British Arachnological Society

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by Dmitri Logunov

Bulgaria, an important but yet in many ways relatively unknown country of the Balkans, hosted the 22nd European Colloquium of Arachnology (ECA). The Colloquium, organised by the Institute of Zoology (the Bulgarian Academy of Sciences), was held at the American University of Blagoevgrad (Fig. 1), a beautiful small town and the administrative capital of the Pirin Region in SW Bulgaria. It attracted 99 participants and 19 accompanying persons from 26 countries. Incidentally, the European nature of the arachnological colloquium was well extended as far south-east as Turkey and also included participants from India – for the first time there were participants from the Niğde University of Turkey (the research group of Dr A. Topçu) and from the Division of Arachnology of the Sacred Heart College in Kerala.

I travelled to Bulgaria with my family and other colleagues in the 'Manchester party', Dave Penney, Emma Shaw and Sue Bennett, on 31st of July, i.e. the day before the official start of the Colloquium. Philip Pearson from Norwich joined us in Sofia. As most of the participants were arriving on the same day, we started reuniting with old friends in Frankfurt airport, where we all had to change planes or begin our journey to Sofia. More colleagues were met in Sofia airport and, as a result, a scheduled public bus from Sofia to Blagoevgrad was half-packed with Colloquium participants from many countries. Thus, an unofficial part of the Colloquium had begun well before we were registered and settled into our rooms in the students' hotel in Blagoevgrad, which was about a 10 minute walk from the main venue.

Monday (1st August) began with a brief opening ceremony, including a welcome address by the dean of the American university and a few other officials, of whom it is worth mentioning Dr Petar Beron, now a politician and one of the fourth Vice Presidents of the Bulgarian Parliament, who not only supported the organisation of the colloquium (as a member of the organising committee) but also participated in it. The opening ceremony was followed by an invited lecture by Jean-Pierre Maelfait (Belgium) on monitoring the effect of nature development measures in coastal ecosystems in the vicinity of Brussels. I felt a little sleepy during this talk, but this was due to the intensive social programme we had instigated the previous evening in the hotel and town centre. The entire morning session concerned spider ecology and included five talks dealing either with different management practices in croplands (Ralf Platen, Germany), or with various aspects of human impact on spider communities, e.g. in salt



Figure 1. The American University of Blagoevgrad, the venue of the 22nd European Colloquium of Arachnology. © Yuri Marusik.

marshes of western France (Julien Pétillon) or along the pollution gradient caused by a smelter complex in Kola Peninsula (Seppo Koponen, Finland). This was followed by a comprehensive paper on the araneofauna of the Karst Mts in Slovakia given by Peter Gajdoš. The afternoon session continued with more ecological and ethological topics (seven talks altogether). I particularly remember the one, by Danny Vanacker (Belgium), on the relation between male dimorphism and sex ratio in Oedothorax gibbosus. While discussing the main subject, the author seemed to also pursue a sort of personal enigma included in his title as follows: "Why is it that every time I wake up the number of females in my bed is multiplied?" The question remained unanswered though. The ethology part of this session included a talk by Stano Pekár (Czech Republic), accompanied by video footage, on the predatory behaviour of Zodarion germanicum; it was shown that being a strict ant-eater this spider is most efficient in paralysing Formicinae ants. The afternoon session was concluded with talks on three experimental

studies: Emma Shaw (UK) on the effect of pesticide treatments on web-design of *Tenuiphantes tenuis*, Tom Gheysens (Belgium) on the cocoon construction of *Araneus diadematus*, and Holger Frick (Switzerland) on thermo-preferences of *Pardosa riparia*. Monday concluded with a gathering for the colloquium photo, followed by the welcome party in the evening, with an excellent buffet supper and lots of local beer and wine.

Tuesday opened with the morning session on palaeontology and evolution. This started with an excellent invited presentation by Jason Dunlop (Germany) on new ideas about arachnid origins. He suggested that sea spiders (Pycnogonida) are now seen either as basal Chelicerata or as a sister-group of all other Euarthropoda and that chelicerae can be homologous with the (a1) antennae as seen in some fossil arthropods. This talk was well-illustrated and properly balanced regarding the amount of discussed information and, to my mind, can be considered the best presentation of the colloquium. Well done Jason! The session continued with a critical review of 20 strictly fossil spider families by Dave Penney (UK), who, as I see it, presented a reasonable background in order to undertake a taxonomic revision of some fossil families in the future. This was followed by an interesting talk from Nuria Macías-Hernández (Spain) about molecular phylogeny of the genus Dysdera with regard to how it colonized the eastern Canaries. The remaining day sessions (eight contributions altogether) dealt with spider faunistics and diversity of various regions such as northern Ciscaspia in Kazakhstan (Tatiana Piterkina, Russia), three sites in the state of Kerala, India (A. V. Sudkhikumar and P. A. Sebastian, India) and two sites in Turkey (Aydýn Topçu, Turkey). Ferenc Samu (Hungary) provided a detailed introduction to the database they use for faunistic-ecological surveys and inventories in Hungary. Yuri Marusik (Russia) presented the current state of knowledge on the Caucasian spiders; to date, 886 species have been recorded or described from the region. This working day ended up with informal discussion of posters and with the presentation of the video-film 'This is Bulgaria' performed by the best ensembles of folk singers and dancers in Bulgaria. Tuesday evening concluded with a jolly beer party, followed by intensive, 'deep-into-night' socializing by most participants.

