OPINION

on the materials submitted for participation in a competition for the academic position of "Associate Professor" in the discipline "Phytopathology" in a professional field 6.2. Plant protection, announced by University of Forestry in the SG, 102/08.12.2023 (procedure code AGR-AsP-1123-119)

Candidate for participation in the competition: Chief Assist. Zhelyu Georgiev Avramov PhD

Prepared the opinion: Prof. PhD Sonya Hristova Bencheva, University of Forestry; field of higher education 6. Agrarian sciences and veterinary medicine, professional field 6.5. Forestry, scientific specialty "Forest melioration, Forest protection and Special forest uses (Forest phytopathology)", member of the scientific jury (order of the Rector of the University of Forestry ЗПС-67/14.02.2024).

1. Brief biographical data

Ch. ass. Zhelyu Georgiev Avramov graduated in 1992 at the Higher School of Agriculture (now Plovdiv University), specialty "Plant and Soil Protection". He defended his Ph.D. in "Phytoplasma yellows on grapevine (Vitis vinifera L.). Methods for control" in 2014 and received a PhD in the scientific specialty "Phytopathology" in Professional Direction 6.2. "Plant protection" at the Academy of Agriculture, Institute of Soil Science, Agrotechnologies and Plant Protection "Nikola Pushkarov". From 1996 to 2015, he worked in the Central Plant Quarantine Laboratory at the National Plant Protection Service successively as Chief Specialist, Chief Expert and Head of the Phytopathology Department. From 2015 to 2017, he was an assistant in the Department of "Plant Protection", Faculty of Agronomy at the Forestry University, where from 2017 to the present he is the Chief Assistant. He speaks English and Russian. Participated in 5 national scientific and 2 educational projects, in 3 international projects, as well as in EU missions to support agricultural and other structures in North Macedonia as a short-term expert. Ch. ass. Zhelyu Avramov is a member of the Union of Bulgarian Scientists.

2. Conformity of the submitted documents and materials of the candidate with the minimum requirements, according to the Regulations for development of the academic staff in the University of Forestry

The scientific production presented by ch. ass. Zhelyu Avramov, the attached documents and materials correspond to the requirements in the Regulations for the development of the academic staff at the University of Forestry. The reference shows the implementation and even exceeding of the minimum required points for the academic position of "Associate Professor".

Fulfillment of the minimum requirements by groups of indicators for AP "Associate Professor"

Group of indicators	Contents	Required for assoc. professor/score	Performed by ch. ass. Zhelyu Avramov
А	Indicator 1	50	50
Б	Indicator 2	-	-
В	Indicator 3 or 4	100	100
Г	Indicators 5-12	200	287,59
Д	Indicators 13-15	50	675
Е	Indicators 16-24	-	115
Total Points		400	1227,59

3. Characteristics and assessment of the candidate's activity

3.1. Learning and teaching activity

The attached reference for the period 2018-2023 shows that the candidate fulfills the required academic work. He conducts the lecture course on the discipline "Phytopathology" for the students

of the specialty Agronomy, EQD "Bachelor". He also leads lectures on "Forecast and signalling" for the students of the Plant Protection specialty, EQD "Bachelor".

Ch. ass. Zhelyu Avramov is a participant in the updating of the curricula of five disciplines: "General Phytopathology", "Agricultural Phytopathology", "Phytopathology", "Practicum of Phytopathology", "Forecast and Signaling" and "Pests on stored products". He also leads exercises in all the listed disciplines.

He has supervised 7 successfully defended graduates.

3.2. Other professional and creative activities

Ch. ass. Zhelyu Avramov has provided evidence of the following activities:

- **Participation in scientific forums:** in poster sessions at 5 scientific forums with a total of 6 reports.
- **Participation in expert workgroups** at the Ministry of Agriculture and Food; Forestry protection station Sofia.
- **Participation in committees at the Faculty of Agronomy:** 5 pcs.
- **First Year Group Leader**, Plant Protection - 2017 and 2021.
- **Participation in educational projects as a mentor:** of 4 students.
- **Carrying out practical exercises at the Center for Continuing Education**: from 2017 to 2023.
- **Held training under the Erasmus+ program:** Master's course in Phytopathology for a foreign student.
- **Specializations**: presented 5 certificates for successfully completed courses, one of which at the University of Agronomic Sciences and Veterinary Medicine in Bucharest, Romania.
- **Awards:** diploma of honor and certificate as a participant in a dance group.

