN (0393 str.1),
 St.-Petersburg, Russia, 1980.
 Isolated from a carpophore,
 Russia, Karelsky Isthmus, 1963

Hymenopellis radicata
(Relhan) R.H. Petersen
 (= *Oudemansiella radicata*
 (Relhan) Singer)

Edible Mushroom with Medicinal properties

80

Obtained from FIE (114a),
 Eberswalde, Germany, 1966.

- 222 Isolated from spores, Georgia,
Lagodek Reserve, Beech forest, on wood, 1983.
- 227 Obtained from CCBAS (668),
Prague, Czech Republic, 1984.
Isolated from spores,
Czech Republic, Bohemia, 1984.
- 259 Isolated from spores, Ukraine,
Zakarpattya Region, Perezhin District, 1988.
- Hypholoma fasciculare***
(Huds.) P. Kumm. (= *Naematoloma fasciculare*
(Huds.) P. Karst.) **Poisonous Mushroom with Medicinal properties**
- 56 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1970
- Hypholoma lateritium*** (Schaeff.) P.
Kumm. (= *Hypholoma sublateritium* (Fr.) Quél.) **Mushroom with Medicinal properties**
- 79 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 2414 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.
- Hypsizygus marmoreus***
(Peck) H.E. Bigelow (= *Agaricus marmoreus* Peck;
Clitocybe marmorea (Peck)
Sacc.) **Cultivated Edible Mushroom with Medicinal properties**
- 1610 Obtained from Company “Weser-Champignon”,
Germany, 1998.
Received from Company “Hocuto Corporation”
(MH 02512), Nagano, Japan.
- 1611 Obtained from Company “Weser-Champignon”,
Germany, 1998.
Received from Company “Hocuto Corporation”
(MH 02511), Nagano, Japan.

- 1612 Obtained from Company “Weser-Champignon”, Germany, 1998.
Received from Company Hocuto Corporation (MH 02510), Nagano, Japan.
- 1867 Obtained from HAI (129), Haifa, Israel, 2005.
- 1868 Obtained from HAI (129/1), Haifa, Israel, 2005.
- 1869 Obtained from HAI (604), Haifa, Israel, 2005.
- 1870 Obtained from HAI (830), Haifa, Israel, 2005.
- 1979 Isolated from a cultivated fruit body, Japan, 2009.
- 2006 Isolated from a cultivated fruit body, Japan, 2009.
- 2270 Isolated from a cultivated fruit body, China, 2012.
- 2273 Isolated from a cultivated fruit body, China, 2012.
- 2294 Obtained from TSAU (white), Melitopol, Ukraine, 2012.
- 2300 Obtained from TSAU (dark), Melitopol, Ukraine, 2012.
- 2377 Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Nadvirna, Gorgany Nature Reserve, 2014.
- Hypsizygus tessulatus* (Bull.) Singer (= *Agaricus tessulatus* Bull)** **Cultivated Edible Mushroom with Medicinal properties**
- 1656 Obtained from Company “Weser-Champignon”, Germany, 1999. Isolated from a carpophore, USA.
- 1975 Isolated from a cultivated fruit body, Japan, 2009.
- Hypsizygus ulmarius* (Bull.) Redhead (= *Lyophyllum ulmarium* (Bull.) Kühner; *Pleurotus ulmarius* (Bull.) P. Kumm)** **Edible Mushroom with Medicinal properties**
- 67 Isolated from a carpophore, Ukraine, Kyiv, environs, 1968.
- 113 Obtained from BIN, St.-Petersburg, Russia, 1979. Isolated from a carpophore, Russia, St.-Petersburg, Botanical garden, 1970.

- 1939 Isolated from a carpophore,
Ukraine, Kyiv Region, Lesniki, 2008.
- 2293 Obtained from TSAU (503),
Melitopol, Ukraine, 2013.
- 2296 Obtained from TSAU (655),
Melitopol, Ukraine, 2013.
- Inocutis tamaricis* (Pat.)
Fiasson & Niemelä
(=*Inonotus tamaricis* (Pat.)
Bond.&Sing.)** **Not Edible Mushroom**
- 2358 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Irshava District,
Kamyanka, Zacharovanyi Krai National Nature
Park, 2014.
- Inonotus obliquus* (Fr.) Pilát** **Mushroom with Medicinal properties**
- 1877 Obtained from InMi NASB,
Minsk, Byelorussia, 1998.
- 2240 Obtained from TSAU (1),
Melitopol, Ukraine, 2012.
- 2241 Obtained from TSAU (FB3),
Melitopol, Ukraine, 2012.
- 2242 Obtained from TSAU (FB5),
Melitopol, Ukraine, 2012.
- 2304 Obtained from TSAU (AM),
Melitopol, Ukraine, 2012.
- 2395 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Tatariv,
Carpathian National Nature Park, Ridge Zhenets,
on *Betula pendula*, 2015.
- Inonotus rheades* (Pers.)
Bondartsev & Singer)** **Not Edible Mushroom**
- 1673 Obtained from HAI (649), Haifa, Israel, 2000.

<i>Irpex lacteus</i> (Fr.) Fr (= <i>Hydnum lacteum</i> (Fr.) Fr.)	Mushroom with Medicinal properties
354	Obtained from BIN (0187), St.-Petersburg, Russia, 1987. Isolated from a carpophore, Russia, Sochi, on <i>Cerasus avium</i> , 1962.
1080	Obtained from DNU (D-1), Donetsk, Ukraine, 2000. Isolated from a carpophore, Ukraine, 1996.
1081	Obtained from DNU (D-9), Donetsk, Ukraine, 2000. Isolated from a carpophore, Ukraine, Donetsk, environs, 1996.
1082	Obtained from DNU (BN-3), Donetsk, Ukraine, 2000. Isolated from a carpophore, Ukraine, Donetsk, environs, 1996.
1574	Isolated from a carpophore, Ukraine, Chernigiv Region, Jaroslavka, 1997.
1630	Obtained from DNU (D-4), Donetsk, Ukraine, 1999.
1631	Obtained from DNU (C-11), Donetsk, Ukraine, 1999.
1632	Obtained from DNU (C-10), Donetsk, Ukraine, 1999.
2130	Obtained from DNU (B-059), Donetsk, Ukraine, 2011. Isolated from a carpophore, Ukraine, Donetsk, Botanical garden, 1991.
2421	Obtained from DNU (I.I.-11-11), Donetsk, Ukraine, 2016. Isolated from a carpophore, Ukraine, Dzerzhinsk, Donetsk Region, on <i>Prunus armeniaca</i> , 2011.
2422	Obtained from DNU (I.I.-12-11), Donetsk, Ukraine, 2016. Isolated from a carpophore, Ukraine, Dzerzhinsk, Donetsk Region, on <i>Prunus domestica</i> , 2011.

- 2423 Obtained from DNU (Ч-13),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Kirovski District, on *Prunus avium*, 2013.
- 2424 Obtained from DNU (A-13),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Kirovski District, on *Prunus armeniaca*, 2013.
- 2425 Obtained from DNU (C-13),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Kirovski District, on *Prunus domestica*, 2013.
- 2426 Obtained from DNU (A-1-14),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Oktyabrski, on *Prunus armeniaca*, 2014.
- 2427 Obtained from DNU (A-2-14),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Oktyabrski, on *Prunus armeniaca*, 2014.
- 2428 Obtained from DNU (A-1-15),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Donskoj District, on *Prunus armeniaca*, 2015.
- 2432 Obtained from DNU (C-06),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Staromychajlovka,
on dry branch of *Prunus domestica*, 2006.
- 2433 Obtained from DNU (CM-1BΦ),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Staromychajlovka,
on dry branch of *Prunus armeniaca*, 2012.
- 2435 Obtained from DNU (P-04),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Sorbus aucuparia*, 2004.

- 2436 Obtained from DNU (ДЧС-11.12),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Staromychajlovka,
on dry branch of *Prunus avium*, 2012.
- 2437 Obtained from DNU (АН-7),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Sorbus aucuparia*, 2013.

***Kuehneromyces mutabilis* (Schaeff.) Singer & A.H. Sm. (= *Pholiota mutabilis* (Schaeff.) P. Kumm.)** **Cultivated Edible Mushroom with Medicinal properties**

- 51 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1990.
- 58 Obtained from FIE (49WT),
Eberswalde, Germany, 1966.
- 122 Obtained from Institute of Forestry, Petrozavodsk
Russia, 1978.
Isolated from a carpophore,
Russia, Petrozavodsk, environs, 1977.
- 241 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Kosovo, 1987.
- 2003 Obtained from MSU (3926),
Moscow, Russia, 2009.
Isolated from a carpophore,
Russia, Moscow Region, 2007.
- 2298 Obtained from TSAU (AM-1),
Melitopol, Ukraine, 2012.
- 5316 Obtained from BIN (0563),
St.-Petersburg, Russia, 1985.
Isolated from a carpophore,
Russia, Leningrad Region, 1979.

***Laetiporus sulphureus* (Bull.) Edible Mushroom with Medicinal properties
Murrill**

- 306 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1969.
- 307 Isolated from a carpophore,
Ukraine, Ternopil Region, on *Fagus* sp., 1976.
- 308 Isolated from a carpophore,
Ukraine, Kyiv, on *Acer* sp., 1971.
- 352 Obtained from BIN (0191), St.-Petersburg,
Russia, 1987.
Isolated from a carpophore,
Belarus, Minsk Region, on *Fraxinus* sp., 1971.
- 1518 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1997.
- 1625 Isolated from a carpophore,
Ukraine, Kyiv, environs, on *Quercus* sp., 1998.
- 1692 Obtained from IFB (138), Gomel, Belarus, 2000.
- 1771 Isolated from a carpophore, Ukraine, Kyiv,
KPI park, on the stamp of *Populus* sp., 2001.
- 1772 Isolated from a carpophore,
Ukraine, Kyiv, KPI park, on *Populus* sp., 2001.
- 1773 Isolated from a carpophore,
Ukraine, Kyiv, Nivki, on *Prunus* sp., 2001.
- 1774 Isolated from a carpophore, Ukraine, Kyiv, 2001.
- 1775 Isolated from a carpophore, Ukraine, Kyiv,
Brovary, on the stamp of *Populus alba*, 2001.
- 1776 Isolated from a carpophore,
Ukraine, Kyiv, KPI park,
on the stamp of *Aesculus hippocastanum*, 2001.
- 1811 Isolated from a carpophore,
Ukraine, Kyiv, KPI park, 2002.
- 1812 Isolated from a carpophore, Ukraine, Kyiv,
Hydropark, on the stamp of *Populus* sp., 2002.
- 1813 Isolated from a carpophore,
Ukraine, Kyiv, KPI park, on *Robinia alba*, 2002.

- 1814 Isolated from a carpophore,
Ukraine, Kyiv, KPI park, on the stamp
of *Aesculus hippocastanum*, 2002.
- 1815 Isolated from a carpophore, Ukraine,
Zhytomyr Region, Olevsk, on *Cerosus* sp., 2002.
- 1816 Isolated from a carpophore,
Ukraine, Zhytomyr Region, Olevsk,
on *Aesculus hippocastanum*, 2002.
- 1817 Isolated from a carpophore,
Ukraine, Zhytomyr Region, Olevsk,
on *Quercus* sp., 2002
- 1818 Isolated from a carpophore,
Ukraine, Zhytomyr Region, Olevsk,
on *Quercus* sp., 2002.
- 1864 Obtained from HAI (1033), Haifa, Israel, 2005.
- 1941 Isolated from a carpophore,
Ukraine, Kyiv, Zukov Island, 2007.
- 1968 Isolated from a carpophore,
Ukraine, Kyiv, park, 2009.
- 1971 Isolated from a carpophore,
Ukraine, Zhytomyr Region, Kornin, 2009.
- 1989 Isolated from a carpophore,
Ukraine, Kyiv, Nivki park, 2009.
- 1995 Isolated from a carpophore,
Ukraine, Kyiv, Nivki park, on *Quercus* sp., 2009.
- 2042 Isolated from a carpophore,
Ukraine, Kyiv, Nivki park, 2010.
- 2155 Isolated from a carpophore,
Ukraine, Kyiv, park, 2011.
- 2254 Isolated from a carpophore, Ukraine,
Kyiv, Goloseevo park, on the stamp, 2012.
- 2257 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2012.
- 2277 Isolated from a carpophore, Ukraine,
Kyiv, park, on *Robinia pseudoacacia* 2012.

