



OPINION

regarding the competition for "professor" in the scientific specialty, Genetics, announced in SG no. 36 of 23.04.2024 with candidate Assoc. Prof. PhD Bojin Maximov Bojinov by professor DSc Anelia Veneva Iantcheva, appointed according to Order No. RD 16-808/18.06.2024 of the Rector of the Agricultural University - Plovdiv as a member of the scientific jury

1. Brief introduction of the candidate.

Associate Professor Dr. Bojin Bojinov completed his higher education in the 1990 at the VSI "V. Kolarov", Plovdiv /the current AU, Plovdiv/ with a diploma of agronomist engineer. He started work at IFTC, Chirpan, AA and began breeding work with cotton in the period 1990-1995. In 2000, he received the educational and scientific degree "doctor". In the period 1995-2008, he held the positions of assistant, senior assistant, associate professor at the department "Genetics and selection" of AU, Plovdiv. During this period, in 2005, he obtained his habilitation and held the position of associate professor, engaged in teaching and research activities, as well as supervision of graduates and doctoral students. From 2008-2016, he was the dean of the Faculty of Agronomy of the AU, being responsible for the organization of the educational and scientific activities of the faculty and the academic and professional growth of the teaching, technical and support staff. From 2016 to 2020, he was the head of the "Genetics and Breeding" department, and from 2024 he was the head of the "Plant Physiology, Biochemistry and Genetics" department with numerous responsibilities related to organizational, teaching and scientific activities.

2. General description of the scientific production.

The scientific output of Assoc. Prof. Bojinov since the beginning of his scientific career includes 3 publications related to the educational and scientific degree "doctor". For the habilitation for the academic position "docent", 25 publications are presented in journals that are referenced and indexed in world-renowned scientific information databases, as well as 10 in non-refereed peer-reviewed journals or published in edited collective volumes. In the current competition for "Professor" Associate Professor Bojin Bojinov participated with a total output of 13 papers, grouped as follows:

Habilitation work - monograph - 1 piece

- Scientific publications on the nomenclature specialty - 12 piece, of which:
 - Publications with an impact factor in scientific journals from the world databases – 5 pieces
 - Publications in peer-reviewed and refereed scientific journals from world databases – 7pieces;
- Assoc. Prof. Bojinov's personal participation in the mentioned 13 scientific works is illustrated by the fact that in 3 of them he is single author, in 1 of the publications he is the first author, in 1 of the publications he is the second author, and in the remaining 8 - he is the third, following or corresponding author. The published textbooks and teaching aids and tests related to his teaching activity must be added to the candidate's scientific output.
- Textbook – 1 item.
 - Teaching aids – 2 items.
 - Tests for candidate students and school students

According to the report for the minimal national requirements on the implementation of the Law of the development of academic staff of Republic of Bulgaria and the regulations for its implementation in AU, Plovdiv for professional direction 4.3. Biological Sciences, Assoc. Prof.

Bojinov meets and exceeds the minimum requirements. With a required minimum of 600 points, for the academic position "professor", the candidate possesses 697, 52 points.

For the preparation of current the opinion, 13 scientific works are subject to analysis.

3. Teaching activity.

Assoc. Prof. Bojinov's teaching activities include bachelor's and master's students. The curriculum for undergraduate students covers 9 disciplines such as: Plant Genetics, DNA Recombinant Technologies, General Genetics, Genetics, Introduction to Agrarian Education, Genetics and Breeding, GMO Legislation Analysis and Control, Innovation and Biotechnology, Molecular Genetics for various specialties such as: Plant biotechnologies, Plant protection, Organic farming, Plant biology, Agronomy, etc. The Master's student program is also concentrated in nine different disciplines such as: Molecular Genetic Approaches in Plant Protection, Genetic Sources of Pest Resistance, Plant genetics, Fundamentals of Genetics and Breeding, Plant Genetics and Breeding, Biotechnological approaches for plant multiplication, Protoplast cultures, Applied computer programs. These disciplines are intended for masters from various master's courses such as: Plant protection, ERASMUS program students, Plant medicine, Digitalization and management of crop production, Mineral nutrition and fertilization, Production of seed and planting material, Plant biotechnology.

Academic employment of the candidate is documented with the presented certificate from AU-Plovdiv with outgoing number and date LS-59 of 20.05.2024, which shows that the teaching activity of Assoc. Prof. Bojinov started in the month of November 1998 and continues to the present day having accumulated teaching experience in the amount of 28 years, 9 months and 9 days until 1.06.2024.

