

STATEMENT

By Assoc. Prof. Anna Ganeva, PhD

Institute of Biodiversity and Ecosystem Research, BAS

on the competition for occupation of the academic position „Professor”, in Sofia University “St. Kl. Ohridski”, Faculty of Biology, Department of Botany

4.3. Biological Sciences (Botany - Systematics of Higher Plants)

Announced in State Gazette no. 59 / 26.07.2019

1. General presentation of the materials received

In the competition for the academic position "Professor", announced in the State Gazette, issue 59/26.07.2019, the applicant is Assoc. Prof. Dolya Kalcheva Pavlova-Tonkova, PhD from the Department of Botany, Faculty of Biology, Sofia University “St. Kl. Ohridski”. The materials, presented by Assoc. Prof. Pavlova-Tonkova, include all the documents necessary for the competition, in accordance with the requirements of the ZRASRB and procedure for acquiring scientific degrees and occupying academic positions at Sofia University “St. Kl. Ohridski”. All lists, references, inventories, scanned administrative documents are presented clearly and precisely, which makes it possible to trace their compliance with the requirements for occupying an academic position.

The reference form for the implementation of the minimum national requirements for the respective scientific field and the additional requirements of Sofia University “St. Kl. Ohridski” clearly indicates that the applicant exceeds the minimum requirements.

The list of scientific papers illustrates the applicant's publication activity: publications related to the PhD thesis, publications presented in the competition procedure for academic position “Assoc. Prof.”, and publications presented in this completion procedure by Assoc. Prof. Pavlova-Tonkova. The list of publications presented in this completion procedure includes 47 in prestigious scientific journals of which 20 with IF and 24 with SJR. The reference to the citations of the publications submitted for participation in the competition contains a complete bibliographic description of the authors' publications and publications that cite the first ones. The total number of citations is 231, of which found in Scopus and Web of Science – 75. For the period of active research from 1990 to 2019 the applicant has registered 649 citations. As a lecturer, Assoc. Prof. Pavlova-Tonkova has also published textbooks (4) and handbooks (7). She has participated in 24

research projects, and in 8 of them she has been a leader. Participation in scientific forums - 83 national and international shows she is very active.

2. General characteristics of the applicant's activities

2.1. Assessment of the candidate's educational and pedagogical activity

Educational activity of Assoc. Prof. Pavlova-Tonkova started in 1989. As a Senior Assistant in the Department of Botany, she taught until 1997, when she held the position of Chief Assistant, and since 2002 has been an Assoc. Professor in the same department. He teaches lectures and exercises in Systematics of Higher Plants, Botany III, Taxonomy and Evolution of Higher Plants, Higher Flora of Bulgaria. She directs pre-diploma practicum and teaching practices. For the period 2014-2019 she has an average classroom load of 297 hours and a total load of 413.6 hours. She also works with students in the Bachelor's Degree and with the Master's Degree. Assoc. Prof. Pavlova-Tonkova is an established and erudite lecturer in the team of scientists in the field of higher plant systematics in the Department of Botany. Published textbooks and teaching handbooks contribute to her work as a lecturer. The supervision of Master Degree students (11, of which 5 MD thesis with supervision only by Dr. Pavlova-Tonkova) and supervision of one PhD is a testament to her commitment to improving the qualifications of students and young researchers. As a part-time lecturer she participated in the training of students at the Medical University of Pleven and the Medical College. She is the author of the curricula in Pharmaceutical Botany. She also participates in the training of students in ERASMUS + with foreign language teaching. She has delivered a series of lectures related to her research topics.

2.2. Evaluation of the applicant's scientific and applied activities

The presented general list of publications shows the main directions of scientific activity of the applicant, namely floristics, systematics, biosystematics, ecology. A number of articles in previous research periods are related to the establishment of chromosomal numbers of species of the Bulgarian flora, floristic diversity in different parts of the country, incl. protected areas, studies of phytochemical characteristics of target species, pollen morphology studies of selected species, etc. The scientific interest in the flora of the serpentinite regions of Bulgaria and the assessment of the concentration of heavy metals in plants from these regions is reflected in the publications after 1998. This area of research interest Assoc. Prof. Pavlova-Tonkova developed in the following years, shaping her clear scientific profile. The quality of scientific development is evidenced in publications in international journals with IF, such as *Botanical Journal of the Linnean Society*, *Journal of Plant Nutrition and Soil Science*, *Biological Trace Element Research*, *Taxon*, *Plant Biosystems*, etc.

Data on the content of biologically active substances in the studied species, identification of species-indicators and nickel hyper-accumulators, as well as assessments of the anthropogenic impact on the serpentine flora are of scientifically applied character.

The list of cited publications and citations shows that the publications of Assoc. Prof. Pavlova-Tonkova are accepted with indisputable interest from the scientific community and are part of the international research process. Some of them have been cited 10-14 times over the years, which proves their importance.

2.3. Assessment of the habilitation reference

The contributions to the scientific papers (habilitation reference) are presented objectively and in full. The Introduction section gives a very accurate picture of the importance of studies to detect the specificity of flora developing on serpentinites. This specificity is not only related to species composition and morphological features of certain species. The issue of species formation, the presence of neo- and paleoendemites is also addressed. The analyzes and comparisons also include neighboring territories of the Balkan Peninsula, which allows for more complete interpretations of the data obtained. Referring to the relevant publications, Assoc.Prof. Pavlova-Tonkova presented the main scientific contributions in a number of scientific fields. An appreciation should be given for contributions such as: clarifying the phytogeographical features of the serpentinite flora in the Rhodopes; identifying and describing three new for science species of higher plants; proven origin of serpentinite flora in the Rhodope Mountains and its links with serpentinite flora from other countries of the Balkan Peninsula; Ni-hyperaccumulator plants, established for the first time in the Bulgarian serpentinite flora. The applicant has correctly referenced the relevant publications. The requirement for submission of abstracts of the peer-reviewed publications in Bulgarian and English is also fulfilled.

3. Comprehensive assessment of the applicant

The documents presented in this competition clearly represent Assoc. Prof. Pavlova-Tonkova as an established university lecturer and research scientist. The successful combination of teaching and research is evidenced by the participation data in all aspects of the teaching process of the Botany Department and in the scientific results achieved in publications and participation in scientific forums. The involvement of editorial boards of scientific journals and the implementation of research projects is also part of the applicant's assets. It is important to note that the applicant has a clearly defined scientific profile. Each subsequent study builds on the previous one, while at the same time setting new goals.

4. Critical notes

I have no criticisms of the documents presented in the contest in terms of form and content.

CONCLUSION

In conclusion, as a member of the scientific jury, determined by an order of the Rector of Sofia University "St. Kl. Ohridski" (№ ПД 38-542 / 12.09.2019) I express the opinion that the applicant **Assoc. Prof. Dolya Pavlova-Tonkova, PhD**, participating in a competition for a professor in the professional field 4.3. Biological Sciences (Botany-Systematics of Higher Plants), announced in SG No.59/26.07.2019 **meets the mandatory and specific conditions and scientometric criteria for the academic position of "Professor"**.

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