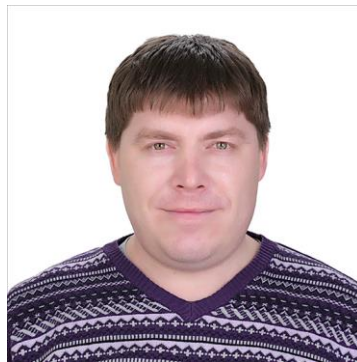


CURRICULUM VITAE



NAME: Rustem A. ILYASOV

DATE OF BIRTH: 02.07.1980

ACADEMIC RESEARCH DEGREE: Doctor of Science (Sc.D. / D.Sc.) in Biology

RESEARCH SPECIALTY: Genetics 03.02.07

POSITION: Leading Researcher, Laboratory of Molecular Genetics

AFFILIATION: Bashkir State Agrarian University (BSAU)

DEPARTMENT: World-class scientific and educational center "Progressive technologies, transplantology and genotyping" Laboratory of Molecular Genetics

ADDRESS: 450001, Russia, Ufa, 50-letiya Oktyabrya street, 34. **WEBSITE:** <https://bsau.ru/en>

PHONE/FAX: +7 347 278-56-11; **MOBILE:** +79174612386

E-MAIL: apismell@hotmail.com; apismell@mail.ru

SCOPUS ID: 44461460200; **WEB OF SCIENCE ID:** O-2665-2014

Profile Publons: <https://publons.com/researcher/2464702/rustem-a-ilyasov/>

Profile eLibrary: http://elibrary.ru/author_items.asp?authorid=156929

EDUCATION

Elementary, middle, and high schools: Ufa, RUSSIA.

M.Sc. (June, 2002): Department of Biology, Bashkir State University (BSU), Ufa City, Validi Street 32, BSU, 450076, RUSSIA.

Ph.D. degree (order #14k/120 by 06.04.2007): Laboratory of Insects' Biochemistry and Adaptiveness, Institute of Biochemistry and Genetics IBG RAS (UFA, RUSSIA). Phone +73472356088. Website: <http://ibg.anrb.ru>

Ph.D. Thesis title: "Polymorphism of *A. m. mellifera* in the Urals".

Ph.D. Academic Advisor: Prof. Alexey NIKOLENKO (e-mail: a-nikolenko@yandex.ru), Head of the Laboratory, Laboratory of Insects' Biochemistry and Adaptiveness, Institute of Biochemistry and Genetics, 71 Prospect Oktyabrya, Ufa, RUSSIA, 450054. Phone: +79608075893.

Sc.D. degree (order #164/nk-1 by 03.03.2017): Laboratory of Insects' Biochemistry and Adaptiveness, IBG RAS (UFA, RUSSIA)

Sc.D. Thesis title: "The genetic structure and phylogenetic position of the Dark European honeybees *A. m. mellifera* of the Ural and Volga region population".

Sc.D. Academic Advisor: Prof. Alexey NIKOLENKO.

Senior Researcher (2002-2021): Institute of Biochemistry and Genetics, Russian Academy of Sciences (IBG RAS), Laboratory of Insects' Biochemistry and Adaptiveness. 71 Prospect Oktyabrya, Ufa, RUSSIA, 450054. Phone +73472356088. Website: <http://ibg.anrb.ru>

Postdoctoral Fellow (2017-2019): Sensory Neurobiology and Brain-science Laboratory (SNBL), Division of Life Sciences, Major of Biological Sciences, Incheon National University (INU), Incheon, SOUTH KOREA. Phone +820328358090. Website: <http://life.inu.ac.kr>

Postdoctoral Academic Advisor: Prof. Hyung Wook KWON (e-mail: hwkwon@inu.ac.kr), Head of the

Laboratory, Sensory Neurobiology and Brain-science Laboratory, 119 Academy-ro, INU, Yeonsu-gu, Incheon, SOUTH KOREA, 22012. Phone: +821033796727.