The teaching activity is complemented by the guidance of successfully defended graduates. Among the attached documentation for the competition is the issued certificate for the management of defending and current graduates. Certificate with Ex. No. 63 /05.06.2024 r confirms that Associate Professor Bojinov has two defended graduate students and is currently the head of 5 graduate students who were enroll in 2023. A certificate with outgoing number D-11/07.06.2024 provides us with information about the successfully defended doctoral students of Assoc. Prof. Bojinov. For one of the doctoral students who defended his thesis in 2014, Assoc. Prof. Bojinov, is involved, as a scientific co-supervisor, of the other two who defended in 2015 and 2022. Assoc. Prof. Bojinov is the only scientific supervisor.

Among the published educational materials, the candidate is an independent author of a textbook on General Genetics for universities, as well as a co-author of two manuals for exercises in Genetics and tests exams in biology for candidate students and school students of grades 9-10.

Among the submitted documents for the competition are available and described, developed from the candidate, students educational programs. For each of the subjects mentioned above, a teaching program is available for bachelor's and master's students, which reflects the lecture topics and exercises to them, as well as the form of control - the exam program.

4. Scientific research activity.

According to the presented report on scientific contributions, the candidate divides the contributions from his scientific production into contributions of an original scientific-fundamental value and scientific-applied contributions. The largest part of the scientific output is dedicated to research related to the use of molecular marker systems (RFLP, SSR, AFLP, ISSR) and the possibility of their application in identifying genetic diversity in different agricultural crops, such as tomatoes (publications numbered 3 and 12 of the list with publications), cotton (publications 1, 9), ornamental tree species paulownia (publication 4), and animals in small populations of

indigenous goat breeds (publication 8). The applicant summarized and analyzed these original results in the published monograph in English, which is part of the scientific production participating in the competition. Combining different types of phenotypic, biochemical and genetic markers has been used in the creation of new tomato genotypes with increased antioxidant content (publication 12, 7 and monograph). Among the scientific-fundamental contributions, it should be noted the developed method for analyzing texts from scientific literature available on the web for investigating the possibility of modern biotechnological methods to support selection in the direction of sustainable yields (publication 6).

Scientific and applied contributions are mainly related to the practical use of molecular markers in different crops: tomatoes, paulownia (publication 3, 4, 7), cotton (monograph publication 5) and animals, goats (publication 8). Applied contributions include ecological epidemiological typing of pathogenic *E. coli* strains to control their spread (publication 10), as well as a proposed set of biotechnological approaches for the rapid propagation of energy plant species (publication 2).

The search made in the scientific database SCOPUS shows that Assoc. Prof. Bojinov has 211 (without self-citations) citations of the scientific production participating in the competition, and in the reference for minimum requirements he has presented 53 citations. The published scientific works are in peer-reviewed and referenced scientific journals from the world's databases, some of them with a high IF, and among them should be noted, authoritative scientific journals, such as *Genome*, *Critical Reviews in Biotechnology*, *Biotechnology & Biotechnological Equipment*.

In the submitted reference for the fulfillment of minimum national requirements, the applicant has provided information on the leadership of the Bulgarian scientific team in an international project funded by the International Atomic Energy Agency CRP D23025 Project No. 12834 in the period 2004-2009.

5. Notes and recommendations.

I have no comments or recommendations for the candidate.

6. Conclusion.

Based on the analysis of the candidate's pedagogic, scientific and scientific-applied activities, I believe that Assoc. prof. Dr. Bojin Bojinov meets the requirements of the Law of the development of academic staff of Republic of Bulgaria, regulations for the implementation of the law, and the regulations for its implementation in AU, Plovdiv. Based on all the presented facts, I can define Associate Professor Bojin Bojinov as a complete expert in the field of plant biotechnology, plant genetics and molecular biology, an accomplished lecturer and responsible scientific supervisor of graduate and doctoral students.

All this gives me reason to positively evaluate his overall activity.

I take the liberty of suggesting the honorable Scientific Jury also to vote positively, and the Faculty Council of the Faculty of Agronomy at the Agricultural University - Plovdiv to elect Assoc.Prof. Dr. Bojin Maximov Bojinov for a "professor" in the scientific specialty Genetics.

Date: 14.08.2024

Sofia

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