- 2329 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2014.
- 2365 Isolated from a carpophore,
Ukraine, Kyiv, park, 2014.
- Laetisaria fuciformis* (Berk.) Burds. Edibility and Medicinal properties not known**
- 2213 Obtained from FCKU (016), Kyiv, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Poltava, 2009.
- Lentinula edodes* (Berk.) Pegler (= *Lentinus edodes* (Berk.) Singer) Cultivated Edible Mushroom with Medicinal properties**
- 55 Obtained from VKM (F-1999),
Moscow, Russia, 1979.
Received from MMRI (121), Japan.
- 57 Obtained from VKM (F-2001),
Moscow, Russia, 1979.
Received from MMRI (W-4), Japan.
- 65 Obtained from BIN (Sochi-454),
St.-Petersburg, Russia, 1976.
- 503 Obtained from Horst, Netherlands (25.0-1), 1992.
- 504 Obtained from Horst, Netherlands, (25.0-2), 1992.
- 505 Obtained from Institute of Plant, (B-4),
Pyongyang, KPDR, 1992.
- 506 Obtained from Academy of Agriculture
(Somycel-600), Poznan, Poland, 1993.
- 507 Obtained from Academy of Agriculture
(Somycel-4055), Poznan, Poland, 1993.
- 508 Obtained from Academy of Agriculture
(37×37), Poznan, Poland, 1993.
- 509 Obtained from Company “Pilzbrut Dieskau”
(L-12), Germany, 1995.

- 511 Obtained from Northwest Mycological
Consultants Inc. (CS-53), Oregon, USA, 1994.
- 512 Obtained from Northwest Mycological
Consultants Inc. (CS-158), Oregon, USA, 1994.
- 513 Obtained from Company “Pilzbrut Dieskau”
(L-20), Germany, 1995.
- 514 Obtained from IFB (06), Gomel, Belarus, 1998.
Received from BIN (0404) St.-Petersburg, Russia.
- 515 Obtained from IFB (107), Gomel, Belarus, 1997.
- 516 Obtained from the Chinese University of Hong
Kong, (L-54), Shatin, Hong Kong, 1995.
- 518 Obtained from IFB (13-14),
Gomel, Belarus, 1995.
- 519 Obtained from IFB (193), Gomel, Belarus, 1995.
- 520 Obtained from IFB (D), Gomel, Belarus, 1995.
- 521 Obtained from IMB (013), Texas, USA, 1998.
- 522 Obtained from IMB (050), Texas, USA, 1998.
- 523 Obtained from Northwest Mycological Consultants
Inc., (CS-41), Oregon, USA, 1994.
- 711 Obtained from CCBAS (Japan 1),
Prague, Czech Republic, 1984.
- 712 Obtained from CCBAS (Japan 2),
Prague, Czech Republic, 1984.
- 713 Obtained from CCBAS (Weiden),
Prague, Czech Republic, 1984.
- 714 Obtained from CCBAS (Japan 4),
Prague, Czech Republic, 1984.
- 717 Obtained from Company “Pilzbrut Dieskau”
(L-11), Germany, 1995.
- 718 Obtained from Company “Pilzbrut Dieskau”
(L-17), Germany, 1995.
- 932 Obtained from IFB (101), Gomel, Belarus, 1993.
- 934 Obtained from IFB (110), Gomel, Belarus, 1995.

- 1500 Obtained from Company “Weser-Champignon” (K-60), Germany, 1997.
- 1501 Obtained from Company “Weser-Champignon” (Hub.), Germany, 1997.
- 1502 Obtained from Company “Weser-Champignon” (4008), Germany, 1997.
- 1534 Obtained from IMB (LE-012), Texas, USA, 1997.
- 1626 Obtained from CCBAS (L-4), Prague, Czech Republic, 1995.
- 1628 Obtained from Company “Weser-Champignon” (L-20), Germany, 1995.
- 1658 Obtained from Mycotec Inc. (106), Oregon, USA, 2000.
- 1659 Obtained from Mycotec Inc. (127), Oregon, USA, 2000.
- 1660 Obtained from Mycotec Inc. (153), Oregon, USA, 2000.
- 1709 Obtained from IFB (194), Gomel, Belarus, 2000.
- 1710 Obtained from IFB (197), Gomel, Belarus, 2000.
- 1711 Obtained from IFB (195), Gomel, Belarus, 2000.
- 1712 Obtained from IFB (198), Gomel, Belarus, 2000.
- 1973 Isolated from a cultivated fruit body, Japan, 2009.
- 1992 Isolated from a cultivated fruit body, Japan, 2009.
- 2014 Isolated from a cultivated fruit body, USA, 2010.
- 2022 Obtained from TSAU, Melitopol, Ukraine, 2010.
- 2023 Obtained from TSAU, Melitopol, Ukraine, 2010.
- 2047 Obtained from HAI (369), Haifa, Israel, 2011.
- 2048 Obtained from HAI (858), Haifa, Israel, 2011.
- 2056 Obtained from DNU (Le-2), Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2059 Obtained from DNU (Le-4), Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.

- 2081 Obtained from DNU (Le-10),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2082 Obtained from DNU (Le-5),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2083 Obtained from DNU (Le-6),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2084 Obtained from DNU (Le-7),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2085 Obtained from DNU (Le-9),
Donetsk, Ukraine, 2011.
Isolated from a carpophore, China, 2009.
- 2133 Obtained from Chong Duk University, (101),
South Korea, 2011.
- 2134 Obtained from Chong Duk University, (502),
South Korea, 2011.
- 2135 Obtained from Chong Duk University, (302),
South Korea, 2011.
- 2180 Isolated from a cultivated fruit body, Japan, 2005.
- 2190 Obtained from MS,
Prague, Czech Republic, 2006.
- 2216 Obtained from HAI (568), Haifa, Israel, 2002.
- 2217 Obtained from HAI (810), Haifa, Israel, 2002.
- 2218 Obtained from HAI (418), Haifa, Israel, 2002.
- 2219 Obtained from HAI (123), Haifa, Israel, 2002.
- 2220 Obtained from HAI (736), Haifa, Israel, 2002.
- 2267 Isolated from a cultivated fruit body,
Kyiv, Ukraine, 2012.

***Lentinus polychrous* Lév.**

Edibility and Medicinal properties not known

- 1924 Obtained from HAI (129), Haifa, Israel, 2008.

***Lentinus sajor-caju* (Fr.) Fr. Edible Mushroom with Medicinal properties**

- 1014 Obtained from MS,
Prague, Czech Republic, 1993.
- 1661 Obtained from Mycotec Inc. (203),
Oregon, USA, 2000.
- 2158 Obtained from TSAU, Melitopol, Ukraine, 2011.

***Lentinus tigrinus* (Bull.) Fr. Edible Mushroom with Medicinal properties**

- 249 Obtained from CCBAS (122),
Prague, Czech Republic, 1987.
- 1988 Isolated from a carpophore,
Russia, Rostov Region, 2006.
- 2478 Isolated from a carpophore,
Ukraine, Kyiv, environs, 2016.

***Lentinus tuber-regium* (Fr.) Cultivated Edible Mushroom with Medicinal
Fr. (=Pleurotus tuber-regium properties
(Fr.) Singer)**

- 2446 Isolated from a cultivated fruit body, USA, 2002.
- 2473 Obtained from TSAU (PTR),
Melitopol, Ukraine, 2016.

***Lenzites betulina* (L.) Fr. Mushroom with Medicinal properties**

- 1001 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1965.
- 1602 Isolated from a carpophore,
Ukraine, Czernigiv Region, Jaroslavka, 1997.
- 2266 Isolated from a carpophore,
Russia, Moscow Region, Zvenigorod,
Biological Station, 2012.

***Lepiota cristata* (Bolton) P. Poisonous Mushroom
Kumm.**

- 2062 Obtained from DNU (1), Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Donetsk, 2010.

- 2086 Obtained from DNU (2), Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Donetsk, 2010.
- 2087 Obtained from DNU (3), Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Donetsk, 2010.
- 2088 Obtained from DNU (4), Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Donetsk, 2010.

***Lepista nuda* (Bull.) Cooke Cultivated Edible Mushroom with Medicinal properties**

- 61 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 62 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 232 Obtained from MS,
Prague, Czech Republic, 1985.
Isolated from a carpophore,
Czech Republic, near Zachove, 1978.
- 1667 Isolated from a carpophore,
Ukraine, Mykolaiv, environs, 1997.
- 1704 Obtained from IFB (191), Gomel, Belarus, 2000.
- 1729 Obtained from HAI (274), Haifa, Israel, 2000
- 2409 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.
- 2410 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.
- 2411 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.

<i>Leucoagaricus barssii</i> (Zeller) Vellinga (= <i>Leucoagaricus macrorhizus</i> Locq ex Singer	Edibility and Medicinal properties not known Rare Mushroom Included in the Red Data Book of Ukraine
2214	Obtained from FCKU (024), Kyiv, Ukraine, 2016. Isolated from a carpophore, Ukraine, Cherkasy Region, 2008.
<i>Leucoagaricus carneifolius</i> (Gillet) Wasser	Edible Mushroom
1803	Obtained from HAI (125), Haifa, Israel, 2002. Isolated from a carpophore, Ukraine, Kyiv, Shevchenko Park, 1995.
<i>Leucoagaricus leucothites</i> (Vittad.) Wasser	Edible Mushroom
1617	Obtained from IMB (LLct 005), Texas, USA, 1998.
1618	Obtained from IMB (LLct 009), Texas, USA, 1998.
1780	Obtained from HAI, Haifa, Israel, 2002. Isolated from a carpophore, Israel, Mt Carmel National Park, 2001.
1821	Obtained from HAI (462), Haifa, Israel, 2003. Isolated from a carpophore, Israel, Haifa, University Park, 1998.
1822	Obtained from HAI, Haifa, Israel, 2003. Isolated from a carpophore, Israel, Mt Carmel National Park, University of Haifa, 2001.
1823	Obtained from HAI (131), Haifa, Israel, 2003. Isolated from a carpophore, Israel, Mt Carmel National Park, University of Haifa, 1995.
2212	Obtained from FCKU (023), Kyiv, Ukraine, 2016. Isolated from a carpophore, Ukraine, Chernigiv Region, 2014.

***Leucocoprinus birnbaumii*
(Corda) Singer**

Edibility and Medicinal properties not known

- 1533 Obtained from IMB (131), Texas, USA, 1997.
1619 Obtained from IMB (LBR N 001), Texas, USA,
1998.
1808 Obtained from HAI (411), Haifa, Israel, 2002.
Isolated from a carpophore,
USA, San-Antonio, Texas Research Park, 1987.

***Lycoperdon dermoxanthum*
Vittad.**

Edible Mushroom

- 2402 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.

***Lycoperdon perlatum* Pers.**

Edible Mushroom with Medicinal properties

- 403 Obtained from BIN (0607),
St.-Petersburg, Russia, 1979.
Isolated from a carpophore,
Russia, Leningrad Region, 1973.
404 Obtained from BIN (0606),
St.-Petersburg, Russia, 1979.
Isolated from a carpophore,
Russia, Leningrad Region, 1971.
406 Obtained from BIN (0806),
St.-Petersburg, Russia, 1979.
Isolated from a carpophore,
Estonia, Tartu Region, 1973.
412 Obtained from CCBAS,
Prague, Czech Republic, 1970.
Isolated from a carpophore,
Czech Republic, Voznice near Dobrzish, 1963.
413 Isolated from a carpophore,
Ukraine, Kyiv Region, Klavdievo, environs, 1967.

- 414 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 416 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 423 Isolated from a carpophore,
Ukraine, Lviv Region, Smoze, 1988.
- 1720 Obtained from BIN (0609),
St.-Petersburg, Russia, 2000.
Isolated from a carpophore,
Russia, Leningrad Region, 1966.

***Lycoperdon pyriforme*
Schaeff.**

Edible Mushroom with Medicinal properties

- 415 Obtained from Friedrich-Schiller-Universitat
(118a FIE), Jena, Germany 1966.
- 1718 Obtained from BIN (0612),
St.-Petersburg, Russia, 2000.
- 1719 Obtained from BIN (0612),
St.-Petersburg, Russia, 2000.
Isolated from a carpophore,
Russia, Leningrad Region, 1966.
- 1985 Isolated from a carpophore,
Ukraine, Kyiv, park, 2009.

***Lycoperdon utriforme* Bull.**

Edible Mushroom with Medicinal properties

- 2359 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Zacharovanyi Krai
National Nature Park, 2014.