Leading Researcher (2021-2022): Vavilov Institute of General Genetics, Russian Academy of Sciences (VIGG RAS), Laboratory of Bacterial Genetics. 119333, Moscow, st. Gubkina, 3. Website: <http://en.vigg.ru>

RESEARCH INTERESTS AND EXPERTISE

Molecular biology and genetics, population genetics, genome, neuropeptides, gene expression, RNAi, dsRNA, lsRNA, evolution and phylogenetics, taxonomy, ecology, biochemistry, zoology, entomology, viruses, bioinformatics, honeybee, honeybee diseases, pollination, Varroa, microsporidia, Nosema, Ascospaera, mitochondrial genome, SNP, microsatellites, behavioural and conservation genetics, Genomic research, non-coding DNA, population genomics, microbiomics, RNA-sequencing, next-generation sequencing, metagenomic studies, bee intestinal microbiome, pharmacobiotics, probiotics, lactobacilli, bifidobacteria, metagenome, antibiotic and pesticide resistance genes, symbiont intestinal bacteria, Lactobacillus, Bifidobacterium, pesticide and antibiotic resistance

AWARDS AND HONORS

- 1. Grant of Russian foundation of basic researches (RFBR):** 02-04-97925-p2002agidel_a “Molecular genetic basis of the Bashkir population of the dark European honeybees’ adaptive potential” (2002 – 2004) (Performer);
- 2. Grant of RFBR:** 05-04-97916-p_agidel_a “A Genetic structure and resistance of the Colorado potato beetle population in the Republic of Bashkortostan” (2005 – 2007) (Performer);
- 3. Grant of RFBR:** 05-04-97945-p_agidel_a “A Genetic structure and resistance of the Bashkir population of the dark European honeybees” (2005 – 2007) (Performer);
- 4. Grant of RFBR:** 06-04-08183-ofi “Molecular genetic basis for the dark European honeybees breeding” (2006 – 2008). (Performer);
- 5. Grant of RFBR:** 07-04-08274-z “Participation at the International Congress of Insect Biotechnology & Industry (ICIBI)” (2007) (Supervisor);
- 6. Grant of RFBR:** 08-04-97039-p_povolzhye_a “Gene pool of the dark European honeybees and genetic processes in the borders” 2008 - 2010 (Performer);
- 7. Grant of RFBR:** 11-04-97078-p_povolzhye_a “Gene geographical analysis of the Burzyan population of the dark European honeybees” (2011 – 2013) (Performer);
- 8. Grant of RFBR:** 13-04-01802-a. “Role of the expression and polymorphism of the gene Vitellogenin in the life span regulation of the dark European honeybees” (2013 – 2015) (Performer);
- 9. Grant of RFBR:** 16-14-0000_D Publishing a Book “Dark forest honeybees *Apis mellifera mellifera* L. of the Republic of Bashkortostan” (2016) (Supervisor).
- 10. Grant of RFBR:** 19-54-70002 e-Asia_t Gene evolution and taxonomic relationships of honey bee *Apis cerana* populations (subspecies) in Russia, Korea, Vietnam and Indonesia (2020-2022) (Performer).
- 11. Award of the Government of the Republic of Bashkortostan** for the scientific project “Population of the dark European honeybees in the Republic of Bashkortostan” (2008).
- 12. Award of the Government of the Republic of Bashkortostan** for the scientific project “Genetic structure of the Northern population of the dark European honeybees in the Republic of Bashkortostan” (2011).
- 13. The European Commission Grant for SmartBees** No. 613960 under FP7 KBBE programme No. 2013.1.3-02 “Sustainable Management of Resilient Bee populations” (2014-2018) (Performer).

RESEARCH SKILLS

1. Molecular Biology

DNA and RNA isolation from insects, animals, viruses, bacteria, plants, fungi; gene cloning; qPCR and RT-PCR; DNA and RNA sequence analysis, RNAi, dsRNA, lsRNA, neuropeptides, metagenomic studies, honey bee intestinal microbiome, pharmacobiotics, searching antibiotic and pesticide resistance genes, analysis of intestinal symbiont bacteria.

2. Genetics

Nuclear and mitochondrial DNA mutation frequency analysis in honeybees, population genetic and phylogenetic analysis of animals and plants, submission DNA and RNA sequences into the GenBank, molecular taxonomy of honeybees, molecular genomics of honeybees, gut metagenome sequencing and analysis.

3. Computer skills

GENEPOP, POPULATION, STATISTICA, STRUCTURE, STATGRAFICS PLUS, DNASTAR, CHROMAS, MEGA, NETVIZ, NETWORK, UNIPRO UGENE, PHYLIP, PRIMER PREMIER, SPSS, BLAST, CLC GENOMICS WORKBENCH, GENEIOUS R, SNAPGENE, JMP.

4. Teaching

Curriculum design, Syllabus construction, Lecturer of the courses "Introduction to Population Genetics" (2007-2011), "Introduction to Modern Phylogenetics" (2007-2011), "Ecology of Populations and Communities" (2011-2012), "Population Genetics" (2012-2016), "Molecular evolution" (2012-2016), scientific advisor of five B.Sc. and five M.Sc theses.

PROFESSIONAL MEMBERSHIPS

1. Member of association **SICAMM** (<http://www.sicamm.org>);
2. Member of association **COLOSS** (<http://coloss.org>);
3. Member of association **BIBBA** (<http://bibba.com>);
4. Member of association **IBRA** (<http://www.ibrabee.org.uk>);
5. Member of association **SMARTBEES** (<http://www.smartbees.eu>);
6. **Editorial board of the scientific journal "Russian Journal of Beekeeping (Pchelovodstvo)"** (ISSN 0369-8629) IF=0.227 (Russia) (<http://beejournal.ru>);
7. **Editorial board of the scientific journal "Sustainability"** (ISSN 2071-1050) IF=2.576 (Switzerland) (<https://www.mdpi.com/journal/sustainability>).
8. **Editorial board of the scientific journal "Microorganisms"** (ISSN 2076-2607) IF= 4.152 (Switzerland) (<https://www.mdpi.com/journal/microorganisms>).
9. **Editorial board of the scientific journal "Uludag Bee Journal (Uludağ Arıcılık Dergisi)"** (ISSN 2687-5594) IF= 0.252 (Turkey) (<https://dergipark.org.tr/en/pub/uluaricilik>).
10. **Committee of the funding "National Science Centre Poland"** (<http://www.ncn.gov.pl/en>).
11. **Editorial board of the scientific journal "European Journal of Zoological Research"** (ISSN 2278-7356) IF= 0.720 (Great Britain) (<https://www.scholarsresearchlibrary.com/journals/european-journal-of-zoological-research>).
12. **Editorial board of the scientific journal "Journal of Genomics and Advanced Research"** (ISSN 0000-0000) IF= 0.100 (India) (<https://gexinonline.com/journal/journal-of-genomics-and-advanced-research>)

PUBLICATIONS

1. Ilyasov, R.A.; Petukhov, A.V.; Poskryakov, A.V.; Nikolenko, A.G. Local honeybee (*Apis mellifera mellifera* L.) populations in the Urals. *Russian Journal of Genetics* **2007**, *43*, 709-711. doi: 1134/S1022795407060166
2. Ilyasov, R.A.; Kutuev, I.A.; Petukhov, A.V.; Poskryakov, A.V.; Nikolenko, A.G. Phylogenetic relationships of dark european honeybees *Apis mellifera mellifera* L. from the Russian Ural and West European populations. *Journal of Apicultural Science* **2011**, *55*, 67-76. doi:
3. Ilyasov, R.A.; Gaifullina, L.R.; Saltykova, E.S.; Poskryakov, A.V.; Nikolenko, A.G. Review of the expression of antimicrobial peptide defensin in honey bees *Apis mellifera* L. *Journal of Apicultural Science* **2012**, *56*, 115-124. doi: 10.2478/v10289-012-0013-y
4. Ilyasov, R.A.; Gaifullina, L.R.; Saltykova, E.S.; Poskryakov, A.V.; Nikolaenko, A.G. Defensins in the honeybee antiinfectious protection. *Journal of Evolutionary Biochemistry and Physiology* **2013**, *49*, 1-9. doi: 10.1134/S0022093013010015
5. Ilyasov, R.A.; Kosarev, M.N.; Neal, A.; Yumaguzhin, F.G. Burzyan wild-hive honeybee *A. m. mellifera* in South Ural. *Bee World* **2015**, *92*, 7-11. doi: 10.1080/0005772X.2015.1047634
6. Ilyasov, R.A.; Poskryakov, A.V.; Nikolenko, A.G. New SNP markers of the honeybee vitellogenin gene (Vg) used for identification of subspecies *Apis mellifera mellifera* L. *Russian Journal of Genetics* **2015**, *51*, 194-199. doi:

7. Ilyasov, R.A.; Poskryakov, A.V.; Petukhov, A.V.; Nikolenko, A.G. Genetic differentiation of local populations of the dark European bee *Apis mellifera mellifera* L. in the Urals. *Russian Journal of Genetics* **2015**, *51*, 677-682. doi: 10.1134/S1022795415070042
8. Kaskinova, M.D.; Ilyasov, R.A.; Poskryakov, A.V.; Nikolenko, A.G. Analysis of the genetic structure of honeybee (*Apis mellifera* L.) populations. *Russian Journal of Genetics* **2015**, *51*, 1033-1035. doi: 10.1134/S1022795415100075
9. Ilyasov, R.A. Features of the honey bee *Apis mellifera* genome versus fruit fly *Drosophila melanogaster*. *Journal of Investigative Genomics* **2016**, *3*, 441-443. doi: 10.15406/jig.2016.02.00044
10. Ilyasov, R.A.; Poskryakov, A.V.; Nikolenko, A.G. Seven genes of mitochondrial genome enabling differentiation of honeybee subspecies *Apis mellifera*. *Russian Journal of Genetics* **2016**, *52*, 1062-1070. doi: 10.1134/S1022795416090064
11. Ilyasov, R.A.; Poskryakov, A.V.; Petukhov, A.V.; Nikolenko, A.G. Molecular genetic analysis of five extant reserves of black honeybee *Apis mellifera mellifera* in the Urals and the Volga region. *Russian Journal of Genetics* **2016**, *52*, 828-839. doi: 10.1134/S1022795416060053
12. Ilyasov, R.A.; Poskryakov, A.V.; Petukhov, A.V.; Nikolenko, A.G. New approach to the mitotype classification in black honeybee *Apis mellifera mellifera* and Iberian honeybee *Apis mellifera iberiensis*. *Russian Journal of Genetics* **2016b**, *52*, 281-291. doi: 10.1134/S1022795416020058
13. Ilyasov, R.A.; Poskryakov, A.V.; Nikolenko, A.G. Modern methods of assessing the taxonomic affiliation of honeybee colonies (in Russian). *Russian Journal of Genetics: Applied Research* **2017**, *15*, 41-51. doi: 10.17816/ecogen15441-51
14. Jung, J.; Kim, D.I.; Ilyasov, R.A.; Kim, K.; Kwon, H.W. Comparative study of olfactory learning and memory in *Apis cerana* and *Apis mellifera* foragers. *Journal of Apiculture (Korea)* **2017**, *32*, 275-280. doi: 10.17519/apiculture.2017.11.32.4.275
15. Ilyasov, R.A.; Park, J.; Takahashi, J.; Kwon, H.W. Phylogenetic uniqueness of honeybee *Apis cerana* from the Korean peninsula inferred from the mitochondrial, nuclear, and morphological data. *Journal of Apicultural Science* **2018**, *62*, 189-214. doi: 10.2478/jas-2018-0018
16. Ilyasov, R.A.; Han, G.Y.; Lee, M.-I.; Kim, K.W.; Proshchalykin, M.Y.; Lelej, A.S.; Takahashi, J.-i.; Kwon, H.W. Phylogenetic relationships of Russian Far-East *Apis cerana* with other North Asian populations. *Journal of Apicultural Science* **2019**, *63*, 289-314. doi: 10.2478/jas-2019-0024
17. Ilyasov, R.A.; Nikolenko, A.; Tuktarov, V.; Goto, K.; Takahashi, J.I.; Kwon, H.W. Comparative analysis of mitochondrial genomes of the honey bee subspecies *A. m. caucasica* and *A. m. carpathica* and refinement of their evolutionary lineages. *Journal of Apicultural Research* **2019**, *58*, 567-579. doi: 10.1080/00218839.2019.1622320
18. Kim, D.I.; Kim, S.I.; Jung, J.W.; Ilyasov, R.A.; Jang, D.; Lee, S.H.; Kwon, H.W. Spatial releasing properties and mosquito repellency of cellulose-based beads containing essential oils and vanillin. *Journal of Asia-Pacific Entomology* **2019**, *22*, 409-416. doi: 10.1016/j.aspen.2018.12.024
19. Lim, S.; Jung, J.; Yunusbaev, U.; Ilyasov, R.A.; Kwon, H.W. Characterization and its implication of a novel taste receptor detecting nutrients in the honey bee, *Apis mellifera*. *Scientific Reports* **2019**, *9*, 17004. doi: 10.1038/s41598-019-53738-6
20. Son, J.D.; Lim, S.; Kim, D.I.; Han, G.; Ilyasov, R.A.; Yunusbaev, U.B.; Kwon, H.W. Automatic bee-counting system with dual infrared sensor based on ICT. *Journal of Apiculture (Korea)* **2019**, *34*, 47-55. doi: 10.17519/apiculture.2019.04.34.1.47
21. Yunusbaev, U.B.; Kaskinova, M.D.; Ilyasov, R.A.; Gaifullina, L.R.; Saltykova, E.S.; Nikolenko, A.G. The role of whole-genome research in the study of honey bee biology. *Russian Journal of Genetics* **2019**, *55*, 815-824. doi: 10.1134/S102279541906019X
22. Ilyasov, R.A.; Lee, M.-I.; Takahashi, J.-i.; Kwon, H.W.; Nikolenko, A.G. A revision of subspecies structure of western honey bee *Apis mellifera*. *Saudi Journal of Biological Sciences* **2020**, *27*, 3615-3621. doi: 10.1016/j.sjbs.2020.08.001
23. Ilyasov, R.A.; Lee, M.-L.; Yunusbaev, U.B.; Nikolenko, A.G.; Kwon, H.-W. Estimation of C-derived introgression into *A. m. mellifera* colonies in the Russian Urals using microsatellite genotyping. *Genes and Genomics* **2020**, *42*, 987-996. doi: 10.1007/s13258-020-00966-0
24. Lim, S.; Yunusbaev, U.B.; Ilyasov, R.A.; Lee, H.S.; Kwon, H.W. Abdominal contact of fluvalinate induces olfactory deficit in *Apis mellifera*. *Pesticide Biochemistry and Physiology* **2020**, *164*, 221-227. doi: 10.1016/j.pestbp.2020.02.005
25. Danilenko, V.N.; Devyatkin, A.V.; Marsova, M.V.; Shibilova, M.U.; Ilyasov, R.A.; Shmyrev, V.I. Common

