

## **OPINION**

From Prof. Dr. Valko Biserkov, member of the Scientific Jury regarding the competition for the academic position of "professor" for the needs of the Department of "Ecosystem Research, Ecological Risk and Conservation Biology" at IBEI

Documents for the competition were submitted by one candidate - Assoc. Prof. Dr. Borislav Naumov. The Technical Commission has admitted him to participate in the competition.

I am familiar with the scientific work of the candidate since the moment he started working at the Bulgarian Academy of Sciences. From the very beginning, the candidate showed exceptional precision to the detail in his work. This precision is visible in his field work (discovery of amphibians\reptiles, their capture, documentation of the specimens, description of the habitats of the species), in laboratory processing and in the mathematical analysis and computer modeling of the habitats.

At the same time, with this precision, the breadth of the horizon towards the set goal is not lost. This approach takes a lot of time and he compensates for it with tireless systematic work to achieve his goals.

### **Profile of scientific activity**

The scientific research profile of Assoc. Prof. Dr. Naumov is defined by his work as a herpetologist. The main part of the studies started on the territory of Bulgaria and subsequently covered the Balkan Peninsula. The region is considered as a center of speciation and as a contact zone between close species.

Assoc. Prof. Dr. Naumov is a successful project manager and scientific staff.

### **Most important scientific contributions**

- Contributions to the ecology and behaviour of amphibians and reptiles. For the species of *Ophisops elegans*, *Dolichophis caspius*, *Malpolon insignitus*, their seasonal activity has been refined. Data on diurnal activity in the *Vipera ammodytes* have been supplemented.
- The food spectrum of local populations of *Triturus cristatus*, *Zootoca vivipara*, *Darevskia praticola*, *Lacerta viridis*, *Podarcis tauricus*, *P. muralis* and *Ablepharus kitaibelii* has been described. For each species, the quantitative ratio between the established food components

was determined. A comparison was made of the realized and potential food niche for the species in the habitat.

- For the *Platycephalus collaris*, based on genetic differentiation with respect to **cytochrome b**, two genetic branches have been established – Balkan-Asia Minor and East Mediterranean. For the subspecies in the Balkan-Asia Minor branch, which also includes the Bulgarian populations, a new combination has been proposed - *Platycephalus collaris rubriceps*, and the subspecies name *Coluber rubriceps thracicus* has been reduced to a junior synonym.
- The distribution in Europe of the locations of the six separate taxa of the common newt species complex (*Lissotriton vulgaris* s.l. and *L. montandoni*) was mapped, using all available data (including genotyping). Contact zones were determined.
- The library for species-specific mitochondrial DNA for amphibians from the Western Palearctic was supplemented. It now includes 133 species, (> 90%) of its modern species.

## Conclusion

I recommend that Assoc. Prof. Dr. Naumov be elected as a professor in the Department of Ecosystem Studies, Ecological Risk and Conservation Biology

June 12, 2025

Signature:

/Prof. Dr. V. Biserkov/