***Lyophyllum decastes* (Fr.)
Singer (=Lyophyllum
fumosum (Pers.)
P.D. Orton)**

Edibility and Medicinal properties not known

- 2378 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region,
Gorgany Nature Reserve, 2014.

***Lyophyllum shimeji*
(Kawam.) Hongo**

Cultivated Edible Mushroom with Medicinal properties

2247

Isolated from a cultivated fruit body, China, 2012.

2297

Obtained from TSAU (992),
Melitopol, Ukraine, 2013.

***Macrolepiota excoriata*
(Schaeff.) Wasser**

Edible mushroom

154

Isolated from a carpophore,
Ukraine, Askania Nova Reserve, 1989.

930

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1995.

1785

Obtained from HAI (N), Haifa, Israel, 2002.
Isolated from a carpophore,
Israel, Thal-al-Gaaza, 2001.

***Macrolepiota rubescens*
(L.M. Dufour) Pázmány**

Edibility and Medicinal properties not known

1786

Obtained from HAI, Haifa, Israel, 2002.
Isolated from a carpophore,
Israel, Thal-al-Gaaza, 2001.

***Macrolepiota mastoidea*
(Fr.) Singer**

Edible Mushroom

1778

Obtained from HAI (149a), Haifa, Israel, 2002.
Isolated from a carpophore,
Israel, Golden Heights, Masaada, 2001.

2403

Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.

***Macrolepiota procera*
(Scop.) Singer**

Edible Mushroom with Medicinal properties

63

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1977.

68

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.

- 70 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1968.
- 71 Obtained from CCBAS (409),
Prague, Czech Republic, 1960.
Isolated from a carpophore, Czech Republic,
Bohemia, Tachov, environs, 1960.
- 73 Obtained from CCBAS (str.V),
Prague, Czech Republic, 1967.
Isolated from a carpophore,
Czech Republic, Bohemia, Blanc hill, 1964.
- 75 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1977.
- 250 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Pereczin, 1988.
- 985 Isolated from a carpophore,
Ukraine, Kyiv, environs, 1996.
- 1686 Isolated from a carpophore,
Ukraine, Kyiv, Koncha Zaspas, 2000.
- 1784 Obtained from HAI, Haifa, Israel, 2002.
Isolated from a carpophore, Israel, Dalton, Upper
Galelee, 2001.
- 2002 Obtained from MSU (3930),
Moscow, Russia, 2009.
Isolated from a carpophore, Russia, Moscow
Region, 2006.
- 2357 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Zacharovanyi Krai
National Nature Park, 2014.
- 2385 Isolated from a carpophore, Ukraine,
Kyiv, environs, Kyiv, Koncha Zaspas, 2014.
- 2396 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.
- 2401 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.

***Marasmius oreades* (Bolton) Fr. Edible Mushroom with Medicinal properties**

- 76 Isolated from spores,
Ukraine, Kyiv, environs, 1969.
- 1997 Isolated from spores,
Ukraine, Zhytomyr Region, 2009.
- 1999 Isolated from spores, Ukraine, Kyiv, park, 2009.
- 2281 Isolated from spores, Ukraine, Kyiv, 2012.
- 2282 Isolated from spores, Ukraine, Kyiv, 2012.

***Meripilus giganteus* (Pers.) P. Karst. Mushroom with Medicinal properties**

- 2208 Obtained from FCKU (032), Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, 2014.
- 2380 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region,
Gorgany Nature Reserve, 2014.
- 2404 Isolated from a carpophore,
Ukraine, Kyiv, park, 2015.

***Merulius tremellosus* Schrad. Mushroom with Medicinal properties**

- 1557 Isolated from a carpophore,
Ukraine, Kyiv Region, Teteriv, on *Quercus* sp., 1997.

***Mitrophora semilibera* DC. Edibility and Medicinal properties not known
Lév. (= *Morchella semilibera*
DC.)**

- 1740 Obtained from Friedrich-Schiller University
(95/7), Jena, Germany, 2000.
Isolated from spores, Germany, 1990.
- 1846 Isolated from spores, Ukraine, Kyiv, park, 2006.
- 1984 Isolated from spores, Ukraine, Kyiv, park, 2008.

- Morchella angusticeps* Peck** **Edible Mushroom with Medicinal properties**
- 1833 Obtained from Institute of Botany,
Department of Terrestrial Ecology, University
(MC1SSI4), Leipzig, Germany, 2004.
Isolated from spores,
India, Solan Himachal Pradesh, 2002.
- Morchella conica* Pers.** **Edible Mushroom with Medicinal properties**
- 1737 Obtained from Friedrich-Schiller University
(889), Jena, Germany, 2000.
Isolated from spores, Germany, Hannover, 1991.
- 1738 Obtained from Friedrich-Schiller University
(Mo Is 5), Jena, Germany, 2000.
Isolated from spores, Israel, 1993.
- 1852 Obtained from Institute of Botany,
(8MCJ), Leipzig, Germany, 2005.
Isolated from spores,
Germany, Jena, Kunatz, 2002.
- 1942 Obtained from HAI (3), Haifa, Israel, 2007.
Isolated from spores Israel, Carmel.
- 1948 Isolated from spores, Ukraine, Kyiv, 2008.
- 1949 Isolated from spores, Ukraine, Kyiv, 2008.
- 1954 Isolated from spores, Ukraine, Kyiv, 2008.
- 1956 Isolated from spores, Ukraine, Kyiv, 2008.
- 1958 Isolated from spores, Ukraine, Kyiv, 2008.
- 1961 Isolated from spores, Ukraine, Kyiv, 2008.
- Morchella crassipes* (Vent.)
Pers.** **Edible Mushroom with Medicinal properties.
Rare Mushroom Included in the Red Data Book of
Ukraine**
- 1834 Obtained from Institute of Botany,
(14J2M), Leipzig, Germany, 2004.
Isolated from spores, Germany, Jena, 2002.
- 1851 Obtained from Institute of Botany,
(10J), Leipzig, Germany, 2005.
Isolated from spores, Germany, Jena, 2002.

- 2209 Obtained from FCKU (028), Kyiv, Ukraine, 2016.
Isolated from spores, Ukraine,
Cherkasy Region, Kaniv Nature Reserve, 2009.
- Morchella elata Fr.*** **Edible Mushroom with Medicinal properties**
- 2210 Obtained from FCKU (029), Kyiv, Ukraine, 2016.
Isolated from spores,
Ukraine, Volyn Region, Lutsk, environs, 2004.
- Morchella esculenta (L.)*** **Edible Mushroom with Medicinal properties**
Pers.
- 1743 Obtained from Friedrich-Schiller University,
Jena, Germany, 2000. Isolated from spores.
- 1744 Obtained from Friedrich-Schiller University
(A0A7), Jena, Germany, 2000.
Isolated from spores.
Originally collected France, 1987.
- 1746 Obtained from Friedrich-Schiller University
(A0B7), Jena, Germany, 2000.
Isolated from spores.
Originally collected France, 1987.
- 1747 Obtained from Friedrich-Schiller University
(A7B7), Jena, Germany, 2000.
Isolated from spores.
Originally collected France, 1987.
- 1748 Obtained from Friedrich-Schiller University
(B0A7), Jena, Germany, 2000.
Isolated from spores.
Originally collected France, 1987.
- 1753 Obtained from Friedrich-Schiller University
(D7), Jena, Germany, 2000.
Isolated from spores.
Originally collected France, 1987.
- 1755 Obtained from Friedrich-Schiller University
(B), Jena, Germany, 2000.
Isolated from spores. Germany, 1990.
- 1805 Obtained from Company «Fungi Perfecti»
(Morel M-18), USA, 2003.

- 1820 Obtained from Company «Fungi Perfecti» (Morel M-28), USA, 2003.
- 1843 Isolated from spores, Ukraine, Kyiv, 2004.
- 1952 Isolated from spores, Ukraine, Kyiv, park, 2008.
- 1953 Isolated from spores, Ukraine, Kyiv, park, 2008.
- 1960 Isolated from spores, Ukraine, Kyiv, park, 2008.

***Morchella spongiola* Boud. Edible Mushroom**

- 1837 Obtained from Friedrich-Schiller University (1J4M), Jena, Germany, 2003.
Isolated from spores, Germany, Jena, 2002.
- 1838 Obtained from Friedrich-Schiller University (1J5M), Jena, Germany, 2003.
Isolated from spores, Germany, Jena, 2002.
- 1850 Obtained from Friedrich-Schiller University (8J), Jena, Germany, 2003.
Isolated from spores, Germany, Jena, 2002.

***Morchella steppicola* Zerova Edible Mushroom.
Rare Mushroom Included in the Red Data Book of Ukraine**

- 1849 Obtained from DNU (8J),
Donetsk, Ukraine, 2005.
- 2215 Obtained from FCKU (031-3), Kyiv, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, 2005.

***Mucidula mucida* (Schrad.) Pat. Edible Mushroom with Medicinal properties**

(= *Oudemansiella mucida*
(Schrad.) Huhn.)

- 223 Isolated from spores,
Georgia, Lagodek Reserve, on beech wood, 1983.
- 226 Obtained from CCBAS (428),
Prague, Czech Republic, 1983.
Isolated from spores, Czech Republic, Bohemia,
Voznice near Dobrzhish, 1963.

- 235 Obtained from CCBAS (651),
Prague, Czech Republic, 1983.
Isolated from spores, Czech Republic, Bohemia,
Shumava Mountains, 1982.
- 254 Isolated from spores, Ukraine,
Zakarpattia Region, Perezhin District, 1988.
- 2355 Isolated from spores,
Ukraine, Zakarpattia Region,
Zacharovanyi Krai National Nature Park, 2014.
- 2381 Isolated from spores,
Ukraine, Ivano-Frankivsk Region, Gorgany
Nature Reserve, 2014.
- 2413 Isolated from spores,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.
- 2415 Isolated from spores,
Ukraine, Ivano-Frankivsk Region, Kosiv,
Hutsulshchyna National Nature Park, 2015.

***Mycetinis alliaceus* (Jacq.)
Earle ex A.W. Wilson &
Desjardin (= *Marasmius
alliaceus* (Jacq.) Fr.)**

Mushroom with Medicinal properties

- 77 Isolated from spores,
Ukraine, Lviv Region, Klimets, 1976.
- 247 Isolated from spores,
Ukraine, Lviv Region, Smoze, 1988.

***Mycetinis scorodonius* (Fr.)
A.W. Wilson & Desjardin
(= *Marasmius scorodonius*
(Fr.) Fr.)**

Mushroom with Medicinal properties

- 78 Isolated from spores,
Ukraine, Kyiv, environs, 1969.
- 116 Obtained from IFB, Gomel, Belarus, 1978.
Isolated from spores,
Russia, Petrozavodsk, environs, 1977.

210 Isolated from spores,
Ukraine, Kyiv, environs, 1982.

343 Isolated from spores,
Ukraine, Kyiv, environs, 1987.

Neolentinus lepideus
(Fr.) Redhead & Ginns
(=*Lentinus lepideus* (Fr.) Fr.)

Edible Mushroom with Medicinal properties

66 Obtained from VKM (F-432),
Moscow, Russia, 1970.

103 Obtained from VKM (F-710),
Moscow, Russia, 1979.

1537 Obtained from HAI (LL008), Haifa,
Israel, 1997.

1538 Obtained from HAI (LL003), Haifa,
Israel, 1997.

1539 Obtained from HAI (LL005), Haifa, Israel, 1997.

1540 Obtained from HAI (LL004), Haifa, Israel, 1997.

1541 Obtained from HAI (LL002), Haifa, Israel, 1997.

2140 Isolated from a carpophore, Ukraine,
Kyiv, Puscha-Voditsa, on the stamp, 2011.

Ophiocordyceps sinensis
**(Berk.) G.H. Sung, J.M.
Sung, Hywel-Jones &
Spatafora (= *Cordyceps*
sinensis (Berk.) Sacc.)**

Mushroom with Medicinal properties

2027 Obtained from TSAU (4),
Melitopol, Ukraine, 2010.

2028 Obtained from TSAU (G2),
Melitopol, Ukraine, 2010.

2139 Obtained from TSAU (CS6 (n)),
Melitopol, Ukraine, 2011.

Ophiocordyceps
***sobolifera* (Hill ex Watson)**
G.H. Sung, J.M. Sung,
Hywel-Jones & Spatafora
(= *Clavaria sobolifera* Hill
ex Watson, = *Cordyceps*
sobolifera (Hill ex Watson)
Berk. & Broome

Mushroom with Medicinal properties

2137

Obtained from TSAU, Ukraine, Melitopol, 2011.

Omphalotus illudens
(Schwein.) Bresinsky &
Besl (= *Omphalotus olearius*
(DC.) Singer)

Poisonous Mushroom with Medicinal properties

937

Obtained from HAI (401), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Quercus calliptratus*, 1995.

938

Obtained from HAI (237), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Olea europea*, 1995.

939

Obtained from HAI (7), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Quercus calliprinos*, 1995.

940

Obtained from HAI (8), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Quercus calliprinos*, 1995.

941

Obtained from HAI (367), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Quercus* sp., 1995.

942

Obtained from HAI (399/9), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Quercus* sp., 1995

943

Obtained from HAI (240/6), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Olea europea*, 1995.

944

Obtained from HAI (383), Haifa, Israel, 1995.
Isolated from a carpophore,
Israel, Haifa, park, on *Olea europea*, 1995.

***Phallus hadriani* Vent.**

Edible Mushroom with Medicinal properties

1717

Obtained from BIN (0042),
St.-Petersburg, Russia, 2000.
Isolated from a carpophore,
Latvia, Yurmala, 1987.

***Phallus impudicus* L.**

Edible Mushroom with Medicinal properties

421

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1969.

422

Isolated from a carpophore, Ukraine,
Ternopil Region, Berezhany, mixed forest, 1976.

982

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1980.

984

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1996.

990

Isolated from a carpophore,
Ukraine, Kyiv, environs, 1996.

1702

Obtained from IFB (188), Gomel, Belarus, 2000.
Isolated from a carpophore,
Belarus, Gomel Region, Korenevka, 1997.

1732

Obtained from HAI (271), Haifa, Israel, 2000.
Isolated from a carpophore,
Israel, Haifa, park, 2000.

1733

Obtained from HAI (233), Haifa, Israel, 2000.
Isolated from a carpophore,
Israel, Haifa, park, 2000.

1967

Isolated from a carpophore,
Ukraine, Khmelnytskyi Region, mixed forest,
2008.

2260

Isolated from a carpophore,
Russia, Moscow Region, Zvenigorod, 2012.

***Phellinus igniarius* (L.)
Quél.**

Mushroom with Medicinal properties

1578

Isolated from a carpophore, Ukraine, Kyiv, 1997.

<i>Phlebia radiata</i> Fr.	Edibility and Medicinal properties not known
1566	Isolated from a carpophore, Ukraine, Kyiv, 1997.
<i>Pholiota adiposa</i> (Batsch.) P. Kumm.	Edible Mushroom with Medicinal properties
22	Isolated from a carpophore, Ukraine, Lviv Region, Smoze, 1988.
85	Obtained from BIN, St.-Petersburg, Russia, 1969.
86	Obtained from BIN, St.-Petersburg, Russia, 1969.
2169	Isolated from a carpophore, Ukraine, Kyiv, on <i>Populus</i> sp., 2011.
<i>Pholiota alnicola</i> (Fr.) Singer	Edibility and Medicinal properties not known
2406	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Halych, Halych National Nature Park, 2015.
<i>Pholiota aurivella</i> (Batsch.) P. Kumm.	Edible Mushroom
84	Obtained from BIN (0437 str.1), St.-Petersburg, Russia, 1969.
146	Obtained from BIN (0438 str.2), St.-Petersburg, Russia, 1979.
214	Isolated from a carpophore, Ukraine, Kyiv Region, Zavorychi, on <i>Juglans regia</i> , 1981.
1527	Isolated from a carpophore, Ukraine, Kyiv, environs, 1997.
2334	Isolated from a carpophore, Ukraine, Kyiv, on <i>Populus</i> sp., 2013.
2371	Isolated from a carpophore, Ukraine, Kyiv, Goloseevo, 2014.
<i>Pholiota lenta</i> (Pers.) Singer	Edible Mushroom with Medicinal properties
2416	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Halych, Halych National Nature Park, 2015.

<i>Pholiota limonella</i> (Peck) Sacc.	Edibility and Medicinal properties not known
2335	Isolated from a carpophore, Ukraine, Kamianets – Podilskiyi, 2013.
<i>Pholiota nameko</i> (T. Itô) S. Ito & S. Imai	Cultivated Edible Mushroom with Medicinal properties
105	Obtained from VKM (F-2000), Moscow, Russia, 1979. Received from Mori Mushroom Research Institute, Japan.
1976	Isolated from a cultivated fruit body, Japan, 2009.
2153	Obtained from TSAU, Melitopol, Ukraine, 2011.
2154	Obtained from TSAU (AM2), Melitopol, Ukraine, 2011.
<i>Pholiota squarrosa</i> (Vahl) P. Kumm.	Edible Mushroom with Medicinal properties
2008	Obtained from MSU (3937), Moscow, Russia, 2009.
2009	Obtained from MSU (3936), Moscow, Russia, 2009.
2010	Obtained from MSU (3935), Moscow, Russia, 2009.
5033	Obtained from BIN (0441), St.-Petersburg, Russia, 1969.
<i>Pleurotus calyptratus</i> (Lindblad Fr.) Sacc.	Cultivated Edible Mushroom with Medicinal properties
189	Obtained from CCBAS (461), Prague, Czech Republic, 1981.
289	Obtained from CCBAS (462), Prague, Czech Republic, 1981.
1890	Obtained from HAI, Haifa, Israel, 2001.
1935	Obtained from HAI, Haifa, Israel, 2002.
2352	Isolated from a carpophore, Ukraine, Kyiv, environs, 2014.

<i>Pleurotus citrinopileatus</i> Singer	Cultivated Edible Mushroom with Medicinal properties
2160	Obtained from TSAU (AM2/1), Melitopol, Ukraine, 2011.
2161	Obtained from TSAU (404), Melitopol, Ukraine, 2011.
<i>Pleurotus columbinus</i> Quél.	Cultivated Edible Mushroom with Medicinal properties
128	Obtained from BIN (0573), St.-Petersburg, Russia, 1980. Received from Institute of Zoology and Botany (77-602), Tartu, Estonia, 1979.
188	Obtained from CCBAS (1), Prague, Czech Republic, 1981. Received from Oxford, England, 1966.
<i>Pleurotus cornucopiae</i> (Paulet) Rolland	Cultivated Edible Mushroom with Medicinal properties
82	Obtained from Institute of Agriculture (2-2-1), Budapest, Hungary, 1978.
88	Obtained from Institute of Forest and Melioration, (444), Sochi, Russia, 1976.
106	Obtained from VKM (F-1979), Moscow, Russia, 1979.
187	Obtained from CCBAS (463), Prague, Czech Republic, 1975.
1708	Obtained from IFB (206), Gomel, Belarus, 2000. Received from Institute of plant (WS 608), Pyongyang, KPDR.
2467	Obtained from CCBAS, Prague, Czech Republic, 1980.
5114	Obtained from CCBAS (465), Prague, Czech Republic, 1978.

<i>Pleurotus cystidiosus</i> O.K. Mill.	Cultivated Edible Mushroom with Medicinal properties
190	Obtained from CCBAS (55), Prague, Czech Republic, 1981. Original collected USA, Luisiana, 1931.
221	Obtained from MS, Prague, Czech Republic, 1983. Received from Taiwan.
1725	Obtained from HAI (95), Haifa, Israel, 2000. Isolated from a carpophore, Israel, Haifa, park, on <i>Schinus terebinthifolius</i> , 2000.
1726	Obtained from HAI (138), Haifa, Israel, 2000. Isolated from a carpophore, Israel, Haifa, park, on <i>Morus alba</i> , 2000.
1728	Obtained from HAI (140), Haifa, Israel, 2000. Isolated from a carpophore, Israel, Haifa, park, on <i>Morus alba</i> , 2000.
2465	Obtained from CCBAS, Prague, Czech Republic, 1980.
<i>Pleurotus djamor</i> (Rumph. ex Fr.) Boedijn	Cultivated Edible Mushroom with Medicinal properties
2159	Obtained from TSAU (AM 1), Melitopol, Ukraine, 2011.
2162	Obtained from TSAU (VDE 1), Melitopol, Ukraine, 2012.
2289	Obtained from TSAU (R-22), Melitopol, Ukraine, 2013.
<i>Pleurotus dryinus</i> (Pers.) P. Kumm.	Cultivated Edible Mushroom with Medicinal properties
197	Isolated from a carpophore, Ukraine, Kyiv, environs, 1970.
1560	Isolated from a carpophore, Ukraine, Kyiv, Podol, 1997.

2468	Obtained from CCBAS, Prague, Czech Republic, 1980.
<i>Pleurotus eryngii</i> (DC.) Quél.	Cultivated Edible Mushroom with Medicinal properties
10	Isolated from a carpophore, Ukraine, Kyiv, environs, 1977.
165	Isolated from a carpophore, Ukraine, Askanija Nova Reserve, 1989.
193	Obtained from CCBAS (25), Prague, Czech Republic, 1981.
1504	Obtained from HAI (202), Haifa, Israel, on <i>Ferula</i> sp., 1997.
1506	Obtained from HAI (203), Haifa, Israel, on <i>Ferula</i> sp., 1997.
1508	Obtained from HAI (3), Haifa, Israel, on <i>Ferula</i> sp., 1996.
1509	Obtained from HAI (4), Haifa, Israel, on <i>Ferula</i> sp., 1996.
1510	Obtained from HAI (5), Haifa, Israel, on <i>Ferula</i> sp., 1996.
1622	Obtained from HAI (15/1), Haifa, Israel, 1998.
1623	Obtained from HAI (25/1), Haifa, Israel, 1998.
1641	Obtained from HAI (4), Haifa, Israel, 1998.
1642	Obtained from HAI (13), Haifa, Israel, 1998.
1643	Obtained from HAI (3), Haifa, Israel, 1998.
1646	Obtained from HAI (2), Haifa, Israel, 1998.
1863	Obtained from HAI (1030), Haifa, Israel, 2005.
1972	Isolated from a cultivated fruit body, Japan, 2009.
1991	Isolated from a cultivated fruit body, Japan, 2009.
2011	Isolated from a cultivated fruit body, Germany, 2010.
2012	Isolated from a cultivated fruit body, Germany, 2010.

- 2015 Isolated from a cultivated fruit body, USA, 2010.
- 2031 Obtained from TSAU (KD2 F11),
Melitopol, Ukraine, 2010.
- 2032 Obtained from TSAU (P4),
Melitopol, Ukraine, 2010.
- 2033 Obtained from TSAU (3AM P4),
Melitopol, Ukraine, 2010.
- 2127 Obtained from DNU (P-er),
Donetsk, Ukraine, 2011.
- 2271 Isolated from a cultivated fruit body, China, 2012.
- 2308 Isolated from a cultivated fruit body,
Belgium, 2013.
- 2351 Isolated from a cultivated fruit body, Korea, 2014.
- 2369 Isolated from a cultivated fruit body,
Germany, 2009.
- 2370 Isolated from a cultivated fruit body,
Germany, 2014.
- 2444 Obtained from MS,
Prague, Czech Republic, 1983.
- 2447 Obtained from Erevanski University,
Yerevan, Armenia, 1984.
- 2448 Isolated from spores,
Ukraine, Zakarpattya Region, 1982.
- 2464 Obtained from MS,
Prague, Czech Republic, 1998.
- 2469 Isolated from a cultivated fruit body,
Thailand, 2011.

***Pleurotus eryngii* var. *ferulae* (Lanzi) Sacc. Cultivated Edible Mushroom with Medicinal properties**

- 2040 Obtained from TSAU (VDE 1),
Melitopol, Ukraine, 2010.

Pleurotus nebrodensis
(Inzenga) Quél.

Cultivated Edible Mushroom with Medicinal properties
Rare Mushroom.

- 1855 Obtained from HAI (1028), Haifa, Israel, 2005.
1827 Obtained from HAI (1020), Haifa, Israel, 2006.
1947 Obtained from HAI (1023), Haifa, Israel, 2006.
2035 Isolated from a carpophore,
Ukraine, Crimea, 2010.

***Pleurotus ostreatus* (Jacq.)**
P. Kumm.

Cultivated Edible Mushroom with Medicinal properties

- 89 Obtained from CCBAS (477, f.florida),
Prague, Czech Republic, 1978.
90 Isolated from a carpophore,
Ukraine, Kyiv, Feofania, deciduous forest, 1969.
94 Obtained from BIN (467),
St.-Petersburg, Russia, 1968.
Isolated from a carpophore,
Russia, St.-Petersburg, environs, 1968.
98 Obtained from MS (1014),
Prague, Czech Republic, 1979.
107 Obtained from VKM (VKMF-1659),
Moscow, Russia, 1979.
108 Obtained from VKM (VKMF-1997),
Moscow, Russia, 1996.
109 Obtained from VKM (VKMF-2008),
Moscow, Russia, 1976.
110 Isolated from a carpophore, Ukraine,
Zakarpattya Region on *Fagus sylvatica*, 1979.
123 Obtained from Institute of forestry,
Petrozavodsk, Russia, 1978.
132 Isolated from a carpophore,
Ukraine, Zakarpattya Region, Pereczin District,
on *Fagus sylvatica*, 1975.

