#### **OPINION**

of Prof. Dr. Daniela Kirilova Pilarska, Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences

Regarding: the candidacy of Assoc. Prof. Dr. Yasen Zhelyazkov Mutafchiev for participation in a competition for the academic position of "Professor" at the Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences

In the announced competition in the scientific specialty "Parasitology and Helminthology", professional direction 4.3. "Biological Sciences", for the needs of the Research group "Taxonomy, Evolution and Ecology of Helminths", in the section "Biodiversity and Ecology of Parasites", Department "Animal Diversity and Resources", published in the State Gazette No. 45 of 03.06.2025, a single candidate participated - Assoc. Prof. Dr. Yasen Zhelyazkov Mutafchiev - researcher in the same Institute. The documents of the candidate submitted for participation in the competition are precisely prepared and meet the requirements of the Law on Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, as well as the Regulations on the conditions and procedure for acquiring scientific degrees and occupying academic positions at the Bulgarian Academy of Sciences and the Regulations on the conditions and procedure for acquiring scientific degrees and occupying academic positions at the Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences.

Assoc. Prof. Mutafchiev has presented a total of 55 scientific publications and 1 chapter of a book published abroad. Three publications are related to the acquisition of his PhD, 29 with "associate professor", and 22 publications are after the last habilitation and in connection with the current competition. All 22 works after the last habilitation have been published in scientific publications with an impact factor. The nine publications in prestigious journals with a quartile Q1 make a very good impression.

Assoc. Prof. Mutafchiev has presented a self-assessment report on the achieved scientometric indicators according to the Law on Development of Academic Staff in the Republic of Bulgaria and the Regulations on Academic Growth of the Institute of Bulgarian Academy of Sciences, Bulgarian Academy of Sciences, which unequivocally proves that the minimum requirements for holding the position of "professor" according to the Regulations for Acquiring Scientific Degrees and Holding Academic Positions of the Institute of Biodiversity and Ecosystem Research are not only met, but also exceeded in groups C, D, E and E. They are distributed as follows: in group A - 50 points, in group C - 150 points, in group D - 271 points, in group E - 678 points and in group E - 169 points.

The candidate's areas of scientific interest are related to the study of the diversity of zooparasitic nematodes of the order Spirurida and other closely related orders (Ascaridida, Camallanida, Strongylida) in amphibians, reptiles, birds and mammals using morphological and molecular methods.

The scientific contributions and achievements of Assoc. Prof. Mutafchiev can be briefly summarized as follows:

### Contributions to the taxonomy, systematics, phylogeny and life cycles of the family Acuariidae (Spirurida)

➤ Three new genera parasitizing various bird species, 10 new species and 10 new combinations have been described, a phylogenetic hypothesis for the family has been prepared and the distribution of morphological characters, host spectra in the different evolutionary lines of the family have been analyzed;

## Contributions to the taxonomy and systematics of the family Spirocercidae, family Physalopteridae and family Aproctidae (Spirurida)

- ➤ Three new species of parasitic nematodes from the family Spirocercidae, parasitizing predators from the families Felidae and Hyaenidae, have been described;
- ➤ A species of nematode from the family Physalopteridae has been redescribed and 6 new combinations within the family have been proposed;
- A new species of nematode from the family Aproctidae, parasitizing the flammulated owl, has been described, and in addition to the morphological description, a phylogenetic analysis of the species has been conducted;

Contributions to the morphology, taxonomy and systematics of the family Heterocheilidae, the family Kiwinematidae and the family Heterakidae (Ascaridida) and the family Micropleuridae (Camallanida)

➤ One new genus and five species of nematodes are described and one representative of the family Heterocheilidae is redescribed based on scanning electron microscopy;

# Contributions to the biology and phylogeny of nematodes from the family Onchocercidae (Spirurida)

- ➤ As a result of parasitological studies, original data on the biology of three species of filarial nematodes parasitizing dogs, deer and horses were obtained;
- ➤ The phylogenetic relationships in the family were clarified and its monophyletic origin was proven;

#### Contributions to the helminth fauna of fish

As a result of the studies of 4 species of fish from Atanasovsko Lake, 15 species of helminths (trematodes, monogeneans, cestodes and nematodes) were identified and data on their occurrence in their hosts were presented.

Assoc. Prof. Mutafchiev's taxonomic acts for 3 new genera, 19 new species and 23 new combinations, included in his publications, are also an undoubted contribution.

Assoc. Prof. Mutafchiev's scientific publications have received international recognition. The total number of citations in journals with impact factor and impact rank is 589, with a large number of them (339) being after holding the academic position of Associate Professor. This is indisputable evidence of the relevance and significance of the candidate's scientific activity.

During the period 2008 - 2025, the candidate participated in 10 national and international projects, being the leader of 1 of them. All this demonstrates his active expert activity and his ability to work successfully in a team with other researchers.

Assoc. Prof. Mutafchiev was the scientific supervisor of one full-time doctoral student, who successfully defended his thesis in 2021, as well as of one graduate student, who defended his master's

thesis in 2017 in the Department of Zoology and Anthropology of the Faculty of Biology, Sofia University "St. Kl. Ohridski".

I have known Assoc. Prof. Yasen Mutafchiev since 2010. I believe that he is a well-established scientist with in-depth knowledge and high qualifications in the field of parasitology and helminthology, work capacity, energy and erudition, which have contributed to the results and contributions he has achieved.

Conclusion: The candidate of the announced competition, Assoc. Prof. Dr. Yasen Mutafchiev, is an established scientist with outstanding scientific and research qualities, a clearly outlined scientific profile and international recognition, which not only covers, but also exceeds the requirements of the Law on Development of Academic Staff in the Republic of Bulgaria and the criteria of the Institute of Biodiversity and Ecosystem Research for occupying the academic position of "Professor". All this gives me a reason to vote confidently "FOR" his candidacy and to propose to the esteemed Scientific Jury and the members of the Scientific Council of the Institute of Biodiversity and Ecosystem Research to unanimously elect Assoc. Prof. Yasen Mutafchiev to the academic position of "Professor" in the scientific specialty "Parasitology and Helminthology"

11.09. 2025 г.	Signature: