

Konferenz / Conference

IV. International arachnological conference: the first meeting of Russian-speaking arachnologists in the online format

The first conference of Russian speaking arachnologists (Soviet at that time) took place at the Zoological Institute of the USSR Academy of Sciences (Leningrad) in 1984. At that meeting, on the initiative of Prof. Victor P. Tystshenko and Vladimir I. Ovtcharenko, an Arachnological section of the All-Union Entomological Society (now the Russian Entomological Society) was organized. The first meeting was followed by the arachnological conferences in Perm (1988) and then Alma-Ata (1992) where the section was transformed into the Eurasian Arachnological Society. Since then, meetings of Russian speaking arachnologists have been held only as arachnological sections at congresses of the Russian Entomological Society: in 2007 (Krasnodar), 2012 (St. Petersburg) and 2017 (Novosibirsk). In 2020, Yuri M. Marusik initiated the revival of the tradition of holding separate meetings for Russian speaking arachnologists. On 13.–25. Feb. 2021, after a 29-year interruption, the fourth conference was held; this time in online format due to ongoing coronavirus restrictions. The conference was dedicated to the 50th anniversary of the publication of the first spider manual for the European part of the USSR by V. P. Tystshenko, the book that strongly influenced the growth of arachnological studies in the Soviet Union in the 1970s to 1980s.

The 2021 conference was organized by Y. M. Marusik (Institute for Biological Problems of the North, Magadan), who headed the organizing committee, Artem N. Sozontov (Institute of Plant and Animal Ecology, Yekaterinburg) and Anna A. Nekhaeva (Severtsov Institute of Ecology and Evolution, Moscow). The organizing committee also included Kirill G. Mikhailov (Zoological Museum of the Moscow State University, Moscow), Olga L. Makarova (Severtsov Institute of Ecology and Evolution, Moscow), Tatyana S. Oslina, Maxim P. Zolotarev (Institute of Plant and Animal Ecology, Yekaterinburg), Victor Y. Fet (Marshall University, Huntington, USA), and Svetlana A. Shirobokova (St. Petersburg State University, St. Petersburg). Galina N. Azarkina (Institute of Systematics and Ecology of Animals, Novosibirsk) created the conference logo (Fig. 1), depicting different representatives of Arachnida and demonstrating the variety of research objects within arachnology.



Fig. 1: Conference logo (design by G. N. Azarkina)

The Conference continued the traditions established by Soviet arachnologists in the 20th century, but was run online for the first time. In total, 87 arachnologists were formally registered, but the actual number of the participants exceeded a hundred. Among them two of the largest publishers of biological/taxonomic literature in Eastern Europe attended: Lyubomir D. Penev from Bulgaria and K. G. Mikhailov from Russia. The geography of participants covered the entire Northern Hemisphere, from the western coast of North America to the coast of the Sea of Okhotsk and Sakhalin Island (Fig. 2). Arachnologists from 17 countries attended the conference: Russia, Azerbaijan, Armenia, Belarus, Bulgaria, Canada, Croatia, Finland, Georgia, Germany, Kazakhstan, Latvia, Poland, Tajikistan, UK, Ukraine and USA. It was the first meeting with so many Russian speaking professional and amateur arachnologists attending and giving talks.

The conference program was divided into three days run on 13., 19. and 25. February. There was no clear division into sections (taxonomy, faunistic and biogeography, biology or ecology) due to time differences between the participants. However, the schedule was designed so that the participants from different time zones could attend at least one full day of the conference. Forty one talks (including nine plenary ones) were given. Each working day began with a welcoming speech from an eminent and respected arachnological colleague (see below).