- 133 Obtained from Hungarian Natural History Museum, Budapest, Hungary, 1970.
- 161 Obtained from Institute of Agriculture (7-7-1), Budapest, Hungary, 1978.
- 162 Obtained from Institute of Agriculture (7-2-1), Budapest, Hungary, 1978.
- 163 Obtained from Institute of Forest and Melioration (37), Sochi, Russia, 1980.
- 164 Obtained from Institute of Agriculture (7-1-6), Budapest, Hungary, 1978.
- 171 Isolated from a carpophore, Ukraine, Kyiv Region, Irpin, on *Quercus robur*, 1976.
- 172 Isolated from a carpophore, Ukraine, Kyiv, environs, on *Acer negundo*, 1979.
- 180 Isolated from a carpophore, Ukraine, Kyiv, environs, on *Betula pendula*, 1980.
- 183 Obtained from IFB (44), Gomel, Belarus, 1986.
- 191 Obtained from CCBAS (78, f.florida), Prague, Czech Republic, 1981.
- 192 Obtained from CCBAS (472), Prague, Czech Republic, 1981.
- 202 Obtained from CCBAS (473), Prague, Czech Republic, 1981.
- 236 Obtained from CCBAS (475), Prague, Czech Republic, 1983.
- 237 Obtained from CCBAS (474), Prague, Czech Republic, 1983.
- 239 Obtained from CCBAS (476), Prague, Czech Republic, 1983.
- 295 Isolated from a carpophore, Ukraine, Kyiv, on *Populus alba*, 1979.
- 297 Isolated from a carpophore, Russia, Krasnoyarsk, on *Picea* sp., 1991.
- 299 Obtained from IFB (668), Gomel, Belarus, 1985.

- 300 Obtained from IFB (2525), Gomel, Belarus, 1990.
- 525 Obtained from Institute of Plant (P-1, f.florida),
Pyongyang, KPDR, 1992.
- 527 Obtained from CCBAS (f.florida),
Prague, Czech Republic, 1983.
- 528 Isolated from a carpophore,
Ukraine, Kyiv, environs, on *Populus* sp., 1984.
- 529 Obtained from Institute of Vegetable-Growing,
Kecskemet, Hungary, 1984.
- 530 Obtained from Institute of Vegetable-Growing
(H-7), Kecskemet, Hungary, 1984.
- 531 Isolated from a carpophore,
Hungary, Borota, on *Populus* sp., 1984.
- 532 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 1987.
- 533 Isolated from a carpophore,
Uzbekistan, Tashkent Region, 1990.
- 534 Isolated from a carpophore,
Ukraine, Kyiv, on *Robinia pseudoacacia*, 1991.
- 535 Isolated from a carpophore,
Ukraine, Kyiv, environs, on *Populus alba*, 1991.
- 536 Obtained from Lviv Forest-technical University
(7), Lviv, Ukraine, 1991.
- 538 Obtained from Scientifically Research Institute of
Agriculture (431), Ashgabat, Turkmenistan, 1991.
- 539 Isolated from a carpophore,
Ukraine, Simferopil, environs, 1991.
- 547 Obtained from Academy of Agriculture
(S-5), Poznan, Poland, 1993.
- 548 Isolated from a carpophore,
Ukraine, Donetsk, on *Populus* sp., 1993.
- 549 Isolated from a cultivated fruit body
(Italspawn, P24), 1995.
- 550 Isolated from a cultivated fruit body
(Italspawn, P20), 1995.

- 551 Isolated from a cultivated fruit body
(Sylvan HK-35), 1995.
- 552 Isolated from a carpophore, Russia, Tver, 1996.
- 553 Obtained from Northwest Mycological
Consultants Inc. (CS-27), Oregon, USA, 1994.
- 563 Obtained from IFB (273), Gomel, Belarus, 1978.
- 564 Obtained from CCBAS (Somycel 3004),
Prague, Czech Republic, 1989.
- 565 Isolated from a carpophore, Ukraine, Ternopil
Region, Kremenec, on *Juglus regia*, 1983.
- 566 Obtained from Institute of Agriculture
(Plo-5), Budapest, Hungary, 1978.
- 567 Obtained from Institute of Agriculture
(7-5-5), Budapest, Hungary, 1978.
- 568 Obtained from Institute of Agriculture
(7-7-5), Budapest, Hungary, 1978.
- 569 Obtained from Institute of Botany
(B-9), Ashgabat, Turkmenistan, 1998.
- 570 Obtained from Institute of botany
(B-10), Ashgabat, Turkmenistan, 1998
- 571 Obtained from Institute of botany
(B-19), Ashgabat, Turkmenistan, 1998.
- 575 Isolated from a carpophore, Ukraine,
Zhytomir Region, on *Robinia pseudoacacia*, 1976.
- 576 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 1976.
- 578 Obtained from Institute of Forest and Melioration
(0-1), Sochi, Russia, 1980.
- 579 Obtained from Institute of Forest and
Melioration, (0-3), Sochi, Russia, 1980.
- 580 Isolated from a carpophore,
Ukraine, Kyiv, on *Fagus* sp., 1981.
- 581 Obtained from IFB (31-76),
Gomel, Belarus, 1981.

- 582 Obtained from IFB (37-77),
Gomel, Belarus, 1981.
- 583 Obtained from IFB (38-77),
Gomel, Belarus, 1981
- 584 Isolated from a carpophore,
Ukraine, Lviv Region, on *Fagus* sp., 1981.
- 585 Isolated from a carpophore,
Ukraine, Lviv Region, on *Populus tremula*, 1981.
- 935 Obtained from IFB (99), Gomel, Belarus, 1995.
- 936 Obtained from IFB (100), Gomel, Belarus, 1995.
- 1010 Obtained from Institute of Microbiology
(KW-1), Kishinev, Moldova, 1989.
- 1011 Obtained from Institute of agriculture
(Kodru-62), Kishinev, Moldova, 1989.
- 1012 Obtained from Institute of agriculture
(Kodru-33), Kishinev, Moldova, 1989.
- 1013 Obtained from Institute of Microbiology
(KD-2), Kishinev, Moldova, 1989.
- 1016 Obtained from DNU (D-112),
Donetsk, Ukraine, 1987.
- 1017 Obtained from DNU (D-103),
Donetsk, Ukraine, 1987.
- 1019 Obtained from State Farm “Zarechje”
(334, f.florida), Moscow, Russia, 1989.
- 1535 Isolated from a cultivated fruit body, USA, 1997.
- 1543 Isolated from a cultivated fruit body, USA, 1997.
- 1665 Isolated from a carpophore,
Ukraine, Mykolaiv, environs, 1997.
- 1684 Isolated from a cultivated fruit body, USA, 1997.
- 1685 Isolated from a cultivated fruit body, USA, 1997.
- 1688 Isolated from a carpophore,
Ukraine, Kyiv, on *Quercus robur*, 2000.
- 1865 Isolated from a carpophore,
Ukraine, Carpathian National Park,
on *Fraxinus excelsior*, 2004.

- 1940 Obtained from Institute of Microbiology (CNM NFB-04), Kishinev, Moldova, 2008.
- 2049 Obtained from DNU (P-93), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2009.
- 2053 Obtained from DNU (P-90), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2009.
- 2063 Obtained from DNU (P-2k), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus alba*, 2010.
- 2064 Obtained from DNU (P-91), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2009.
- 2089 Obtained from DNU (D-140), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2001.
- 2090 Obtained from DNU (P-004), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus alba*, 2004.
- 2091 Obtained from DNU (P-008), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus alba*, 2008.
- 2092 Obtained from DNU (P-01), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2001.
- 2093 Obtained from DNU (P-011), Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk, on *Populus bolleana*, 2003.

- 2094 Obtained from DNU (P-035),
Donetsk, Ukraine, 2016,
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 1995.
- 2095 Obtained from DNU (P-038),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 1999.
- 2096 Obtained from DNU (P-039),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 1999.
- 2097 Obtained from DNU (P-081),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, Donetsk Botanical Garden
on *Populus alba*, 1998.
- 2098 Obtained from DNU (P-082),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine, Donetsk,
Donetsk Botanical Garden
on *Populus alba*, 1998.
- 2099 Obtained from DNU (P-083),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, Donetsk Botanical Garden
on *Populus alba*, 1998.
- 2100 Obtained from DNU (P-087),
Donetsk, Ukraine, 2016,
Isolated from a carpophore,
Ukraine, Donetsk, Donetsk Botanical Garden
on *Populus bolleana*, 1998
- 2101 Obtained from DNU (P-088),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, Donetsk Botanical Garden
on *Populus bolleana*, 1998.

- 2102 Obtained from DNU (P-089),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, Donetsk Botanical Garden
on *Populus bolleana*, 1998.
- 2103 Obtained from DNU (P-105),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Slovjansk Forestry,
on *Populus alba*, 2004.
- 2104 Obtained from DNU (P-106),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Slovjansk Forestry,
on *Populus alba*, 2004.
- 2105 Obtained from DNU (P-107),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Slovjansk Forestry,
on *Populus alba*, 2007.
- 2106 Obtained from DNU (P-108),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Slovjansk Forestry,
on *Populus alba*, 2008.
- 2107 Obtained from DNU (P-12),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Svjati Gory National Park, on *Populus alba*, 2002.
- 2108 Obtained from DNU (P-12k),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Svjati Gory National Park, on *Populus alba*, 2002

- 2109 Obtained from DNU (P-175),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region, Slovjansk Forestry,
on *Populus bolleana*, 2005.
- 2110 Obtained from DNU (P-191),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Krasnolimanske Forestry, on *Populus alba*, 2007.
- 2111 Obtained from DNU (P-192),
Donetsk, Ukraine, 2016,
Isolated from a carpophore,
Ukraine, Donetsk Region,
Krasnolimanske Forestry, on *Populus alba*, 2007
- 2112 Obtained from DNU (P-200),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2000.
- 2113 Obtained from DNU (P-202),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2003.
- 2114 Obtained from DNU (P-203),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2003.
- 2115 Obtained from DNU (P-204),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2004.
- 2116 Obtained from DNU (P-206),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 1997.

- 2117 Obtained from DNU (P-208),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2006.
- 2118 Obtained from DNU (P-217),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Svjati Gory National Park, on *Populus alba*, 2007.
- 2119 Obtained from DNU (P-47),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Svjati Gory National Park, on *Populus alba*, 2007.
- 2120 Obtained from DNU (P-6),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2006.
- 2121 Obtained from DNU (P-6v),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2006.
- 2122 Obtained from DNU (P-кЛ),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2007.
- 2123 Obtained from DNU (P-14),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk Region,
Svjati Gory National Park, on *Populus alba*, 2002.
- 2124 Obtained from DNU (P-4),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus alba*, 2010.

- 2125 Obtained from DNU (P-7),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus alba*, 2010.
- 2126 Obtained from DNU (P-94),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, on *Populus bolleana*, 2009.
- 2151 Isolated from a carpophore,
Ukraine, Donetsk, 2003.
- 2169 Isolated from a carpophore,
Ukraine, Lviv, on *Populus alba*, 2009.
- 2181 Isolated from a cultivated fruit body
(Korona 357), 2000.
- 2182 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 2003.
- 2183 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 2003.
- 2184 Isolated from a cultivated fruit body
(Denita), Ukraine, 2001.
- 2185 Isolated from a carpophore,
Ukraine, Kyiv, on *Aesculus hippocastanum*, 2010.
- 2186 Obtained from Company «Korona» (D 9/4/15),
Demjen, Hungary, 2000.
- 2187 Obtained from Company «Korona» (A /9/4/16),
Demjen, Hungary, 2000.
- 2188 Obtained from Company «Korona» (C 8/9/1),
Demjen, Hungary, 2000.
- 2189 Obtained from MS,
Prague, Czech Republic, 2006.
- 2249 Obtained from TSAU (K-6),
Melitopol, Ukraine, 2012.
- 2250 Obtained from TSAU (2199),
Melitopol, Ukraine, 2012.
- 2251 Obtained from TSAU (2175),
Melitopol, Ukraine, 2012.

- 2252 Obtained from TSAU (Pearl),
Melitopol, Ukraine, 2012.
- 2253 Obtained from TSAU (HK-80),
Melitopol, Ukraine, 2012.
- 2275 Isolated from a cultivated fruit body
(Italspawn P-77), 2012.
- 2284 Isolated from a carpophore, Ukraine, Kyiv
Region, Vorzel, on *Tilia europaea*, 2012.
- 2285 Isolated from a carpophore, Ukraine, Kyiv
Region, Vorzel, on *Carpinus betulus*, 2012.
- 2286 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region,
Hutsulshchyna National Nature Park, 2013.
- 2287 Obtained from TSAU (K-12),
Melitopol, Ukraine, 2012.
- 2292 Obtained from TSAU (Giza),
Melitopol, Ukraine, 2013.
- 2301 Obtained from TSAU (K-17),
Melitopol, Ukraine, 2013.
- 2316 Obtained from TSAU (2191),
Melitopol, Ukraine, 2013.
- 2317 Obtained from TSAU (Kr),
Melitopol, Ukraine, 2013.
- 2318 Obtained from TSAU (Azul),
Melitopol, Ukraine, 2013.
- 2319 Obtained from TSAU (CA),
Melitopol, Ukraine, 2013.
- 2320 Obtained from TSAU (56),
Melitopol, Ukraine, 2013.
- 2321 Obtained from TSAU (JB),
Melitopol, Ukraine, 2013.
- 2322 Obtained from TSAU (RL),
Melitopol, Ukraine, 2013.
- 2323 Obtained from TSAU (RH),
Melitopol, Ukraine, 2013.

- 2324 Obtained from Company “Biotechnology”,
Donetsk, Ukraine, 2013.
- 2431 Obtained from DNU (ДП-15),
Donetsk, Ukraine, 2016.
Isolated from a carpophore, Ukraine,
Donetsk Region, on *Populus tremula*, 2015.
- 2445 Obtained from MS (25),
Prague, Czech Republic, 1983.
- 2449 Isolated from a cultivated fruit body
(DV), Ukraine, 2010.
- 2451 Obtained from CCBAS (435, f.florida),
Prague, Czech Republic, 1987.
- 2452 Isolated from a cultivated fruit body
(Amycel 3000), Ukraine, 2004.
- 2453 Obtained from IFB (175), Gomel, Belarus, 1977.
- 2455 Obtained from Institute of Forest and Melioration
(1383/474), Sochi, Russia, 1977.
- 2456 Isolated from a cultivated fruit body
(M-5), Ukraine, 2007.
- 2457 Obtained from Institute of Agriculture
(Olaz-5), Budapest, Hungary, 1975.
- 2458 Isolated from a cultivated fruit body
(Kyiv-5), Ukraine, Lviv Region,
on *Fagus sylvatica*, 1978.
- 2460 Isolated from a cultivated fruit body
(Palmycel 107), 1999.
- 2461 Isolated from a cultivated fruit body
(Kyiv-6), Belarus, Gomel,
on *Populus tremula* 1979.
- 2462 Isolated from a cultivated fruit body
(L), Ukraine, 2001.

***Pleurotus pulmonarius* (Fr.) Quél. Cultivated Edible Mushroom with Medicinal properties**

- 111 Obtained from VKM (F-2006),
Moscow, Russia, 1979.

- 194 Obtained from CCBAS (478), Prague, Czech Republic, 1981.
- 230 Obtained from VKM (F-2007), Moscow, Russia, 1979.
- 1856 Obtained from HAI (1024), Haifa, Israel, 2005.
- 2036 Obtained from TSAU (P₁₇), Melitopol, Ukraine, 2010.
- 2037 Obtained from TSAU (P₃), Melitopol, Ukraine, 2010.
- 2145 Obtained from TSAU (Phoenix), Melitopol, Ukraine, 2011.
- 2191 Obtained from “Korona” (9/5/11), Hungary, 2001.
- 2256 Isolated from a carpophore, Ukraine, Kyiv, Repina str., 2012.
- 2262 Isolated from a carpophore, Russia, Moscow Region, Zvenigorod, Biological station, 2012.
- 2295 Obtained from TSAU (694), Melitopol, Ukraine, 2011.
- 2299 Obtained from TSAU (708), Melitopol, Ukraine, 2011.
- 2305 Obtained from TSAU (537), Melitopol, Ukraine, 2011.
- 2306 Obtained from TSAU (707), Melitopol, Ukraine, 2011.
- 2307 Obtained from TSAU (668), Melitopol, Ukraine, 2011.
- 2314 Obtained from TSAU (Hibrid), Melitopol, Ukraine, 2011.
- 2454 Obtained from Institute of forest and melioration (991/473), Sochi, Russia, 1977.

***Pleurotus salignus* (Fr.)
Kumm. s. Romagn**

Cultivated Edible Mushroom with Medicinal properties

- 181 Isolated from a carpophore, Russia, Altay Territory, Altay Reserve, Yaylou, on *Betula* sp., 1980.

- 182 Isolated from a carpophore, Russia, Altay Territory, Altay Reserve, Chemosh cordon, on *Betula* sp., 1980.
- Polyporus brumalis* (Pers.) Fr. Mushroom with Medicinal properties**
- 2019 Obtained from BIN, St.-Petersburg, Russia, 2011.
- Polyporus squamosus* (Huds.) Fr. Edible Mushroom with Medicinal properties**
- 1758 Obtained from HAI (242), Haifa, Israel, 2001.
- 1825 Isolated from a carpophore, Ukraine, Kyiv, Park KPI, on the stump of *Populus* sp., 2003.
- 1826 Isolated from a carpophore, Ukraine, Kyiv, on *Aesculus hippocastanum*, 2003.
- 1827 Isolated from a carpophore Ukraine, Kyiv, Park KPI, on the stump of *Acer negundo*, 2003.
- 1828 Isolated from a carpophore, Ukraine, Kyiv, Hydropark, on *Populus* sp., 2003.
- 1829 Isolated from a carpophore, Ukraine, Kyiv, Park KPI, on the stump of *Acer negundo*, 2003.
- 1830 Isolated from a carpophore, Ukraine, Kyiv, on *Acer* sp., 2003.
- 1842 Isolated from a carpophore, Ukraine, Kyiv, 2002.
- 1977 Isolated from a carpophore, Ukraine, Kyiv, Siretshki park, 2009.
- 1978 Isolated from a carpophore, Ukraine, Kyiv, Siretshki park, 2009.
- 2268 Isolated from a carpophore, Ukraine, Kyiv, on the stump of the *Acer* sp., 2012.

<i>Porodaedalea pini</i> (Brot.) Murrill (= <i>Phellinus pini</i> (Brot.) Bondartsev & Singer)	Mushroom with Medicinal properties
5088	Obtained from BIN (0236), St.-Petersburg, Russia, 1969. Isolated from a carpophore, Russia, Primorje.
<i>Postia caesia</i> (Schrad.) P. Karst. (= <i>Tyromyces caesius</i> (Schrad.) Murrill)	Edibility and Medicinal properties not known
1604	Isolated from a carpophore, Ukraine, Kyiv, 1997.
2375	Isolated from a carpophore, Ukraine, Kyiv, park, 2014.
<i>Postia ceriflua</i> (Berk. & M.A. Curtis) Jülich (= <i>Tyromyces revolutus</i> (Bres.) Bondartsev & Singer)	Not Edible Mushroom
1025	Obtained from DNU (A-025), Donetsk, Ukraine, 1995. Isolated from a carpophore, Ukraine, Donetsk, environs, 1992.
<i>Psathyrella candolleana</i> (Fr.) Maire	Edible Mushroom
2387	Isolated from spores, Ukraine, Danube Biosphere Reserve, 2014.
<i>Psilocybe cubensis</i> (Earle) Singer	Mushroom with Medicinal properties
2394	Isolated from spores, Netherlands, 2015.
2472	Isolated from a cultivated fruit body, Netherlands, 2015.
<i>Psilocybe semilanceata</i> (Fr.) P. Kumm.	Mushroom with Medicinal properties
229	Obtained from CCBAS (492), Prague, Czech Republic, 1984.

- Pycnoporellus fulgens* (Fr.) Donk.** **Edibility and Medicinal properties not known**
2264 Isolated from a carpophore, Russia, Moscow Region, Zvenigorod, Biological station, 2012.
- Rhodocollybia maculate* (Alb. & Schwein.) Singer** **Edibility and Medicinal properties not known**
1987 Obtained from MSU (3938), Moscow, Russia 2009.
Isolated from a carpophore, Russia, Moscow Region, Zvenigorod, 2007.
- Rhodofomes cajanderi* (P. Karst.) B.K. Cui, M.L. Han & Y.C. Dai (= *Fomitopsis cajanderi* (P. Karst.) Kotl. & Pouzar)** **Not Edible Mushroom**
1690 Obtained from IFB (132), Gomel, Belarus, 2000.
- Rhodofomes roseus* (Alb. & Schwein.) Vlasák (= *Fomitopsis rosea* (Alb. & Schwein.) P. Karst.)** **Mushroom with Medicinal properties**
2263 Isolated from a carpophore, Russia, Moscow Region, Zvenigorod, Biological station, 2012.
- Schizophyllum commune* Fr.** **Mushroom with Medicinal properties**
96 Obtained from BIN (BKMF-1661), St.-Petersburg, Russia, 1970.
Isolated from a carpophore, Russia, Leningrad Region, 1968.
97 Obtained from VKM (F-715), Moscow, Russia, 1969.
Recieved from Senezh Laboratory of Wood Preservation, Russia, Teberda, environs.

- 335 Isolated from a carpophore,
Ukraine, Lviv Region, Smozhe, 1988.
- 441 Isolated from a carpophore,
Ukraine, Lviv Region, Smozhe, 1988.
- 1590 Isolated from a carpophore, Ukraine, Kyiv, 1997.
- 1713 Obtained from BIN (0514),
St.-Petersburg, Russia, 2000.
- 1714 Obtained from IFB, Gomel, Belarus, 2000.
Received from BIN (0459), St.-Petersburg,
Russia.
- 1759 Isolated from a carpophore,
Ukraine, Kyiv, Darnitza, 2001.
- 1760 Isolated from a carpophore,
Ukraine, Kyiv Region, Fastov, Pivni, 2001.
- 1761 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1762 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1763 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1764 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1765 Isolated from a carpophore, Ukraine,
Kyiv, Rusanivski Gardens, 2001.
- 1766 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1767 Isolated from a carpophore, Ukraine,
Zakarpatsky Region, Lubni, on *Fagus* sp., 2001.
- 1768 Isolated from a carpophore, Ukraine,
Kyiv, Darnitza, on *Pinus* sp., 2001.
- 1769 Isolated from a carpophore, Ukraine,
Kyiv, Darnitza, on *Pinus* sp., 2001.
- 1770 Isolated from a carpophore, Ukraine,
Kyiv, Park KPI, on *Populus* sp., 2001.

- 1806 Isolated from a carpophore,
Ukraine, Kyiv, Darnitza, 2002.
- 1861 Obtained from HAI (1035), Haifa, Israel, 2005.
- 2131 Obtained from DNU (S.c.-10),
Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Donetsk, 2010.
- 2132 Obtained from DNU (S.c.- 201),
Donetsk, Ukraine, 2011.
Isolated from a carpophore,
Ukraine, Svjati Gory National Park, 2001.
- 5009 Obtained from BIN (0460),
St.-Petersburg, Russia, 1981.

***Sidera lenis* (P. Karst.)
Miettinen (= *Amyloporia
lenis* (P. Karst.) Bondartsev
& Singer)**

Edibility and Medicinal properties not known

- 1026 Obtained from DNU (KB-92),
Donetsk, Ukraine, 1995.

***Sparassis crispa* (Wulfen)
Fr.**

**Edible Mushroom with Medicinal properties.
Rare Mushroom Included in the Red Data Book of
Ukraine**

- 304 Obtained from FIE (71a IPL),
Eberswalde, Germany, 1966.
- 312 Obtained from CCBAS (607),
Prague, Czech Republic, 1967.
Isolated from a carpophore,
Czech Republic, Bohemia, 1964.
- 314 Obtained from CCBAS (606),
Prague, Czech Republic, 1969.
Isolated from a carpophore, Czech Republic,
Bohemia, Praskolesy, near Zdice, 1959.
- 2004 Obtained from MSU (3939),
Moscow, Russia, 2009.
Isolated from a carpophore,
Russia, Moscow Region, 2007.

<i>Sparassis nemecii</i> Pilát & Veselý	Edible Mushroom
2327	Isolated from spores, Ukraine, Ivano-Frankivsk Region, Hutsulshchyna National Nature Park, Sheshory, 2015.
<i>Sparassis laminosa</i> Fr.	Edible Mushroom
2211	Obtained from FCKU (048), Ukraine, Kyiv, 2016. Isolated from a carpophore, Ukraine, Donetsk Region, 2010.
<i>Spongipellis litschaueri</i> Lohwag	Not Edible Mushroom
5312	Obtained from Lviv Agricultural Academy (66), Lviv, Ukraine, 1977. Isolated from a carpophore, Ukraine, Lviv.
<i>Stereum gausapatum</i> (Fr.) Fr.	Mushroom with Medicinal properties
1601	Isolated from a carpophore, Ukraine, Kyiv, 1997.
<i>Stereum hirsutum</i> (Willd.) Pers.	Mushroom with Medicinal properties
1586	Isolated from a carpophore, Ukraine, Chernigiv Region, 1997.
1596	Isolated from a carpophore, Ukraine, Kyiv, 1997.
1597	Isolated from a carpophore, Ukraine, Kyiv, 1997.
1598	Isolated from a carpophore, Ukraine, Kyiv, 1997.
<i>Stropharia aeruginosa</i> (Curtis) Quél.	Poisonous Mushroom
2408	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Kosiv, Hutsulshchyna National Nature Park, 2015.

<i>Stropharia rugosoannulata</i> Farl. ex Murrill	Cultivated Edible Mushroom with Medicinal properties
142	Obtained from CCBAS (503), Prague, Czech Republic, 1980. Isolated from a carpophore, Czech Republic, Moravia, 1978.
754	Obtained from Company “Pilzbrut Dieskau” (T-54), Germany, 1995.
2150	Obtained from TSAU (VGA 4), Melitopol, Ukraine, 2011.
2302	Obtained from TSAU (Don), Melitopol, Ukraine, 2011.
2310	Obtained from TSAU (408), Melitopol, Ukraine, 2011.
2311	Obtained from TSAU (AM1), Melitopol, Ukraine, 2011.
2312	Obtained from TSAU (407), Melitopol, Ukraine, 2011.
<i>Suillus luteus</i> (L.) Roussel	Edible Mushroom with Medicinal properties
2420	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Kosiv, Hutsulshchyna National Nature Park, 2015.
<i>Trametes gibbosa</i> (Pers.) Fr.	Mushroom with Medicinal properties
1937	Isolated from a carpophore, Ukraine, Kyiv Region, 2009.
2167	Isolated from a carpophore, Ukraine, Uzhanski National Park, tract Termachuv, on <i>Fagus sylvatica</i> , 2009.
2340	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2348	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
2349	Isolated from a carpophore, Ukraine, Lviv Region, 2013.

- 2356 Isolated from a carpophore,
Ukraine, Zakarpattya Region,
Zacharovanyi Krai National Nature Park, 2014.
- 2391 Isolated from a carpophore,
Ukraine, Kyiv, 2015.
- 2398 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Halych,
Halych National Nature Park, 2015.

***Trametes hirsuta* (Wulfen)
Lloyd**

Mushroom with Medicinal properties.

- 338 Obtained from BIN (069),
St.-Petersburg, Russia, 1986.
Isolated from a carpophore,
Russia, Ryazan Region, 1960.
- 358 Obtained from BIN (074),
St.-Petersburg, Russia, 1986.
Isolated from a carpophore,
Russia, Gorky Region, on *Tilia* sp., 1965.
- 359 Obtained from Institute of genetic (113),
Czech Republic, 1987.
- 1568 Isolated from a carpophore, Ukraine, Kyiv, 1997.
- 1569 Isolated from a carpophore,
Ukraine, Chernigiv Region, Jaroslavka, 1997.
- 1983 Isolated from a carpophore,
Ukraine, Kyiv Region, Juriivka, 2009.
- 2429 Obtained from DNU (Th-11),
Donetsk, Ukraine, 2016.
Isolated from a carpophore,
Ukraine, Donetsk, 2011.
- 5018 Obtained from BIN (2-S),
St.-Petersburg, Russia, 1981.
- 5019 Obtained from BIN (3-S),
St.-Petersburg, Russia, 1981.
- 5137 Obtained from BIN (B-22),
St.-Petersburg, Russia, 1981.

<i>Trametes maxima</i> (Mont.) A. David & Rajchenb.	Not Edible Mushroom
1002	Obtained from BIN (0681), St.-Petersburg, Russia, 1987. Isolated from a carpophore, Cuba, Havana, 1981.
<i>Trametes pubescens</i> (Schumach.) Pilát (= <i>Tyromyces pubescens</i> (Schumach.) Imazeki)	Mushroom with Medicinal properties
322	Obtained from VKM (115), Moscow, Russia, 1979. Isolated from a carpophore, Russia, Leningrad Region, 1971.
1699	Obtained from IFB (154), Gomel, Belarus, 2000. Isolated from a carpophore, Belarus, Minsk, 1993.
<i>Trametes suaveolens</i> (L.) Fr.	Mushroom with Medicinal properties
1524	Isolated from a carpophore, Ukraine, Kyiv, 1997.
2343	Isolated from a carpophore, Ukraine, Lviv Region, 2013.
5024	Obtained from BIN (0266), St.-Petersburg, Russia, 1996. Isolated from a carpophore, Russia, Leningrad Region, on <i>Alnus</i> sp., 1971.
<i>Trametes trogii</i> Berk. (=<i>Funalia trogii</i> (Berk.) Bondartsev & Singer)	Not Edible Mushroom
1521	Isolated from a carpophore, Ukraine, Kyiv Region, Vishgorod, 1997.
<i>Trametes versicolor</i> (L.) Lloyd	Mushroom with Medicinal properties
319	Obtained from VKM (462), Moscow, Russia, 1979. Isolated from a carpophore, Russia, Leningrad Region, 1971.

- 353 Obtained from BIN (8-S),
St.-Petersburg, Russia, 1971.
Isolated from a carpophore,
Russia, Gorky Region, 1961.
- 1571 Isolated from a carpophore,
Ukraine, Chernigiv Region, Jaroslavka, 1997.
- 1689 Obtained from IFB (124), Gomel, Belarus, 2000.
Isolated from a carpophore,
Belarus, Gomel Region, Korneevka, 1992.
- 2142 Obtained from TSAU (VDEI),
Melitopil, Ukraine, 2011.
- 2143 Obtained from TSAU (441),
Melitopil, Ukraine, 2011.
- 2144 Isolated from a carpophore, Ukraine, Kyiv, 2011.
- 2331 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Hutsulshchyna
National Nature Park, Sheshory, 2015.
- 2354 Isolated from a carpophore,
Ukraine, Ukraine, Zakarpattya Region,
Zacharovanyi Krai National Nature Park, 2014.
- 5094 Obtained from BIN (084),
St.-Petersburg, Russia, 1981.
- 5095 Obtained from BIN (080),
St.-Petersburg, Russia, 1981.
- 5129 Obtained from BIN (087),
St.-Petersburg, Russia, 1981.
- 5131 Obtained from BIN (089),
St.-Petersburg, Russia, 1981.
- 5299 Obtained from Lviv Agricultural Academy
(31-65), Lviv, Ukraine 1984.

***Trametes zonata* Wettst.**

Mushroom with Medicinal properties

- 301 Obtained from Estonian Research Institute of
Agriculture (NN), Tallinn, Estonia, 1967.
- 1525 Isolated from a carpophore, Ukraine, Kyiv, 1997.

- 1561 Isolated from a carpophore,
Ukraine, Kyiv, on *Populus* sp., 1997.
- 1570 Isolated from a carpophore, Ukraine,
Chernigiv region, Jaroslavka, on *Betula* sp., 1997.
- 5021 Obtained from BIN (098),
St.-Petersburg, Russia, 1981.
- 5022 Obtained from BIN (099),
St.-Petersburg, Russia, 1981.
- 5134 Obtained from BIN (095),
St.-Petersburg, Russia, 1981.
- 5135 Obtained from BIN (094),
St.-Petersburg, Russia, 1981.
Isolated from a carpophore,
Russia, Ryazan Region, on *Betula* sp., 1960.
- 5300 Obtained from Lviv Agricultural Academy
(1-82), Lviv, Ukraine, 1984.
- 5301 Obtained from Lviv Agricultural Academy
(7-81), Lviv, Ukraine, 1984.
- 5302 Obtained from Lviv Agricultural Academy
(12-S), Lviv, Ukraine, 1984.
- 5303 Obtained from Lviv Agricultural Academy
(10-S), Lviv, Ukraine, 1984.

***Tremella fuciformis* Berk. Mushroom with Medicinal properties**

- 2470 Obtained from VKM (J-2761),
Moscow, Russia, 2009.

***Tolyptocladium* Mushroom with Medicinal properties**

***ophioglossoides* (J.F. Gmel.) Quandt, Kepler & Spatafora (= *Clavaria parasitica* Willd., *Cordyceps ophioglossoides* (J.F. Gmel.) Fr.)**

- 2136 Obtained from TSAU, Ukraine, Melitopol, 2011.

<i>Trichaptum laricinum</i> (P. Karst.) Ryvarden (= <i>Hirschioporus abietis</i> (Lloyd) Imazeki; <i>Lenzites abietis</i> Lloyd)	Not Edible Mushroom
1075	Obtained from DNU (A-032), Ukraine, Donetsk, 1977
<i>Tricholoma ustale</i> (Fr.) P. Kumm.	Not Edible Mushroom
2475	Isolated from a carpophore, Ukraine, Ivano-Frankivsk Region, Halych, Halych National Nature Park, 2015.
<i>Tropicoporus linteus</i> (Berk. & M.A. Curtis) L.W. Zhou & Y.C. Dai (= <i>Phellinus linteus</i> (Berk. & M.A.Curtis) Teng)	Mushroom with Medicinal properties
2471	Obtained from VKM (3528), Moscow, Russia, 2009.
<i>Volvariella bombycina</i> (Schaeff.) Singer	Edible Mushroom with Medicinal properties
2165	Isolated from a carpophore, Ukraine, Kyiv, on the stump of <i>Populus</i> sp., 2011.
2353	Isolated from a carpophore, Ukraine, Kyiv, 2014.
<i>Volvariella pusilla</i> (Pers.) Singer (= <i>Volvariella parvula</i> (Weinm.) Speg.)	Edibility and Medicinal properties not known
2207	Obtained from FCKU (055), Kyiv, Ukraine, Isolated from a carpophore, Ukraine, Kyiv, 2016.

Volvariella volvacea (Bull.) **Cultivated Edible Mushroom with Medicinal properties**
Singer

2248 Obtained from TSAU,
Ukraine, Melitopol, 2012.

Xylaria polymorpha (Pers.) **Not Edible Mushroom**
Grev.

2382 Isolated from a carpophore,
Ukraine, Ivano-Frankivsk Region, Gorgany
Nature Reserve, 2014.

2430 Obtained from DNU (Xp-1301),
Donetsk, Ukraine, 2014.
Isolated from a carpophore,
Ukraine, Donetsk Region, Dronovka, 2013.