Although this colloquium did not have a dedicated poster session, discussion of posters was arranged twice, on the Tuesday and Thursday evenings, following the afternoon plenary sessions. In total, 36 posters were presented. Of those, I particularly remember the three posters by Valerio Vignoli (Italy) and co-authors; one of them dealt with a systematic revision of the scorpion family Superstioniidae, another was about the genus Butheoloides in Morocco, and the third considered species limits in the Euscorpius carpathicus complex. Poster presentations covered a great variety of subjects, from the zoogeographical status of Greenland by Yuri Marusik (Russia) and co-authors to oogenesis in araneomorph spiders by Gerd Alberti (Germany) and co-authors. There were several interesting taxonomic posters: e.g., new and poorly known taxa of the Palaearctic Theridiidae by Alexander Gromov (Kazakhstan); the taxonomic position of East Asian Ummidia species by Joachim Haupt (Germany); new, closely related species of Aelurillus by Galina Azarkina (Russia); Clubionidae of Papua New

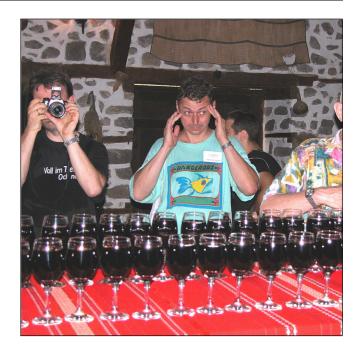


Figure 2. In the wine cellars of the Kordopulov House in Melnik: Christian Kropf (right) and Peter Jäger (left). © D. V. Logunov.

Guinea by Veerle Verstreit (Belgium) and co-authors. One cannot mention all of the other posters, but beyond doubt the entire poster session was a great success, as it generated intensive discussions between participants and resulted in developing useful research contacts. For instance, my poster on *Macaroeris* definitely helped me to obtain a lot of new comparative material on this genus from around Europe and the Mediterranean, so that a critical revision of the genus can be completed successfully.

The whole of Wednesday (3rd August) was devoted to an excursion to the Rozhen Monastery and the picturesque, tiny town of Melnik famous for its wines. Both are situated in the hilly region of the southern Pirin Mts, with a strange landscape of tall (up to 100 m high) pyramid-shaped, sandstone formations. The Rozhen Monastery is one of Bulgaria's oldest foundations, dating back to the twelfth century, and is dedicated to the 'Mother of God's Nativity'. Inside the monastery's church, I was most impressed by a magnificent wooden iconostasis, richly decorated with carved flowers, birds, fish and flounces. I have never seen a better piece of woodcarver's art. Despite the rather hot weather on the day of the excursion, many participants, especially the eager collectors such as Alexander Gromov (Kazakhstan) and Robert Bosmans (Belgium), were keen to collect spiders. Others, including myself, decided to do some trekking along the trail over hills from the Rozhen Monastery to Melnik (c.6.5 km), where we finally joined the main party that arrived by coach. After lunch we went to the Kordopulov House, which was built upon a rock by a rich local merchant in 1754. The house is famed for its underground wine cellars, with huge wooden barrels, occupying vast caverns connected to the vineyards by a network of tunnels. In the cellar, each participant was offered a glass of delicious red wine (mellow Melnik; Fig. 2) to toast the success of the colloquium. The excursion

day concluded successfully with the already traditional Russian party at the hotel. This tradition was started by Yuri Marusik (Russia) in 1994, during the 15th European Colloquium in České Budějovice, and includes tasting smoked wild salmon brought from Magadan (the Russian Far East) and a variety of top-quality, authentic Russian and Ukrainian vodkas. As usual, the Russian party entertained a large number of delegates, many of whom (e.g. Gernot Bergthaler, Austria) came along with additional offerings of their own national, strong spirits, like schnapps.