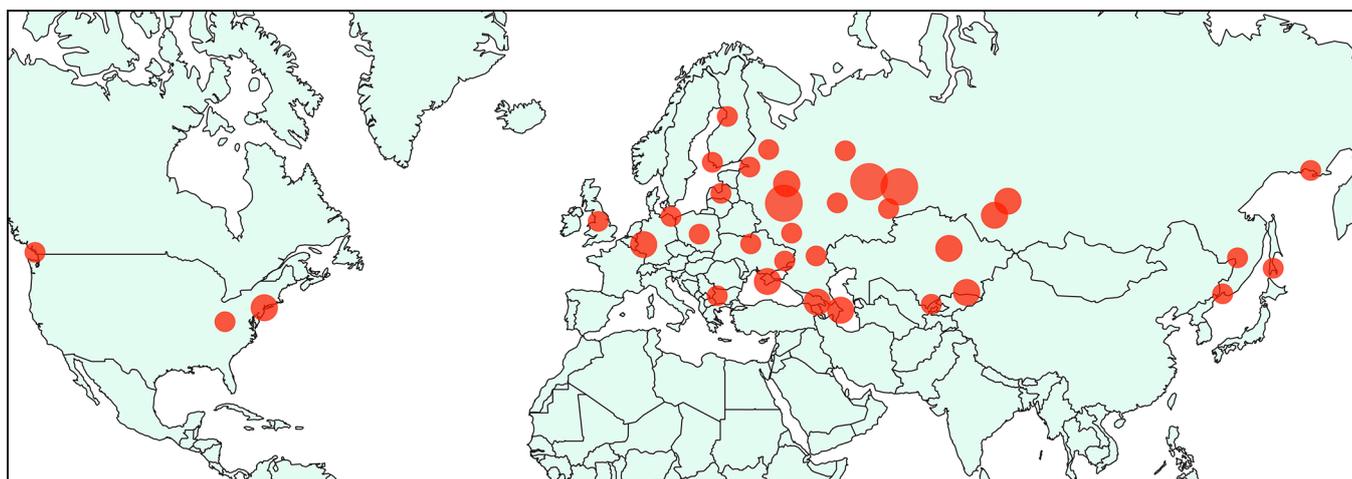


Fig. 2: The geography of the home places of the participants

The first day of the conference (13. Feb.) was opened by an honorary member of the Russian Entomological Society, Sepko Koponen (University of Turku, Finland). Yuri M. Marusik (Magadan) gave a plenary talk on unknown names in the history of Russian arachnology, followed by three talks devoted to molecular genetic arachnological studies by Vladislav V. Ivanov (Oulu, Finland), who presented novel data on the use of ddRAD (double digest restriction-site associated DNA) sequencing in the taxonomy of Lycosidae, Evgeniya A. Propistsova (Moscow), who talked about the phylogeny of the *Paradosa lugubris* species-group, and Stefan Otto (Tbilisi, Georgia and Leipzig, Germany), who presented the CaBOL project (the Caucasus Barcode of Life) and invited arachnologists to join it. There were two talks about mites and ticks: Mikhail S. Bizin (Moscow) reported on gamasid mites from the littoral zone of the Black Sea coast, and Victor E. Efimik (Perm) on the distribution of *Dermacentor* ticks in the Perm Region (Russia). Several talks presented results of regional faunistic and taxonomic studies (Zoya A. Kastygina, Mykola M. Kovblyuk and Ivan F. Valukh from Simferopol; Vasiliy V. Yanul from Kyiv; Sofia S. Sokolova from Miass; Alibi A. Kabdrakhimov and Sergei L. Esyunin from Perm). Rimma R. Seifulina (Moscow) discussed the need for a new identification key for spiders of European Russia, followed by Anastasia A. Akinfiyeva and S. L. Esyunin (Perm) who talked about the role of spiders in frog diets, and Daniil V. Osipov (Moscow) who presented methods of resuscitation of tarantulas in captivity. At the end of the day, Viktor Y. Fet (Huntington, USA) gave a comprehensive and well-illustrated overview of the current level of knowledge of the taxonomy and evolution of Scorpiones.

The second day (19. Feb.) began with a welcome from the President of the International Arachnological Society Wayne Maddison (University of British Columbia, Canada). Galina N. Azarkina (Novosibirsk) gave a nice talk on the basics of scientific illustration and preparation of drawings and maps for publishing. Vladimir M. Kartsev (Moscow) continued this topic and presented ideas and methods on how to photograph live spiders. Vladimir I. Ovtcharenko (New York, USA) reviewed the spider fauna of Gnaphosidae in Australia and New Zealand, in which he suggested using additional structures (e.g. trichobothria, tarsal organs, setae and scales, spinnerets) in diagnosing gnaphosid genera. Two reports were devoted to Arctic spiders: Olga L. Makarova (Moscow) talked about spiders of the polar deserts occurring at thermal limits in the Arctic, and Anna A. Nekhaeva (Moscow) on the diurnal activity of spiders in a polar day. Artem N. Sozontov (Yekaterinburg) presented functional aspects of the biodiversity and modern approaches to its study. Maxim S. Galuta (Novosibirsk) announced his PhD taxonomic projects on spiders of the genus *Pseudicius* (s. lat.). One more report was dedicated to a faunistic study (Semyon V. Vlasov, Perm). The second day of the conference ended with four plenary presentations. Yuri M. Marusik (Magadan) highlighted the key points in preparing and submitting taxonomic papers. Kirill G. Mikhailov (Moscow) reviewed arachnological collections in Russia and adjacent countries, estimated their approximate sizes, described the principles of storage and indicated threatened/lost private spider collections in the area of the ex-USSR. Natalia V. Ivanova (Pushchino) presented the global biodiversity information facility (GBIF) for arach-