4. Assessing scientific, applied research and publication activities of the candidate

Ch. ass. Zhelyu Avramov submitted a list of 30 scientific publications and a monograph for the current competition. Three more scientific papers related to his doctoral thesis, which are not considered in the competition for AP "Associate Professor" are also described as well as 3 additional publications.

Разпределение на броя публикации според вида им

Видове публикации		бр.	точки
В3	Habilitation thesis – monograph	1	100
Г7	Scientific publications in journals referenced and indexed in world-renowned scientific information databases	18	241,1
Г8	Articles and papers published in non-refereed peer-reviewed journals or in edited collective volumes	11	46,49
Е23	Published chapter in a book	1	20
Total points			407,59

Of the total number of publications, 23 are in English and 7 in Bulgarian.

Number of co-authors in the publications:

- individual – 7 pcs
- with one co-author – 3 pcs
- with two or more co-authors – 20 pcs
- leading author – 16 pcs.

4.1. Participation in scientific, applied and educational projects

Ch. ass. Zhelyu Avramov has presented a list and evidentiary material for participation in 4 scientific and applied projects and 2 educational projects, which is not required from the candidates for employment AP "Associate Professor".

4.2. Characteristics of published scientific results

The publications with which ch. ass. Avramov participates in the competition for AP "Associate Professor" were made in the refereed and indexed editions: Bulletin of Insectology, Bulgarian Journal of Agricultural Science, Acta Entomologica Bulgarica, Scientific Papers. Series B, Horticulture, Bulgarian Journal of Crop Science, Bulgarian Journal of Crop Science, as well as in 6 edited proceedings of scientific forums and 4 non-refereed journals.

4.3. Reflection of the candidate's scientific activity in the literature (citation)

In the list of established citations ch. ass. Avramov presents 53 citations of 14 publications. Of these, 35 citations are in referenced and indexed in world databases editions (with attached evidence), with which the minimum requirements of the citation criterion are covered. A Scopus search shows the presence of 19 citations of 4 publications of ch. ass. Avramov and this is sufficient evidence of the scientific community's interest in his work.

4.4. Contributions in the works of the candidate (scientific, scientific-applied, applied)

The scientific research of ch. ass. Zhelyu Avramov can be summarized in three main areas:

- Pathogens, hosts and vectors of infection new to Bulgaria have been identified.
- Developed methods for laboratory identification of pathogens.
- Described external symptoms of diseases and species composition of pathogens.

A. Scientific contributions

- **Pathogens, hosts and vectors of infection new to Bulgaria have been identified**

- For the first time in Bulgaria, Stolbur phytoplasma has been proven on the cherry *Prunus avium* L. and a phytoplasma infection has been established in the *Convolvulus arvensis* L. (Г7.2).
- For the first time in Bulgaria, a phytoplasma infection on lavender with a causative agent 'Candidatus Phytoplasma solani' has been identified (Г7.12).
- A new species established for Bulgaria: *Phylosticta lactucae* Brezchnew on the salad (Г8.1).
- A new host of *Phytophthora pseudocryptogea* established: raspberry plantations variety "Lyulin". Successful inoculation of leaves from Turkey oak, wild cherry and laurel indicates that these plant species are potential hosts for the pathogen, increasing the risk of its spread (Г7.14).
- Cucumber (*Cucumis sativus* L.) was established for the first time as a natural host of the tomato bronzing virus in Bulgaria and the role of *Franclinella occidentalis* as a vector of the disease was clarified (Г7.1).
- For the first time in Bulgaria, Tomato Brown Rugose Fruit Virus (ToBRFV) was detected on the seeds of tomatoes from greenhouses, with the origin of the plants from other countries (Г7.17).
- New vectors of phytoplasma infections were found in Bulgaria and transmission of Bois Noir was proven in the cicadas *Fiebiriella florii* and *Cicadella viridis* (Г8.10).

