

Implementing the OECD Best Practice Guidelines at VKM

Oleg Stupar

All-Russian Culture Collection of Microorganisms,
Institute of Biochemistry and Physiology of
Microorganisms Russian Academy of Sciences

Pushchino, Moscow Region, Russian Federation
E-mail: stupar@ibpm.pushchino.ru



VKM on the road to BRC status

Activities	Readiness
Preservation and maintenance of microorganisms	+
Documentation management	+
Quality checks on the biological material	+
Responsibilities of management	+
Long-term sustainability	

Russian Federation

- Manages considerable territory and biodiversity in diverse climate conditions**
- Legal and economic systems undergoing significant evolutionary changes**
- Interested in harmonization of several legal aspects both on global and regional levels (ongoing negotiations with WTO, OECD etc.)**
- Over 100 microbial culture collections operate within host institutions (Institutes of academies, universities etc.)**



VKM

- Operates as a Department of the Institute of Biochemistry and Physiology of Microorganisms, Russian Academy of Sciences. Main location in Pushchino, Moscow Region, 142290. (Mycology Unit – in Moscow)
- Head of Department – Dr. Lyudmila I. Evtushenko. Permanent staff 42 people in 7 sectors
- Catalogue in electronic format available at www.vkm.ru
- Main interests are in taxonomy and ecology of microorganisms (actinomycetes, bacteria, yeast and mycelial fungi)
- Customers include research and educational establishments, some governmental as well as private biotech and agricultural laboratories
- VKM is not licensed for keeping microorganisms of high risk groups
- Functions as IDA



Main Russian VKM customers aggregated in categories

Institutes of Russian Academy of Science

Agencies of Ministry of Justice

Agencies of Ministry of Culture

Different establishments of Ministry of Public Health

Governmental Research Institutes

Universities

Private companies



MTA

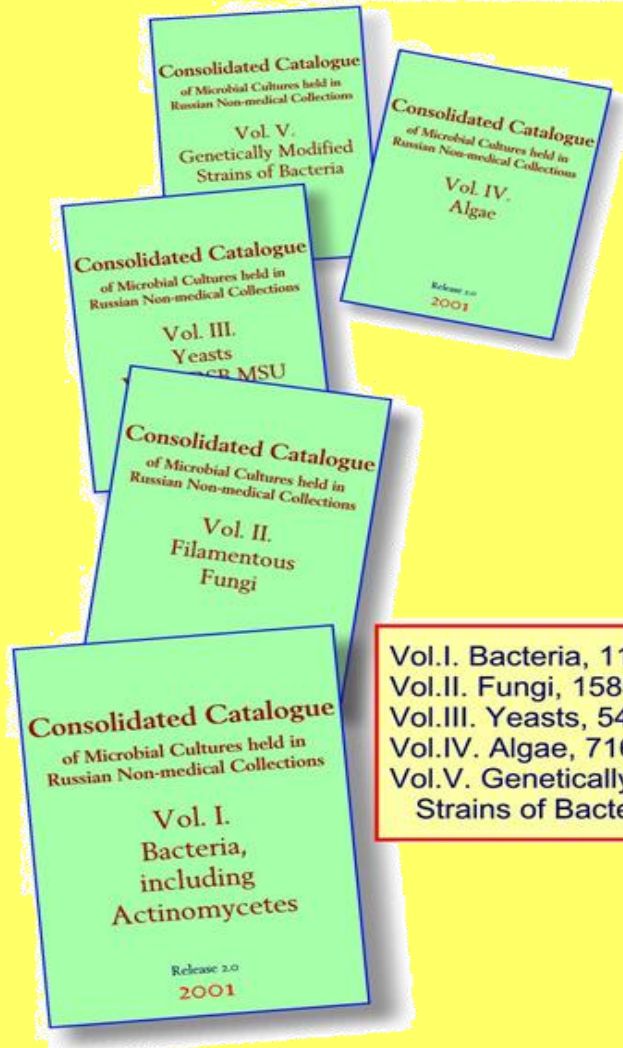
(Excerpts from current VKM distribution form)

- Recipient will not sell, distribute, multiply for proliferation, or transfer Material in other ways to third parties, except for the cases when Recipient performs Legal Exchange. In the case of transfer of Material at Legal Exchange to a third party, Recipient will keep responsibility for further non-proliferation of Material.
- Recipient must indicate Collection as a source of Material in any publications related to the Material.
- Recipient has right to draw up patents for inventions made by Recipient at using Material or its Modifications. Recipient will be the owner of these patents.
- Recipient is the owner of Modifications and intellectual property contained in Modifications.