nological studies providing new opportunities for free, open access to their data. Lyubomir D. Penev (Sofia, Bulgaria) continued this topic by talking about the independent value of primary data, importance of their publication and the stages of preparing “data papers”.

The last day (25. Feb.) began with greetings from the President of the European Arachnological Society Gabriele Uhl (University of Greifswald, Germany). Then Y. M. Marusik and S. L. Esyunin discussed terminological problems of the spider copulatory organs and sclerites. Two plenary talks were devoted to Solifugae (Alexandr V. Gromov, Bingen am Rhein, Germany) and Pseudoscorpiones (Vasiliy B. Kolesnikov, VNIISS); a separate presentation by Ilya S. Turbanov (Borok) was devoted to hypogean false scorpions of the Crimea and the Caucasus. Two talks were devoted to Salticidae: G. N. Azarkina (Novosibirsk) presented an overview of the world Aelurillina, and Maciej Bartos (Łódź, Poland) introduced the audience to the vision system of the jumping spiders and its functionality during hunting. Dmitri V. Logunov (Manchester, UK) reported on the spider collections of the Manchester Museum containing notable materials from the territory of the ex-USSR. The talks by Elena V. Prokopenko (Donetsk) and A. A. Nekhaeva (Moscow) were devoted to harvestmen of the Left-Bank Ukraine and spiders of Kamchatka, respectively. Maxim P. Zolotarev (Yekaterinburg) talked about the long-term dynamics of ground-dwelling arachnids in dark coniferous forests of industrial polluted areas. Yet, on this day, a special seminar was held, with Alexandr A. Fomichev reporting on his future PhD thesis entitled as “Gnaphosid spiders of the Altai Mountain country: taxonomy, faunistic and zoogeography”. This report stimulated a discussion, which resulted in the idea of organizing such seminars for PhD students in the future.

The organizers tried to bring the online meeting as close to traditional face-to-face conferences as possible, and hence the participants had plenty of opportunities for informal communication. Every day, after the end of the official part, participants stayed online being involved the so-called ‘evening program’, in which they were able to communicate in flexible micro-groups in the same way as it usually happens at conferences. Preparation of illustrations, maps, papers, methods of storing and processing data were among the most discussed topics. In our opinion, this indicates the need for the preparation of methodological manuals and events for sharing and exchanging experience, such as workshops and masterclasses. Hence, in May 2021, A. N. Sozontov organised a YouTube livestream devoted to the basics of working with the R-software environment for the participants of the conference. We hope that this event will be the first of many, and the same/similar practice will continue in the future.

The conference materials, including abstracts, video recordings and PowerPoint presentations, have been posted on the website of Institute of Plant and Animal Ecology (IPAE) and are free to access (http://ipae.uran.ru/ArachnoMeeting_2021). Although the conference was in Russian, many participants prepared slides for their presentations in English.

Most participants agreed that the first experience of holding the online conference could be considered a success. Despite the time difference, which reached 16 hour zones between some participants, an exchange of ideas between

experts and budding arachnologists proved to be effective and productive. Besides, the online format of the conference showed its advantages over traditional meetings: e.g. it took less time to be organized, more specialists managed to get together and, more importantly, thanks to the financial support of the KMK publishing house (Moscow) and the Institute of Plant and Animal Ecology (Yekaterinburg), it turned out to be free for all participants.

The conference indicated the need for further development of academic research across all fields of the arachnology. Based on the results of discussions undertaken during the conference, we agreed:

- to hold such meetings regularly and to involve English speaking participants;
- to recommend the publishing of all primary biodiversity digital data in public repositories, following international standards for this data type;
- to organize online approbation seminars for all arachnologists approaching their PhD viva.

The next and hopefully face-to-face meeting of the Russian speaking arachnologists is planned within the arachnological section at the 16th Congress of the Russian Entomological Society, which will be held by the Lomonosov Moscow State University (Moscow) 22.–26. Aug. 2022.

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