- inflammatory mechanisms in COVID-19 and Parkinson's diseases: the role of microbiome, pharmabiotics and postbiotics in their prevention. *Journal of Inflammation Research* **2021**, 14, 6349–6381. doi: 10.2147/JIR.S333887
26. Ilyasov, R.A.; Han, G.Y.; Lee, M.L.; Kim, K.W.; Park, J.H.; Takahashi, J.I.; Kwon, H.W.; Nikolenko, A.G. Phylogenetic relationships among honey bee subspecies *Apis mellifera caucasia* and *Apis mellifera carpathica* based on the sequences of the mitochondrial genome. *Russian Journal of Genetics* **2021**, 57, 697-710. doi: 10.1134/S1022795421060041
27. Ilyasov, R.A.; Han, G.Y.; Lee, M.L.; Kim, K.W.; Proshchalykin, M.Y.; Lelej, A.C.; Park, J.H.; Takahashi, J.I.; Kwon, H.W.; Nikolenko, A.G. Genetic properties and evolution of Asian honey bee *Apis cerana ussuriensis* from Primorsky Krai, Russia. *Russian Journal of Genetics* **2021**, 57, 557-571. doi: 10.1134/S1022795421050033
28. Ilyasov, R.A.; Lim, S.; Lee, M.L.; Kwon, H.W.; Nikolenko, A.G. Effect of miticides amitraz and fluvalinate on reproduction and productivity of honey bee *Apis mellifera*. *Uludağ Bee Journal (Uludağ Arıcılık Dergisi)* **2021**, 21, 21-30. doi: 10.31467/uluaricilik.883775
29. Ilyasov, R.A.; Takahashi, J.I.; Proshchalykin, M.Y.; Lelej, A.S.; Lee, M.L.; Kwon, H.W.; Nikolenko, A.G. First evidence of presence of *Varroa underwoodi* mites on native *Apis cerana* colonies in Primorsky Territory of Russia based on COX1 gene. *Journal of Apicultural Science* **2021**, 65, 177-186. doi: 10.2478/JAS-2021-0014
30. Kim, D.-I.; Ilyasov, R.; Yunusbaev, U.; Lee, S.-H.; Kwon, H.W. Behavioral and molecular responses of *Aedes aegypti* to ultrasound. *Journal of Asia-Pacific Entomology* **2021**, 24, 429-435. doi: 10.1016/j.aspen.2020.12.016
31. Momeni, J.; Parejo, M.; Nielsen, R.O.; Langa, J.; Montes, I.; Ilyasov, R.; Papoutsis, L.; Farajzadeh, L.; Bendixen, C.; Căuia, E., et al. Authoritative subspecies diagnosis tool for European honey bees based on ancestry informative SNPs. *BMC Genomics* **2021**, 22, 101. doi: 10.1186/s12864-021-07379-7
32. Ilyasov, R.A.; Takahashi, J.I.; Lee, M.L.; Proshchalykin, M.Y.; Lelej, A.S.; Kwon, H.W.; Danilenko, V.N.; Nikolenko, A.G. Characteristics of *Varroa underwoodi* mites (Acari: Varroidae) in the population of *Apis cerana ussuriensis* (Hymenoptera: Apidae) in the Primorsky Krai of Russia. *Biology Bulletin Reviews (Zhurnal obshchei biologii)* **2022**, 83, 38-50, doi: 10.31857/S0044459622010055.