СПИСОК НАУКОВИХ ПРАЦЬ, ПРИСВЯЧЕНИХ ДОСЛІДЖЕННЮ ШТАМІВ ІВК КОЛЕКЦІЇ

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Hericium alpestre - the source of strain 2407



Hericium coralloides - the source of strain 2332



Hericium cirrhatum - the source of strain 2393



Hericium abietis - the source of strain 2376



Lyophyllum decastes - the source of strain 2378



Meripilus giganteus - the source of strain 2380



Inonotus obliquus - the source of strain 2395



Mucidula mucida - the source of strain 2415



Volvariella bombinata - the source of strain 2165



Clathrus archeri - the source of strain 2405



Hypsizygos marmoreus - the source of strain 2410



Gyromitra slonevskii - the source of strain 1932



Lycoperdon utriforme - the source of strain 2359



Trametes versicolor - the source of strain 2354



Lepista nuda - the source of strain 2410



Stropharia aeruginosa - the source of strain 2408



Ganoderma lucidum - the source of strain 2392



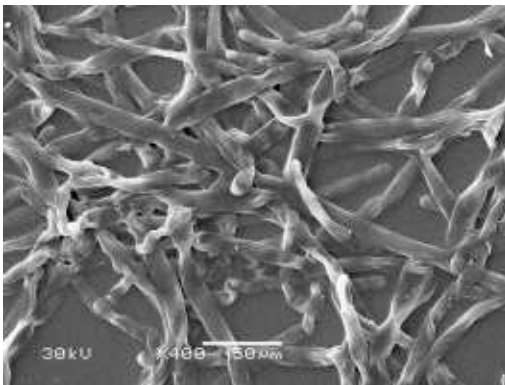
Ganoderma resinaceum - the source of strain 2477



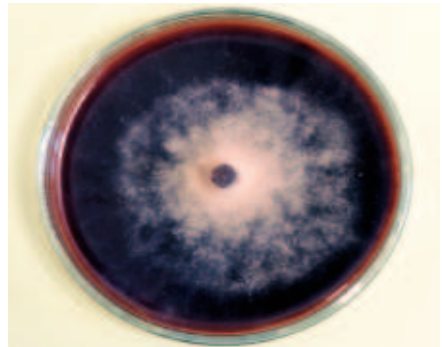
Clathrus archeri: vegetative hyphae with crystals. SEM ($\times 5,500$)



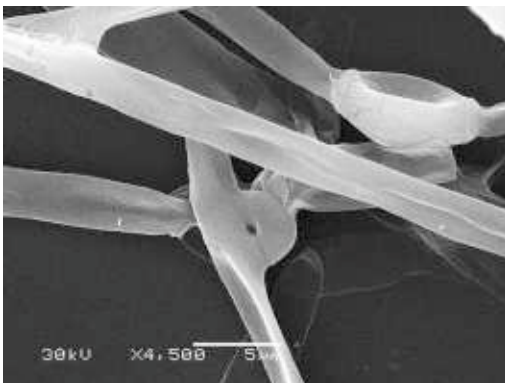
Clathrus archeri: mycelial colony on malt agar medium (20 day of cultivation)



Gyromitra slonevskii: vegetative hyphae. SEM ($\times 400$)



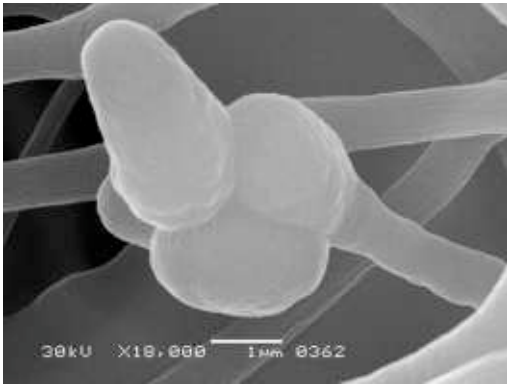
Gyromitra slonevskii: mycelial colony on malt agar medium with aspen sawdust



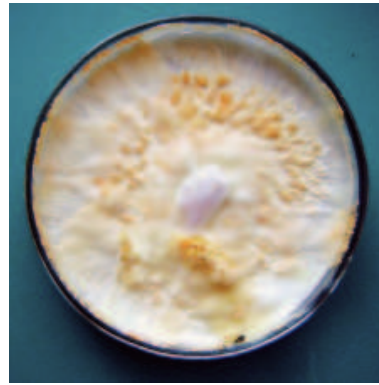
Hericium cirrhatum: clamp connection and chlamydospore. SEM ($\times 4,500$)



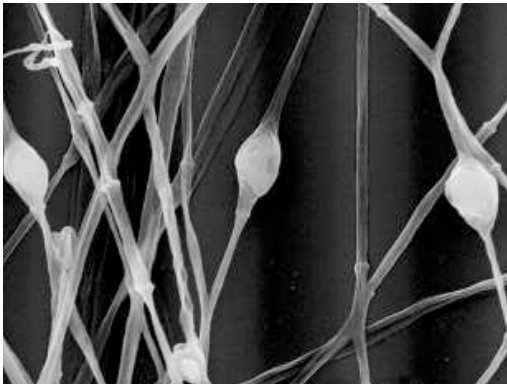
Hericium cirrhatum: mycelial colony on malt agar medium with decoction of coriander (15 day of cultivation)



Cordyceps militaris: conidial sporulation
Cephalosporium militare. SEM (× 18,000)



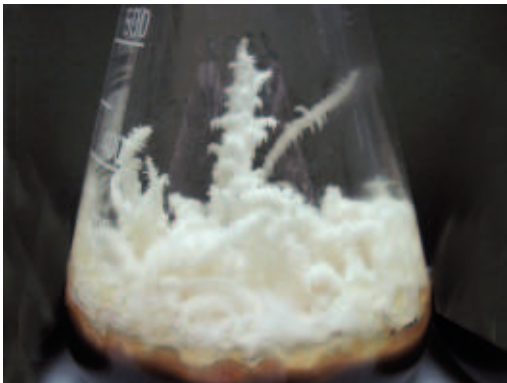
Cordyceps militaris: mycelial colony on
glucose-peptone-yeast agar medium (30 day
of cultivation)



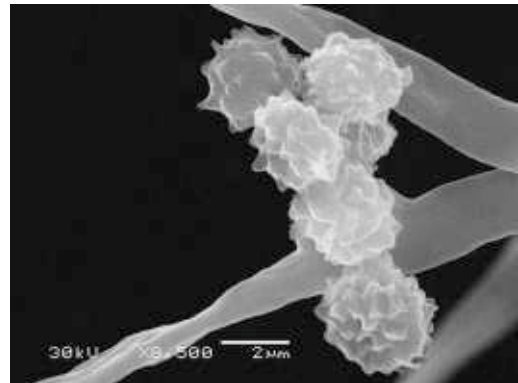
Cordyceps militaris: chlamydospores. SEM
(× 2200)



Cordyceps militaris: teleomorph on glucose-
peptone-yeast medium (60 day of cultiva-
tion)



Hericium coralloides: teleomorph on
glucose-peptone-yeast medium (30 day of
cultivation)



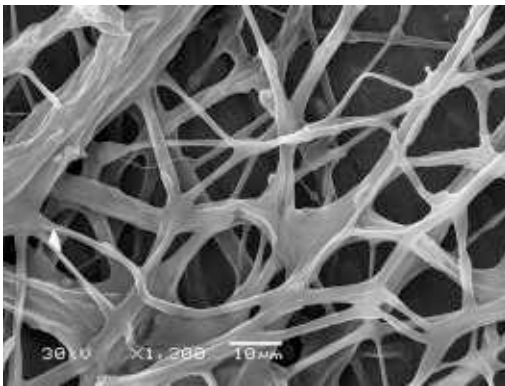
Hericium coralloides: conidial sporulation.
SEM (× 8,500)



Fomitopsis officinalis: clamp connection. SEM ($\times 8,000$)



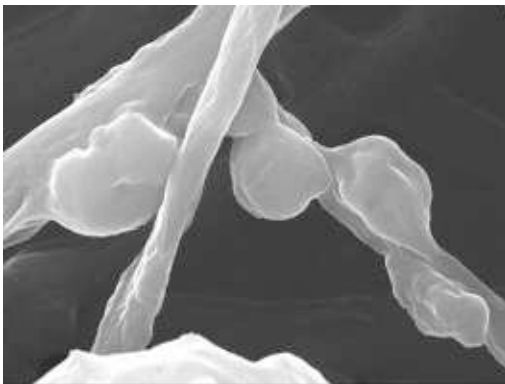
Fomitopsis officinalis: mycelial colony on malt agar medium with larch sawdust



Sparassis crispa: vegetative hyphae, mycelial cords and anastomoses. SEM ($\times 1,300$)



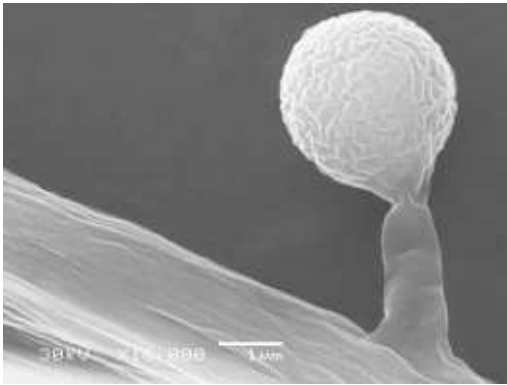
Sparassis crispa: mycelial colony on malt agar medium with pine sawdust (30 day of cultivation)



Sparassis crispa: secretory cells. SEM ($\times 4,500$)



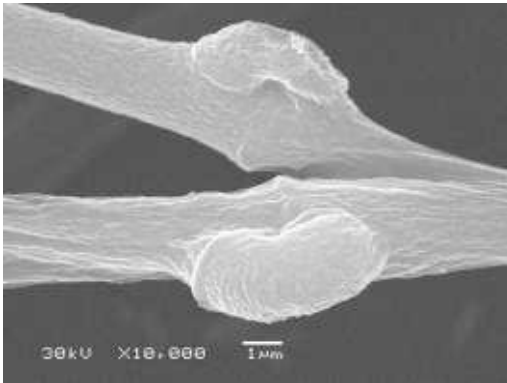
Sparassis crispa: teleomorph on malt agar medium with pine sawdust (60 day of cultivation)



Pleurotus nebrodensis: conidial sporulation.
SEM (× 16,000)



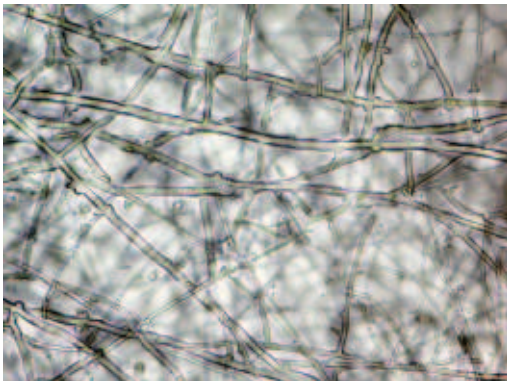
Pleurotus nebrodensis: teleomorph on malt agar medium (50 day of cultivation)



Pleurotus nebrodensis: clamp connections.
SEM (× 10,000)



Pleurotus nebrodensis: mycelial colony on malt agar medium (15 day of cultivation)



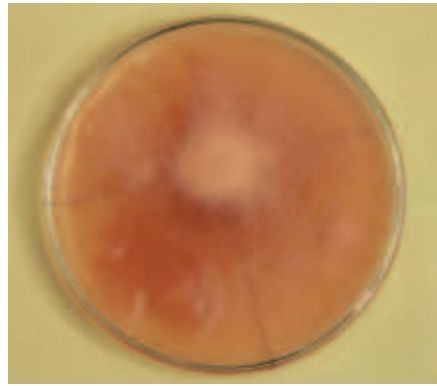
Grifola frondosa: clamp connections.
Obj. x 40



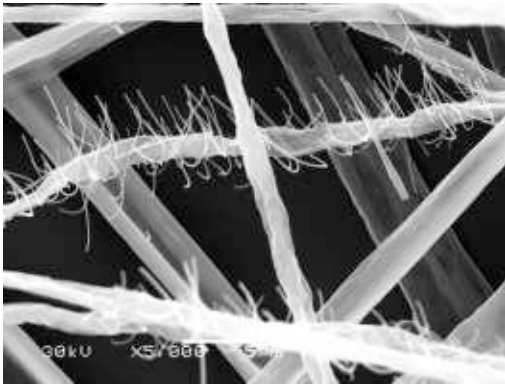
Grifola frondosa: mycelial colony on malt agar media



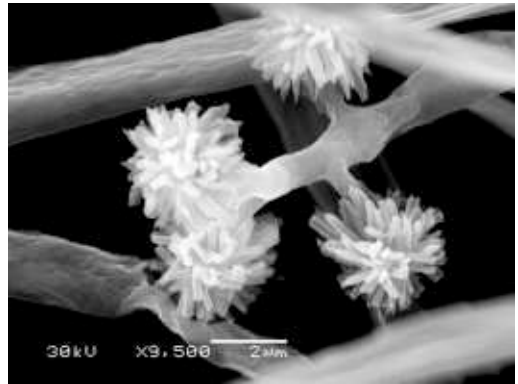
Morchella steppicola: vegetative hyphae.
Obj. x 40



Morchella steppicola: mycelial colony on malt agar medium (15 day of cultivation)



Coprinus comatus: crystals on hyphae. SEM
(x 5,000)



Coprinus comatus: dendroid structures.
SEM (x 9,500)



Sparassis nemecii: teleomorph on malt agar medium with cherry sawdust (60 day of cultivation)



Lyophyllum decastes: mycelial colony on malt agar medium (30 day of cultivation)

