

**The Federal Scientific Center on the East Asia Terrestrial Biodiversity
FEB RAS**

**Engineering Research Center of Chinese Ministry of Education
for Edible and Medicinal Fungi**

The 1st International Conference

North East Asia Biodiversity

PROGRAMME

September 17–21, 2018

Vladivostok

RUSSIA

PROGRAMME

The duration of oral talks is supposed to be **12 min** plus 3 min for questions and discussion. We kindly ask you to keep strictly to this time limit.

SEPTEMBER 17

09:00 – 10:00 — Registration

10:00 – 10:20 — Opening of the Conference

SESSION 1. BIODIVERSITY OF TERRESTRIAL AND FRESHWATER FLORA, FAUNA, AND FUNGI

(10:20–13:20, Moderators: Andrey A. Gontcharov and Yu Li)

Yu.N. Zhuravlev. Present state, urgent problems and main directions for conservation of biodiversity in dry land.

Y.P. Fu. MCODE: Mushroom Crop Omics Database.

W. Qi. The application of «One district, one herbarium and five bans» in fungal resources on Qinghai-Tibet Plateau, China.

E.M. Bulakh, **N.V. Bukharova.** Features of the mycobiota of the Kunashir Island.

I.A. Galanina, A.K. Ezhkin. Genus *Rinodina* of the Kuril Islands.

11:20-11:40 Coffee break

G.A. Gladkova, L.A. Sibirina. Rare species of vascular plants and fungi in the Udege Legend National Park.

I.F. Skirina, I.M. Rodnikova, F.V. Skirin. Lichens of rocky habitats (the southern part of the Russian Far East).

E. Efimova, O.V. Nesterova. Biodiversity of marine fungi of the South China Sea.

M.V. Pivkin. Biodiversity marine fungi from subaqueous soils of the Sakhalin island area.

13:20–14:00 LUNCH

SESSION 1

(14:00–17:00, Moderators: Sergey Yu. Storozhenko and Changtian Li)

K. Ma, X. Xu, M. Luo, B. Liu, H. Wang, **J. Xue,** Q. Lin, W. Li. Mapping Asia Plants: initiative and progress.

V.V. Chepinoga, V.M. Doronkin, J. Xue, K. Ma. Concept of backbone taxonomy for vascular plants of Asian Russia in frame of the Mapping Asia Plants project.

V.Yu. Barkalov, M.M. Kozyrenko. The Genus *Salix* in the flora of the Russian Far East.

N.S. Probatova. The *Poaceae* Family in the Russian Far East: main features of biodiversity.

V.V. Chepinoga, M.V. Protopopova, V.V. Pavlichenko, N.N. Lashchinskiy, A.V. Verkhovina. The impact of the Khamar–Daban nemoral refugium (the south of Eastern Siberia) on the Baikal region biodiversity.

I.Yu. Adrianova, **E.A. Vasyutkina**, A.A. Bondar. Genetic diversity among wild and cultivated *Panax ginseng* Meyer based on chloroplast DNA data.

15:20-15:40 Coffee break

M.N. Chipizubova. Assessment of threats to the vascular plant diversity of natural communities of Reineke island from the alien species *Rudbeckia hirta* L. and *Centaurea jacea* L. (Asteraceae) (Vladivostok, Russia).

A.G. Kiselyova. Modern coniferous species diversity on islands of Primorskii Krai.

N.K. Kozhevnikova, M.L. Burdukovskii, P.A. Perepelkina, et al. Relation of natural waters chemical composition to the Sikhote-Alin forest ecosystems diversity.

SEPTEMBER 18

SESSION 1

(9:00–13:00, Moderator: Mikhail Yu. Shchelkanov)

A.S. Lelej, S.Yu. Storozhenko. Insect biodiversity of the North Pacific area.

Y. Guo. Research on Crane Migration in Asia based on GPS-GSM tracking.

G.V. Roslik, O.P. Valchuk, K.S. Maslovsky. A kariological study of Siberian Rubythroat *Calliope calliope* (MUSCICAPIDAE, AVES) from the Primorye Territory.

D. Irinyakov, O.P. Valchuk, K.S. Maslovsky, et al. Long-term changes in autumn migration phenology of background bunting species based on banding data in the valley of Litovka river (South of Primorye)

V.Yu. Guskov. Genetic diversity and formation history of peripheral populations of two broadaraial species: Brown bear *Ursus arctos* Linnaeus, 1758 and Asian black bear *Ursus thibetanus* G. Cuvier, 1823.

Yu.A. Belov, E.G. Burukhina, T.V. Moskvina, et al. Wild boars (*Sus scrofa*) as the hosts and distributors of *Haemophysalis longicornis* and *Dermacentor silvarum* ticks.

D.A. Derunov, A.R. Titova, T.V. Moskvina, et al. The morphology of the fur of Siberian tiger (*Panthera tigris altaica*).

11:00-11:20 Coffee break

T.V. Moskvina, E.N. Lubchenko, T.F. Homichuk, et al. Toxocarasis among domestic dogs in Vladivostok: a longitudinal study.

N.S. Sulikhan, M.B. Shedko, L.V. Zheleznova, et al. Molecular identification of Far Eastern leopard pathogens: *Spirometra* case

- M.Yu. Shchelkanov**, S. V. Aramilev, P.V. Fomenko, et al. Far Eastern Bank of biological materials as an improvement tool for the protection of big cats (Pantherinae).
- K.S. Vainutis**. The Phylogenetic relationships of the family Allocreadiidae Looss, 1902 with other representatives of superfamily Allocreadioidea Nicoll, 1934.
- Yu.V. Tatonova**, G.N. Chelomina, H.M.Nguyen, V.V. Besprozvannykh. Features of variability in the ITS1 region of *Clonorchis sinensis* (Trematoda: Opisthorchiidae).
- T.T. Tran**, Q.-L.N. Le, L.A. Prozorova, X.Q. Ngo. Nematode communities in up-stream and downstream of the dam on Ba Lai River (Mekong Delta, Vietnam)
- M.B. Shedko**, A.V. Ermolenko, N.L. Aseeva. Rare and poorly studied species of parasites of cyprinid fish from the Primorye Territory.

13:00–13:40 LUNCH

SESSION 1

(13:40–17:00, Moderator: Arkady S. Lelej)

- M.Yu. Shchelkanov**, V.G. Dedkov, K.F. Khafizov, et al. Molecular-genetic identification of two Paramushir virus (Bunyavirales, Nairoviridae, Orthonairovirus) strains isolated on the Tyuleniy Island in the Okhotsk Sea.
- M.N. Dunaeva**, K.A. Sharshov, I.A. Sobolev, et al. North–Eastern Asia as a modern genetic subgroup generation center for highly pathogenic avian influenza A/H5 viruses (Orthomyxoviridae, Influenzavirus A).
- Yu.G. Volkov**, N.N. Kakareka, Z.N. Kozlovskaya, M.Yu. Shchelkanov. Variety of viruses affecting natural flora of North–Eastern Asia.
- V.F. Tolkach**, T.I. Pleshakova, N.N. Kakareka, M.Yu. Shchelkanov. Variety of viruses affecting vegetable crops in the Far East.
- T.I. Pleshakova**, N.N. Kakareka, M.V. Sapotskiy, et al. Variety of viruses affecting cereals in the Far East.
- M.Yu. Shchelkanov**, T.V. Moskvina, E.M. Shchelkanov. *Antarctophthirus nevelskovii* – a new species of Echinophthiriidae lice found in the Northern fur seal.

15:00-15:20 Coffee break

- L.A. Prozorova**, K.V. Fomenko. Land snail species new for Primorye Territory and Russian malacofauna.
- L.A. Medvedeva**, T.V. Nikulina. Diatom diversity of the southern part of the Russian Far East.
- T.S. Vshivkova**, A.A. Nikolayeva. A new record of *Brachypsyche sibirica* (Martynov, 1924) (Insecta: Trichoptera, Limnephilidae, Limnephilinae, Chilostigmini) from Kamchatka Peninsula, Far East of Russia.
- L.A. Prozorova**, K.A. Lutaenko, V.V. Bogatov, et al. Mangrove mollusk fauna of the Kien Giang Province in the Mekong River delta (South Vietnam).

SEPTEMBER 20

SESSION 2. BIODIVERSITY CONSERVATION AND REPRODUCTION OF BIOLOGICAL RESOURCES

(9:00–13:00, Moderator: Vyacheslav Yu. Barkalov)

- A. **Borzée**. How can Korean urbanised landscapes preserve amphibian biodiversity?
- I.M. **Rodnikova** et al. Species and environment diversity on islands of Primorskii krai: land use impact and implications for biodiversity conservation.
- T.Yu. **Epifanova**. The perspective of restoration of the wild Manchurian Apricot (*Armeniaca mandshurica* (Maxim.) Kostina) in the Primorye Territory by seed renewal.
- A.V. **Micheeva**. Features of micropropagation of the *Andromeda polifolia* L.
- L.A. **Sibirina**, G.A. Gladkova Problems of *Taxus cuspidata* restoration and natural regeneration in the Udege Legend National Park territory.
- T.P. **Orekhova**, O.K. Barkalova. Results of experiments on microclonal propagation the Far Eastern species of poplars.
- V.N. **Bocharnikov**. Wilderness concept for Kamchatka first landscape inventory and of large integrated mountain and forest ecosystems in conservation issues.

11:00-11:20 Coffee break

- K.A. **Drozdov**, O.D. Demina. East Russia Integrative Herbal Medicine/Phytotherapy and DNA Database
- A.V. **Gapeka**, N.N. Kakareka, Yu.G. Volkov, et al. Barley stripe mosaic virus (Virgaviridae, Hordeivirus) as biological threat for agricultural crop in the Far East.
- O.M. **Grigoryan**, T.V. Moskvina, M.A. Begun, et al. Sulfated galactans from *Rhodophyta* – a perspective drug against demodecosis.
- N.N. **Kakareka**, Yu.G. Volkov, V.F. Tolkach, M.Yu. Shchelkanov Russian collection of viruses from East Asia as an element of biological safety ensuring.

POSTER SESSION

- The posters have to be in **portrait** (upright) format and should not exceed the following dimensions: 59 cm width, 84 cm height (ISO A1, ANSI D).
- J. **Altman**, et al. Climatic changes and their links to global processes investigated through tree–ring reconstruction based on *Pinus koraiensis* trees from the Russian Far East (North–East Asia).
 - V.V. **Antropova** The ecological state of *Cypripedium calceolum* L. in protected landscape «Gornoye Zadelye» of Mari El Republic.
 - I.V. **Balan**, M.O. Sharyi-ool Biodiversity of small freshwater bivalves (Mollusca: Pisidioidea) of the Khingansky State reserve (Amur Region, Russia).
 - H. **Chen**, et al. Proteomic analysis of the secreted proteins from thermoacidophilic archaeon *Sulfolobus acidocaldarius*

- A.S. Dubrovina**, et al. The diversity and transcriptional responses of the calcium sensor genes of wild-growing grapevine *Vitis amurensis* Rupr.
- T.Yu. Epifanova**. Analysis of the coppice resumption of Manchurian apricot natural habitats in the south of the Far East.
- J.-X. Ji**, Z. Li, Y. Li, M. Kakishima. Taxonomic and ecological diversity of *Puccinia* species on Gramineae and Cyperaceae in Jilin, China, clarified with morphological and molecular analyses.
- T. Kasuya**, et al. Circumpolar macrofungi of alpine and subalpine forests in Japan.
- K.V. Kiselev**, et al. The diversity of valuable stilbenes in the Russian Far East flora.
- P. Komin**. Cultivation of *Lentinula edodes* on sawdust of coniferous trees.
- D.E. Konyushkov**, et al. Soils of the Far East in the new Russian Soil Classification System on the updated version of the Soil Map of Russia (1 : 2.5 M scale).
- L.A. Latysheva**. The influence of fires on the properties of burozems of Russky Island.
- P. Liu**, et al. Biodiversity of dictyostelids in high-elevation habitats on the Qinghai–Tibet Plateau, China.
- S. Liu**, et al. A new species in Physaraceae, *Craterium yichunensis*, and a new record for *C. dictyosporum* in China.
- I.V. Maslova**. The current state of Dybowski's frog farming in China and Russia.
- V.Yu. Nikulin**, et al. Ribotypic diversity and structural features of the internal transcribed spacer (ITS) for representatives of the genus *Rhodiola* L. (Crassulaceae)
- B.S. Petropavlovsky**, L.A. Mayorova. Forest typological diversity of the Primorye Territory.
- L.A. Prozorova**, et al. New for the Mekong Delta and Vietnam fauna mollusk families
- L.N. Purtova**, L.N. Shchapova. Influence of phytomelioration on humus state and microflora of agrodark humus–gley soils in Primorye.
- M.O. Sharyi-ool**. Biodiversity of small freshwater bivalves (Mollusca: Bivalvia: Pisidioidea) of the Upper Yenisei River basin.
- Y. Sun**, et al. Endophytic fungal community and succession of *Tamarix ramosissima* cultivated in Jilin, China.
- A.N. Voronova**, G.N. Chelomina. Geographical and host-specific distribution of the genetic diversity in troglotrematids.
- I-C. Yang**, S.-L. Huang. Disinfectant–resistant bacteria enriched on cleaning tools in a bacteriology laboratory in Taiwan: with a special reference to surfactant- and antibiotic-resistant *Acinetobacter* strains.
- B. Zhang**, Y. Li. Taxonomy and Molecular Phylogeny of Stemonitidaceae (Myxogastrea) from China.

SEPTEMBER 21

SESSION 3. SOIL BIODIVERSITY AND AGRICULTURE

(9:00–13:00, Moderator: Yana O. Timofeeva)

- Sh.R. Abdullin.** Cyanobacteria, algae and cyanobacterial–algal coenoses biodiversity in the caves Primorskij Velikan and Belyj Dvorec (Primorye Territory).
- L.A. Gaysina,** M. Eliaš, A.A. Gontcharov. Biodiversity of algae and cyanobacteria in volcanic soils near Mutnovsky and Gorely volcanoes (Kamchatka peninsula)
- A. Boyko.** Changes in microorganism abundance involved in nitrogen cycle under the influence of long-term fertilizers addition.
- S.-L. Huang,** M.L. Sidorenko, K.C. Hoang, et al. Analysis of secretome and identification of useful enzymes from *Pseudomonas japonica* isolated in Russia.
- M.L. Sidorenko.** Ammonia-oxidizing bacteria respond to multifactorial global change.
- T.I. Mukhina,** B.F. Pshenichnikov, N.F. Pshenichnikova. Parasitic nematode species diversity in burozems of continental islands of Peter the Great Gulf (Sea of Japan).
- S.V. Klyshevskaya.** Heavy metals content in the soils of broad-leaves forests of Primorye Territory.

11:00-11:20 Coffee break

- M.L. Burdukovskii,** I.V. Kiseleva, P.A. Perepelkina, YU.A. Kosheleva. Changes in the physical properties and the humus content of fallow soils in Primorye Territory.
- A.A. Golyeva, **L.A. Matyushkina,** G.V. Kharitonova, N.S. Konovalova. Silica phytoliths in the meadow soils of the Mid-Amur lowland.
- Yu.A. Kosheleva,** Ya.O. Timofeeva. Potentially toxic elements (Sr, V) contents in undisturbed natural soils: Shelikhov Bay coast, Russian Far East.
- E.A. Zharikova.** Changes in Potassium Status at the Mineral Fertilizers and Lime Application.
- R.A. Makarevich,** L.A. Latysheva. Geochemical composition of the mortmass as a criterion for monitoring the status of biocenoses on the Russky Island.
- L.A. Matyushkina,** V.B. Kalmanova. Diversity of soil of the Jewish Autonomous Region and the use in agriculture (Russian Far East).

13:00–13:40 LUNCH

SESSION 3.

(13:50–17:00, Moderator: Marina I. Sidorenko)

- O.V. Polokhin.** Properties of Soils of Islands of the Greater Kuril Ridge.
- I.V. Kiseleva.** Specific of humus composition of Burozem of Lazovsky Nature Reserve (Primorye Territory, Russia).
- B.F. Pshenichnikov, N.F. Pshenichnikova.** Morpho-chemical diversity and taxonomy of burozems in Peter the Great Gulf islands (Primorye Territory, Russia)
- L.N. Purtova.** To an estimation of the humus status in the soils of natural and agrogenic landscapes in Southern Regions of the Russian Far East.
- Ya.O. Timofeeva.** Effects of long-term fertilizer applications on accumulation of Co, Cu, Ni, and Pb in soil iron–manganese nodules.
- S. Korovitskii, L.B. Marchesini, V. Tregubova.** Seasonal dynamics of greenhouse gas fluxes by soils of Russky Island.

15:00-15:20 Coffee break

- D. Vzorova, K. Korznikov, V. Tregubova.** Study of the processes of soil formation on the substrata of mud volcanoes (on the example of the volcano Maguntan, Sakhalin Island).
- A.D. Popova, V.A. Semal.** Biochar: sources, properties, and applications.
- Yu.A. Kolesnikova, V.A. Semal.** Influence of biochar on population of soil.
- M. Bovsun, O.V. Nesterova.** The composition and properties of biochar for use on agricultural land in Primorye Territory.
- D.I. Karpova, O.V. Nesterova.** The possibility of using humates different origin as a component of the culture medium for experiments.

CLOSING OF THE CONFERENCE