Papers and Proceedings of the

John Murphy and Mike Roberts Memorial Symposium

held online on December 3, 2021

Edited by Dmitri Logunov

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FOREWORD

It was with great sadness that the British Arachnological Society (BAS) heard of the deaths of two of Britain's arachnological giants, John Murphy and Dr Mike Roberts, early in 2021. Both were long-time Honorary Members of the Society and had made major contributions to our understanding and identification of spiders both here and internationally. John, and his wife Frances, were instrumental in encouraging and nurturing many of the arachnologists active in Britain today and collaborated with international figures in furthering the taxonomy of spiders, particularly those from the Far East. Frances was an inspirational and memorable, if somewhat daunting, tutor on training courses, and pioneered techniques for rearing and photographing spiders in captivity. More recently, John, in collaboration with Mike, produced two major taxonomic works published by the BAS, *Gnaphosid Genera of the World* (2 vols, 2007) and *Spider Families of the World* (2 vols, 2015), with John supplying the text and Mike the superb drawings.

Mike is perhaps best known for his magisterial *Spiders of Great Britain and Ireland* (3 vols, 1985, 1987), still the go-to identification guide, and his influential *Collins Field Guide to Spiders of Britain and Northern Europe* (1995), a volume that opened up spider identification to new generations of arachnologists. Mike also was enthusiastic about passing on his knowledge and ran highly successful and long-remembered field courses.

This symposium was organised by the BAS to mark and commemorate the lives and contributions of John and Mike. It took place on 3 December 2021 via Zoom. Topics included the origins of spiders in the geological record, how to measure spider diversity, revisions of certain genera and higher classifications, and spider phylogeography. Many of the presentations, of course, referred back to the pivotal role played by John and Mike in advancing their areas of arachnology. We also celebrated the work of Frances, who died in 1995, with two papers dedicated to the contributions of women to arachnology in Britain and more widely.

This memorial *Festschrift* contains most of the symposium presentations and some additional contributions. Recordings of the talks can be found on the BAS YouTube channel (via https://www.youtube.com/c/BritishArachnologicalSociety/playlists).

Finally, many thanks to the small team who organised the symposium: Jan Beccaloni, Dmitri Logunov, Paul Selden, Danni Sherwood and Helen Smith, and particularly to Dmitri (Programme Organiser) and Danni (Technical Organiser). Thanks also to Richard Gallon for technical advice and to Alan Cann who skilfully edited the video files.

Geoff Oxford

Past President British Arachnological Society

The present *Festschrift* has resulted from the memorial symposium organized by the British Arachnological Society and dedicated to two notable British arachnologists: John A. Murphy (1922–2021) and Michael J. Roberts (1945–2020). The symposium was run in online format and took place on 3rd December 2021. A total of 149 participants (excluding speakers and technical staff) from 39 countries attended the symposium. The programme included 15 talks of the speakers from eight countries. This memorial *Festschrift* contains eight papers based on symposium presentations and 16 additional contributions. Four speakers did not submit papers based on their talks, but instead submitted different taxonomic contributions.

The content of the *Festschrift* is organized in two sections: *People and Spiders* and *Taxonomy*. The former contains eight essays devoted to notable British arachnologists, their scientific legacy and role in promoting arachnological affairs in the UK and beyond. As a special tribute to Frances Mary Murphy (1926–1995), the wife and faithful companion of John Murphy and a notable British arachnologist herself, a special attention is paid to the role of women in modern arachnology. The section *Taxonomy* consists of 16 review and alpha-taxonomic papers. Almost every contribution contains new taxa dedicated to John and Frances Murphy and to Michael Roberts, in gratitude to their lifelong dedication to spiders and the importance of their own taxonomic research.

The section *People and Spiders* begins with the essay by Dmitri Logunov (Manchester, UK), who has summarized the biographical data on John Murphy and analysed his major arachnological publications and worldwide spider collection assembled by him and his wife Frances Murphy. The biography and (inter)national arachnological network of Octavius Pickard-Cambridge (1828–1917), one of the founding fathers of the British arachnology, are discussed in the essay by Zoë Simmons (Oxford, UK) and Mollie S. Davies (Belfast, UK). In the third essay, Jan Beccaloni (London, UK) celebrates Michael Roberts's illustration genius by discussing his illustrative techniques which are exemplified by original artworks from the archive of the Natural History Museum in London.

The following two contributions are devoted to the changing role of women in international and British arachnological communities. Anna Holmquist and Rosemary Gillespie (Berkeley, USA) present a thoughtful analysis of the involvement and role of women in arachnological academic research in order to better understand why women are still underrepresented in senior academic positions, first-authored papers and oral presentations at arachnological conferences; possible ways to achieve gender equity in modern arachnology are suggested. The history of women in British arachnology during the 19th and 20th centuries is considered in the essay by Danniella Sherwood (London, UK), with particular focus given to two notable British female arachnologists: Eliza Fanny Staveley (1831–1903) and Frances Murphy. In addition, changes in the membership of the British Arachnological Society and its Council, current publication trends, and the role of women in national recording scheme are also discussed. The two aforementioned essays are followed by a synopsis of all matronymic genera composed by Yuri Marusik (Magadan, Russia) and Danniella Sherwood, with a total of 30 matronyms dedicated to female arachnologists being listed and briefly discussed.