Following the enjoyable excursion day, we resumed our work on Thursday. The morning session on systematics and evolution opened with an invited talk by Matjaž Kuntner (Slovenia), who reported original results of a large, six-year systematic and phylogenetic study of the subfamily Nephilinae; it was shown that the nephilines form a sister-group to the remaining araneoids. The next talk, by Peter Jäger (Germany), dealt with the problem of evolutionary lengthening of the copulatory organs in Sparassidae, discussed in terms of their structural design, with lots of interesting observations and empirical conclusions. The paper by Rudy Jocqué (Belgium) was devoted to the genus Pseudocorinna and initiated a discussion with regard to generic criteria in spider taxonomy. The author is firmly of the opinion that genera cannot be diagnosed purely on genitalic characters, and I partly agree with this, but on the other hand diagnoses based only on somatic characters ('somatic templates' sensu Rudy) might also be misleading, and besides it is not applicable for all spider groups. Other taxonomic papers covered a number of groups, such as European Tegenaria (Angelo Bolzern, Switzerland) and Atypus (Milan Řezáč, Czech Republic), SE-European Zodarion (Robert Bormans, Belgium), Alopecosa of the Canaries (Nayra Txasko, Spain), to name but a few. The talk by Yuri Marusik (Russia) on the conformation of the copulatory organs of Lathys also seemed to generate general interest. Using large, hand-made models of the Lathys palp, Yuri discussed not only its detailed structure (with a number of structures, which were hitherto mistakenly coded), but also possible mechanisms of its functioning during copulation.

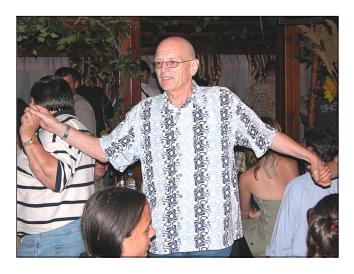


Figure 3. Christo Deltshev, the organizer of the Colloquium, is dancing 'horo'. © D. V. Logunov.



Figure 4. The Rila Monastery, the finest and most famous in Bulgaria. © D. V. Logunov.

The Colloquium dinner was organised in one of the folk-restaurants in the vicinity of Blagoevgrad on the Thursday evening. We were treated to traditional delicacies such as a variety of mixed salads and traditional grilled meats served with fried vegetables and potato, and of course, accompanied with generous amounts of Bulgarian red wine and beer. Of the events, unusual for EAC, one can mention the 'horo', a traditional round dance of Bulgaria and Macedonia, in which almost half of the participants were involved (Fig. 3) (but actually, everyone should have been involved). Truly, there were no unhappy people that evening.

Friday (5th August) morning started with a session on biogeography, and Carles Ribera (Spain) introduced us to a large research programme regarding spider biodiversity of the Canary Islands, being undertaken in his department. The main focus of their current efforts lies in exploring the genesis of the spider fauna and its diversity in the Canaries. This general talk summed up a number of particular studies devoted to specific spider groups that were also presented during the Colloquium. For instance, after the coffee break, D. Dimitrov (Spain) reported on one such project dealing with the colonisation and radiation of the genus Pholcus in the Macaronesian islands. Two of the subsequent talks demonstrated the effectiveness of modern molecular-biological approaches in contemporary arachnological studies: Christoph Muster (Germany) examined the congeners of the Pardosa saltuaria group and suggested that the species with arctoalpine disjunct ranges are of 'multiglacial origin' rather than descendants of a single ancestor widespread in the late Pleistocene; Miquel Arnedo (Spain) reported on the population structure of Macrothele calpeiana, trying to reveal the origin of particular populations and to elucidate the conservation value of this species. The Friday sessions also included some taxonomic talks: Léon Baert (Belgium) provided a detailed account of distinguishing the three *Hogna* species from the Galápagos Islands; Vladimir Ovtsharenko (USA) gave two presentations on the subfamily Zelotinae and the genus Taieria from Australia. Pedro Cardoso (Portugal) discussed the best seasons (May and June, in his opinion) to collect spiders in the Mediterranean. In the afternoon, faunistics was the

theme, and presentations were devoted to areas as diverse as the steppe habitats of the left bank of the Dnepr River in Ukraine (Nina Polchaninova, Ukraine), the Nimba Mts in Guinea (Christine Rollard, France), the national park 'Mercantour' in the French Alps (Christophe Herve, France), and the Vel'ka Fatra Mts in Slovakia (Jaroslav Svatoň, Slovakia).