BOOKS

- Farkhutdinov, R.G., Ilyasov, R.A., Ivanov, A.A., Shafikova, V.M., Tuktarova, Y.V., Voronkov, Y.P., 2015. Composition for stimulation of development of bee families, prevention and treatment of ascospores (in Russian). In: Farkhutdinov, R.G. ed. Patent of Russia № RU 2552672. Bull. № 16 on 10.06.2015. Bashkir State University, Ufa, pp. 1-12.
- Ilyasov, R.A., Nikolenko, A.G., Saifullina, N.M., 2015. Dark forest bee *Apis mellifera mellifera* L. of the Republic of Bashkortostan (in Russian) Gilem, Bashkirskaya encyclopedia, Ufa. isbn: 978-5-88185-264-1.
- Ilyasov, R.A., Nikolenko, A.G., Saifullina, N.M., 2016. Dark forest bee *Apis mellifera mellifera* L. of the Republic of Bashkortostan (in Russian) KMK Scientific Press, Moscow. isbn: 978-5-9908416-0-4.
- Ilyasov, R.A., Farkhutdinov, R.G., 2016. Chapter 2. Herbal dietary supplement with antifungal effect for Increasing the productivity of honey bee colonies. In: Dreesen, D. ed. Honeybees: biology, behavior and benefits. Nova Science Publishers, Hauppauge, New York, pp. 15-22 (149). isbn: 978-1-63484-037-8.
- Ilyasov, R.A., Poskryakov, A.V., Nikolenko, A.G., 2016. Chapter 1. The genetic structure of dark European honey bee population in the Ural. In: Dreesen, D. ed. Honeybees: biology, behavior and benefits. Nova Science Publishers, Hauppauge, New York, pp. 1-13 (149). isbn: 978-1-63484-037-8.
- Dunin, I.M., Novikov, A.A., Kalashnikova, L.A., Kalashnikov, A.E., Gladyr, E.A., Burmistrova, L.A., et al., 2019. Guidelines: The standard methods of genetic identification, determining the validity of origin and appraisal of honey bee colonies (in Russian) VNIIPlem, Lesnye Polyany, The Moscow region. isbn: 978-5-87958-383-0.
- Ilyasov, R.A., Kwon, H.W., 2019. Phylogenetics of Bees CRC Press, Taylor and Francis Group, Boca Raton, London, New-York, USA. isbn: 978-5-87958-383-0.
- Dar, S.A., Dukku, U.H., Ilyasov, R.A., Kandemir, I., Lee, M.L., Özkan Koca, A., 2019. Chapter 4. The classic taxonomy of Asian and European honey bees. In: Ilyasov, R.A., Kwon, H.W. eds. Phylogenetics of Bees. CRC Press, Taylor and Francis Group, Boca Raton, London, New-York, USA, pp. 107-137 (290). isbn: 978-5-87958-383-0.
- Ilyasov, R.A.; Marsova, M.V.; Kovtun, A.S.; Vatlin, A.A.; Yunes, R.A.; Gaifullina, L.R.; Kaskinova, M.D.; Nikolenko, A.G.; Kwon, H.W.; Danilenko, V.N. The gut microbiome of the honey bee *Apis mellifera* – is a potential source of biologically active ingredients. In: Modern advances in apidology. FSBEI HE "BSPU named after M. Akhmedov": Ufa, 2021; pp 23-30.
-