Б. Scientific and applied contributions

- **Developed methods for laboratory identification of pathogens**

- The methods for diagnosis of grapevine diseases caused by phytoplasmas, viruses and bacteria have been updated (В3.1, Г7.12, Г8.2, Г8.5).
- Four diagnostic molecular protocols for the detection of 'Candidatus Phytoplasma prunorum', 'Ca. P. mali' and 'Ca. P. pyri' in fruit trees have been validated by interlaboratory tests (Г7.3).
- DAS-ELISA and electron microscopic method have been adapted for diagnosis of Cucumber Green Mosaic Virus (CGMMV) (Г7.15).
- It has been found that serological tests are not suitable for the detection of ToBRFV in tomato and pepper seeds, and the use of molecular identification methods is required (Г7.17).
- PCR analyzes were applied for the diagnosis of phytoplasmas in the orchards of Bulgaria (Г7.5).

- **Described external symptoms of diseases and species composition of pathogens.**

- Symptoms of grapevine diseases caused by phytoplasmas, viruses and bacteria are described (B3.1, Г7.12, Г8.2, Г8.5).

- The work on the vine pest program confirms that there are no quarantine pests on the territory of Bulgaria, including viral infection by ToRSV and TRSV (Г8.5).

- It has been confirmed that GFkV, GLRaV3 and GFLV are the most widespread virus infections in the grapevine in Bulgaria (B3.1, Г8.6).

- The species composition and distribution of soil-dwelling fungal pathogens on cereal crops with a fused surface in Bulgaria was studied (Г7.4), as well as the influence of abiotic factors on the development of soil pathogens during lettuce cultivation (Г7.6, Г7.8).

- Overwintering of the rust *Tranzschelia pruni-spinosae* in the young shoots of trees in the plum orchards in Bulgaria has been confirmed (Г8.3).

- The early color symptoms in various drupe species of Plum Pox (PPV) infection are described for early diagnosis purposes (Г7.16).

- The species composition of the pathogens of medicinal and aromatic plants described in Bulgaria was analyzed (Г7.7).

- The use of the repellent "Porocol" is recommended in the organization and implementation of plant protection measures against wild animals in the production of corn and potatoes near forests in the semi-mountainous and mountainous regions of Bulgaria (Г7.11).

- Alternative measures for the management of gall nematodes on vegetable crops from the Potato family in southwestern Bulgaria are described (Г7.18).

5. Assessment of the candidate's personal contribution

The scientific contributions of ch. ass. Zhelyu Avramov are indisputable and show a very good ability for independent and team work, which is confirmed by the large number of specialists who participated in joint developments with him.

6. Critical remarks and recommendations

I have no remarks on the scientific production of ch. ass. Zhelyu Avramov. My criticism is directed only at the preparation of some materials for the competition:

- The submitted evidence for updated curricula includes only their title pages, from which the personal involvement of the candidate is not visible.

- In the summary of contributions, errors were made when writing the publication numbers (for example, in the list of publications there is no one described with the number Г7.19 – it is obviously about Г7.14, and the contribution, with reference to Г7.14, is based on publication Г.8.10).

7. Personal impressions

I know the candidate and I have no doubts about his personal participation in the publications and activities presented for the competition. He is responsible and correct, but I have not worked with him and do not have enough impressions to comment on his work.

8. Conclusion

After a detailed acquaintance with the documents and materials submitted by the applicant, and established compliance with the requirements of the Regulations for the development of the academic staff at the University of Forestry, I propose Chief Assistant PhD Zhelyu Georgiev Avramov to be elected as an "Associate Professor" in the discipline "P[redacted] professional field 6.2 Plant protection.

12.03.2024

Member of the scientific [redacted]

(Prof. S. Bencheva)