ORGANISATIONS PARTICIPATED IN DEVELOPMENT OF “CONSOLIDATED CATALOGUE” 1999-2002

Consolidated Catalogue of Microbial Cultures held in Russian Non-medical Collections



Vol. I. Bacteria, 1125 species, 2160 pp.
Vol. II. Fungi, 1585 species, 2262 pp.
Vol. III. Yeasts, 545 species, 1115 pp.
Vol. IV. Algae, 716 pp.
Vol. V. Genetically modified Strains of Bacteria, 84 pp.

All-Russian Collection of Microorganisms - VKM
Culture Collection of Basidiomycetes of the Komarov Botanical Institute
Collection of Algal Strains at the Biological Institute, St. Petersburg University
Culture Collection of the Institute of Plant Protection
Culture Collection of the VNIIPA
Culture Collection of the Institute of Agricultural Microbiology
Culture Collection of the Institute of Biology, Ufa Scientific Center
Culture Collection of the Institute of Marine Biology
Culture Collection of Luminous Bacteria of the Institute of Biophysics
Culture Collection of the Institute of Cell Biophysics
Culture Collection of the Institute of Molecular Genetics
Culture Collection of the K.A. Timiryazev Institute of Plant Physiology
Collection of Monoxenic Cultures of Arbuscular Mycorrhizal Fungi, K.A. Timiryazev Institute of Plant Physiology
Regional Specialized Alkanotrophic Microorganism Collection of the Institute of Ecology and Genetics of Microorganisms
Yeast Collection of the Department of Soil Sciences, Moscow State University
Collection of Microorganisms of the Department of Microbiology, Moscow State University
Culture Collection of the “Microb” Institute
Collection of Marine Microorganisms

ANNUAL FINANCIAL RESULTS OF VKM FOR THE YEARS 2007-2010 (thousand US \$)

REVENUE		EXPENDITURE			
Source	Quantity	Salary	Equipment	Supplies	Other
Russian Academy of Science	250	250			
Collection services	50			35	15
Scientific grants (RFFR, Programs of RAS Presidium)	80		50	18	12
Total revenue	380	250	50	53	27

In the 2006-2007 VKM received Special Funding (300 000 US \$) to reconstruct premises of Mycology unit (Moscow) according to GLP Standard



Comparative relation of some microorganisms to Risk group 2

European safety rules (DIRECTIVE 2000/54/EC) 2000	Belgian safety rules (“List of pathogenic bacteria” Scientific Institute of Public Health) 2008	Russian safety rules (СП 1.3.2322-08) 2008
<i>Nocardia asteroides</i> <i>Nocardia brasiliensis</i> <i>Nocardia farcinica</i> <i>Nocardia nova</i>	<i>Nocardia abscessus, Nocardia africana</i> <i>Nocardia araoensis, Nocardia arthritidis</i> <i>Nocardia asiatica, Nocardia asteroides</i> <i>Nocardia brasiliensis, Nocardia concava</i> <i>Nocardia cyriacigeorgica</i> <i>Nocardia elegans, Nocardia exalbida</i> <i>Nocardia farcinica, Nocardia higoensis</i> <i>Nocardia ignorata, Nocardia mexicana</i> <i>Nocardia niigatensis, Nocardia ninae</i> <i>Nocardia nova, Nocardia otitidiscaviarum</i> <i>Nocardia paucivorans, Nocardia pneumoniae</i> <i>Nocardia pseudobrasiliensis</i> <i>Nocardia salmonicida, Nocardia seriolae</i> <i>Nocardia terpenica, Nocardia transvalensis</i>	<i>Nocardia asteroides</i> <i>Nocardia brasiliensis</i>

Comparative relation of some microorganisms to Risk group 2

European safety rules (DIRECTIVE 2000/54/EC) 2000	Belgian safety rules (“List of pathogenic fungi” Scientific Institute of Public Health) 2008	Russian safety rules (СП 1.3.2322-08) 2008
<i>Penicillium marneffe</i>	<i>Penicillium marneffe</i>	<i>Penicillium spp.</i>
<i>Aspergillus fumigatus</i>	<i>Aspergillus flavus</i> <i>Aspergillus fumigatus</i> <i>Aspergillus parasiticus</i> <i>Aspergillus terreus</i> <i>Aspergillus thermomutatus</i> <i>Aspergillus ustus</i>	<i>Aspergillus spp.</i>

THANK YOU FOR ATTENTION