CONFERENCES

- International IV conference “BIODIVERSITY, ECOLOGY, ADAPTATION, EVOLUTION” (Odessa,

Ukraine, 2009) (oral presentation).

2. International congress APIMONDIA (**Monpellier, France, 2009**) (oral presentation).

3. International XLVII conference “NAUKOWA KONFERENCJA PSZCZELARSKA” (**Pulawy, Poland, 2010**) (poster).

4. International XLVIII conference «NAUKOWA KONFERENCJA PSZCZELARSKA» (**Pszczyna, Poland, 2011**) (poster).

5. International 12th SICAMM conference (**Landquart, Switzerland, 2012**) (poster).

6. International 13th SICAMM and 50th BIBBA conference (**Llangollen, United Kingdom, 2014**) (oral presentation).

7. International 6th conference EURBEE (**Murcia, Spain, 2014**) (poster).

8. International 14th SICAMM conference (**Lunteren, Netherlands, 2016**) (oral presentation).

9. International 17th Symposium on Molecular and Neural Mechanisms of Taste and Olfactory Perception (ISMNTOP/YRUF/AISCRIB 2018). 2018.11.30-12.02. **Fukuoka, Japan**: Kyushu University (poster).

10. World 6th Congress of Digital Olfaction Society. 2018.12.03-04. **Tokyo, Japan**: Digital Olfaction Society (poster).

11. International 8th Symposium on Molecular Insect Science (MOLI) 2019.07.07-10. **Spain, Barcelona** (oral presentation).

SCIENTIFIC REFEREES

1. Myeong-Lyeol LEE, Ph.D. Position: Chief Researcher, Affiliation: National Institute of Agricultural Sciences (NAAS) (www.naas.go.kr), Address: 166 Nongsaengmyeong-ro, Iseo-myeon, Wanju-gun, Jeollabuk-do, SOUTH KOREA, 55365 Phone/Fax: +82 63-238-3078 E-mail: mllee6@korea.kr	2. Alexei V. CHEMERIS, Sc.D. Position: Professor, Chief Researcher, Affiliation: Institute of Biochemistry and Genetics (IBG) (http://ibg.anrb.ru), Address: 71 Prospect Oktyabrya, IBG, Ufa, RUSSIA, 450054 Phone/Fax: +7 3472-356088 E-mail: chemeris@anrb.ru
3. Hyung Wook KWON, Ph.D. Position: Professor, Head of the Lab, Affiliation: Incheon National University (INU) (http://life.inu.ac.kr), Address: 119 Academy-ro, INU, Yeonsu-gu, Incheon, SOUTH KOREA, 22012 Phone/Fax: +82 032-835-8090 E-mail: hwkwon@inu.ac.kr	4. Jun-ichi TAKAHASHI, Ph.D. Position: Professor, Head of the Lab, Affiliation: Kyoto Sango University (KSU) (http://www.kyoto-su.ac.jp), Address: Motoyama, Kamigamo, Kita-ku, Kyoto-City, JAPAN, 603-8555 Phone/Fax: +82 032-835-8090 E-mail: jit@cc.kyoto-su.ac.jp
5. Thomas Dyer SEELEY, Ph.D. Position: Horace White Professor in Biology, Affiliation: Cornell University (CU) (https://www.cornell.edu), Address: Ithaca, New York, USA, 14853 Phone/Fax: +1 607-279-5498 E-mail: tds5@cornell.edu	6. Arkady S. LELEY, Sc.D. Position: Professor, Head of the Lab, Affiliation: Institute of Biology and Soil Science (IBSS) (http://www.biosoil.ru), Address: 159 Prospect 100-letya, Vladivostok, Primorsky Krai, RUSSIA, 690022 Phone/Fax: +7 4232-311385 E-mail: lelej@biosoil.ru