

## **OPINION**

**From Assoc. Prof. Dr. Dimitar Vladimirov Dimitrov**

Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences (IBER-BAS),  
internal member of the Scientific Jury according to Order No. 51/05.08.2024 of the Director of  
IBER-BAS in the procedure for occupying the academic position "Associate Professor"

In connection with the announcement in the State Gazette no.48/07.06.2024 (p.108) competition for the occupation of the academic position "associate professor" in professional direction 4.3. Biological sciences, specialty "Genetics" for the needs of the research group "Molecular-evolutionary studies" in the department "Animal diversity and resources" of IBER-BAS, documents were submitted only by ch. assistant Dr. Boyko Stoykov Neov, currently an employee at the same institute.

The scientific works presented by Dr. Neov for the competition in the specialty "Genetics" include 6 publications under group of indicators **B** (Habilitation thesis - scientific publications in publications that are referenced and indexed in international databases with scientific information (Web of Science and Scopus)), of which 5 with Impact Factor (IF) and 1 with Scimago Journal Rank (SJR) without IF. The candidate's points for this indicator are a total of 120 with a required minimum of 100 points. According to group of indicators **Г** (Scientific works in connection with the competition for the academic position of "Associate Professor", not related to the dissertation and not related to the habilitation work), a total of 19 scientific works were provided, of which 15 with IF, 3 with SJR without IF and 1 chapter of a book, with the total number of points here being 360 with a required minimum of 220 points. The candidate has submitted a total of 277 citations (excluding self-citations) only in international journals with IF, more than ten times over the required minimum of 20 citations.

The scientific growth of the candidate began already in 2013 with his first publications in the field of polymorphism analysis of milk protein genes in Bulgarian cattle, analysis of the origin of cattle breeds in Bulgaria and their genetic diversity (2014 and 2015). Passes through research on the taxonomy, phylogeny and identification of parasites and other pathogenic

organisms, defending a thesis in 2021 based on an analysis of evolutionary processes in cestodes parasitizing insectivorous mammals of the Soricidae family. More recent studies in Dr. Neov's work relate to the genetic diversity of communities of bacteria, RNA viruses, and microsporidian pathogen *Nosema ceranae* in honey bees, and on the origin, evolution and geographical distribution of lyssaviruses in bats in Europe, as well as the origin and diversity of several horse breeds in Bulgaria (2022 and 2023).

I accept the list with the scientific contributions made by Dr. Boyko Neov with a few exceptions regarding the technical inaccuracies in the spelling of *Nosema ceranae*, some spelling mistakes and unclear expressions (eg - contributions 7, 10-12). The candidate's contributions with his overview research on the factors determining the loss of bee colonies in the honey bee (article 16), on the biotic and abiotic factors influencing the mortality in the honey bee (article 13) and on the role of wild and domesticated bees as pollinators of major agricultural crops directly related to human nutrition (Article 17). Citations of these three publications gain over 90% of the candidate's points in terms of citations of his work and have the greatest resonance in the scientific community.

When checking in Scopus database, it can be seen that Dr. Boyko Neov has *h*-index = 10, and 27 documents that are cited in 387 sources (without self-citations), which is a certificate of his active research work with internationally recognized results and achievements.

In conclusion, although during his career the candidate has worked with diverse animal groups, it is my opinion that he has a clearly defined research profile with significant contributions in three main areas 1) molecular genetic studies on taxonomy, phylogeny and the identification of parasites and other pathogenic organisms; 2) molecular genetic studies on the origin and evolution of domestic animals and their wild relatives and 3) those related to the role of the genetic structure of the honey bee and elucidation of the reasons for the increase in bee mortality. In my opinion, the expertise and achievements of Dr. Boyko Neov in the field of application of various methods for molecular-biological research, phylogenetic analyzes and the interpretation of the obtained results in their ecological sense are indisputable, and I am convinced to vote "For" his appointment to the position of "Associate Professor" in "Genetics" specialty in the Research Group "Molecular Evolutionary Studies" at IBER-BAS.

Date: 02.10.2024

Signature:.....

(Assoc.Prof.Dr.D.Dimitrov)