The first section concludes with two articles. The essay by Lawrence Bee (Witney, UK), Geoff Oxford (York, UK) and Helen Smith (South Lopham, UK) deals with the development of field guides to British spiders from 1678 to the present day. The authors argue that the future of field guides is likely to be in electronic formats, such as digital versions of physical field guides, ID apps, image recognition software and the like. Zoë Simmons and Yuri Marusik discuss difficulties in identifying type localities of the spiders collected by Ferdinand Stoliczka (1838–1874) on the Second Yarkand Expedition 1873–1874 and then described by O. Pickard-Cambridge (108 species in total); a corrected locality list for 78 type localities is provided.

The section *Taxonomy* begins with an interesting review by Jason Dunlop (Berlin, Germany) of the origin of spiders as evidenced by palaeontological findings. As argued, one of several lineages of arachnids that existed in the Devonian–Carboniferous periods could have led to modern spiders; most likely, it was an arachnid group with a flagelliform telson as in *Chimerarachne* known from Burmese amber. The following paper by Bernhard Huber (Bonn, Germany) and Andrea Acurio (Santa Cruz Island, Galápagos, Ecuador) is about a negative impact of two pholcid species (*Modisimus culicinus* and *Smeringopus pallidus*), which have been unintentionally introduced to the Galápagos islands, leading to the decline or disappearance of two native species (*Galapa bella* and *Aymaria jarmil*).

The following five taxonomic works have in common that they are all based on the study of specimens from the extensive collection of spiders collected by John and Frances Murphy. Andrei Tanasevitch (Moscow, Russia) revised the linyphiid spiders from south-east Asia; a total of 25 species are identified and two from Malaysia are described as new. Danniella Sherwood, Dmitri Logunov and Ray Gabriel (Sussex, UK) present an annotated catalogue of the Theraphosidae from the spider collection of the Manchester Museum (UK); a total of 27 species are reported, of which 12 originated from the Murphy collection. Galina Azarkina (Novosibirsk, Russia) describes a new Aelurillus species (Salticidae) from Kenya representing the ninth species of the genus from the Afrotropical Region. In the next paper, Brogan Pett (Glabbeek, Belgium and Penryn, UK) describes two new species of Patelloceto (Trachelidae) from Kenya, with a key to all known species. Finally, Dmitri Logunov reviews four Irura species (Salticidae) from south-east Asia, of which one from Malaysia is described as new and dedicated to John Murphy.

The following four taxonomic papers contain descriptions of new spider genera, and two of them are dedicated to John and France Murphy. Rudy Jocqué (Tervuren, Belgium) and Tony Russell-Smith (Sittingbourne, UK) establish a new, unique genus Murphydrela (Zodariidae) for five species from central and east Africa, which have no retrolateral tibial apophyses in male palps; a key to the species of Murphydrela is also provided. Two monotypic genera of Theraphosidae from Peru are described by Danniella Sherwood and Ray Gabriel; one of them (Murphyarachne) is dedicated to the Murphys. This paper is followed by a paper of Sergei Zonstein (Tel-Aviv, Israel) and Yuri Marusik who established a new genus Sceliraptor (Palpimanidae) for two new species from Kenya; one of the species was collected by the Murphys in 1980. Boris Zakharov and Vladimir Ovtsharenko (both New York, USA) deal with the poorly understood Gnaphosidae fauna of Australia. They have revised the genus Zelanda (six species) and established a new genus Avstroneulanda to accommodate 12 new species from Australia, Tasmania, and Papua New Guinea.

Good regional taxonomic reviews are presented in the following two works. Francesco Ballarin (Verona, Italy and Tokyo, Japan) and Paolo Pantini (Bergamo, Italy) revise the genus *Palliduphantes* (Linyphiidae) in the scope of Italian fauna; a total of 16 species, of which two from southern Italy are new to science, are reported. Robert Bosmans (Gent, Belgium) and the co-authors revise the genus *Lycosoides* (Agelenidae) of the Maghreb region; a total of 13 species are reported of which five are described as new.

More new spider species are described in three following papers. Two species of the genera *Namundra* (Prodidomidae) and *Platyoides* (Trochanteriidae) from Northern Cape region of South Africa are described by Charles Haddad (Bloemfontein, South Africa), who also provides DNA barcodes (cytochrome oxidase subunit I, COI) of all the specimens studied. Vinícius Diniz, Gracielle Braga-Pereira and Adalberto Santos (all from Minas Gerais, Brazil) describe a new *Paratrechalea* species (Trechaleidae) from Brazil based on the specimens collected 30 years ago. The authors failed to collect fresh specimens of this species and hence conclude that there is the possibility that this species is either threatened or has already become extinct. The final paper of the *Festschrift* by Alireza Zamani and the co-authors is about new faunistic records for 62 spider spiders from Iran and descriptions of two new species of *Alopecosa*.

To summarize, the taxonomic section of the *Festschrift* contains descriptions of 36 new species and five new genera of spiders from 10 families. Of these new taxa, 11 species and two genera are dedicated to John and Frances Murphy, and, for the first time, three new spider species have been dedicated to Michael Roberts.

Finally, I wish to thank all colleagues who contributed to this memorial *Festschrift*. It is very much my hope that this collection of articles, especially from the first section *People and Spiders*, will contribute to the history of British arachnology, particularly of the second half of the 20th century. I am grateful to the British Arachnological Society and personally Prof. Paul Selden, the Chief Editor of *Arachnology*, for the opportunity to publish this *Festschrift* as a special issue of such respected international arachnological journal.

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