The Friday afternoon ended with the General Assembly to consider the problem of the ECA website, the all-European list of spiders, distribution of the ECA Proceedings, and other matters. In a brief address, Peter van Helsdingen (the Netherlands) commemorated our friend and colleague, Prof. Konrad Thaler (Austria), who passed away untimely several weeks before; may his memory live forever among fellow-arachnologists. Eric Duffey (UK) and Jerzy Prószyński (Poland) were elected as Honorary Members of the European Arachnological Society, making a total of eight honorary members. Six new ordinary members were accepted to the EAS. The Closing Ceremony included presenting prizes, which this time were nice watercolour paintings of spiders, for the best poster and paper presented by young arachnologists. The prize for best poster went to Sandra Öberg (Sweden), who studied spiders and carabid beetles of Swedish spring sown cereals as generalist predators and analysed their composition, migration and efficiency in pest control (e.g. of aphids). The prize for best talk went to Nuria Macías-Hernández (Spain) for her presentation on the molecular phylogeny of *Dysdera* of the Canaries. Traditionally, the Closing Ceremony ended up with the singing of Pierre Bonnet's arachnological anthem by ECA delegates. It was finally decided that the next ECA will be held in Barcelona during the first week of September 2006.

The programme of excursions for accompanying persons, as my wife reliably informed me, was also very interesting. It started with seeing the historic sights of Blagoevgrad, including the Museum of Local Lore, History and Economy and the Nature Reserve in the town's vicinity, and then continued with a trip to Sofia,



Figure 5. A group of delegates in front of the cave 'Devil's Throat', in the Trigrad gorge. From left to right: Jean-Pierre Maelfait, Danny Vanacker, Léon Baert, Marij Bosmans (front), Philip Pearson, Lutgarde Maelfait (front), Rudy Jocqué, Robert Bosmans, Alain Canard, Geneviève Canard, Dmitri Logunov (front), Alexandra Lazarova, Stoyan Lazarov, Joachim Haupt. © D.V. Logunov.

where associate members visited the excellent Archaeological and Ethnographic Museums, the capital's striking cathedral of Alexander Nevski, and excavations of the Thracian settlement of Sedica founded here in the 2nd century.

After the official conclusion of the Colloquium, some colleagues stayed on in Bulgaria to collect spiders for a week or two. Of those, Yuri Marusik (Russia) and Alexander Gromov (Kazakhstan) carried out a really intensive survey in the vicinity of Banya village (near Bansko) and many other localities, resulting in some 200 species collected, with a number of new records for the Bulgarian spider fauna, such as the genus *Brommella*, a theridiid (*Theridion innocuum*), etc. The complete results of this survey will be published elsewhere.

Others (28 people altogether) stayed on for a postcolloquial excursion. During four days we visited plenty of fascinating destinations in Bulgaria and there was a great deal to discover and marvel at. Firstly, we visited the Rila Monastery, the most visited monastic foundation in the country, founded in 1335. The monastery is surrounded by beautiful pine- and beech-covered mountains (Fig. 4), and its mighty walls give it the appearance of a fortress. Christian monasteries and churches, which are still numerous in Bulgaria, have always played a role as spiritual centres, helping Bulgarians to keep their own language, culture and strong sense of national identity. Then we briefly visited the Pirin National Park situated in Bulgaria's wildest range (Pirin Mts) and enjoyed views of wild nature, of coniferous and deciduous mountain forests, and also saw the oldest, as they claim, pine-tree of the Balkans, viz. Pinus leucodermis reputed to be 1300 years old and with a diameter of 7.8 m. This was followed by visits to the Roman Theatre in Plovdiv; to the stunning deep Trigrad gorge and the stupendous cave called 'Devil's Throat' (Fig. 5); to the roses' valley and the Thracian tomb at Kazanlak; to the historical Shipka Pass and war memorials on its summit; and so on. It is impossible to share all the impressions each of us generated. But I am sure that everyone who took part in that trip will always remember those days we spent travelling by coach along the picturesque mountain roads of the Rhodopes, accompanied all the way by Bulgarian national folk music.

The whole Colloquium was very well organised and our sincere thanks for such splendid organisation go to Prof. Christo Deltshev and the organising committee. Stoyan and Alexandra Lazarov are thanked wholeheartedly for taking care of us during the post-colloquial excursion; Stoyan is a mine of information about the history of Bulgaria and we learnt a lot from him. Our thanks also go to Vlada Peneva, Rayka Ivanova and Alexandr Pulev, who helped a group of associate members with their excursion programme.

My family, Dave Penney, and I spent ten additional days in Bulgaria, and this extension, together with the colloquium week, made it a great, ever-lasting memorable experience for us all. Fantastic wild nature, friendly and hospitable people, and the delicious Bulgarian cuisine and wine. But the moment of farewell has come: 'Dovizhdane' Blagoevgrad, and 'Hola' Barcelona.

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