

STATEMENT

on the materials for participation in the competition for the academic position of "associate professor", field of higher education 6. Agricultural sciences and veterinary medicine, PN 6.2 Plant protection, scientific specialty "Plant protection" (phytopathology)", in the discipline "Phytopathology", announced from Forestry University in State Gazette no. 102/8.12.2023, procedure code AsP-1123-119.

Applicant to participate in the competition:

Zhelyu Georgiev Avramov, Senior assistant professor, PhD

Prepared the statement:

Assoc. prof. Katya Georgieva Trencheva - professional direction 6.2 "Plant protection", scientific specialty "Plant protection" (entomology) - University of Forestry, Faculty of Agronomy

1. Brief biographical data about the candidate

Dr. Zhelyu Georgiev Avramov, was born on 26.12.1967. In 1992, he graduated from the Higher Agricultural Institute of Plovdiv (now AU- Plovdiv), majoring in "Plant and Soil Protection" with the professional qualification "Agronomist Engineer. In 2014, he defended his doctoral dissertation at the Institute of Soil Science, Agrotechnologies and Plant Protection "Nikola Pushkarov", on the topic "Phytoplasmic causes of yellows on the vine (*Vitis vinifera* L.). Methods of diagnosis" and acquired PhD degree (Diploma No. 0053, issued on 18.08.2014). From 1993 to 1996, he was the chief specialist in the "Phytopathology" department of the Central Plant Quarantine Laboratory in Sofia. In the period 1996 - 2006 he was the chief expert in the same department of the laboratory, and from 2006 to 2011 he was the head of the "Phytopathology" department of the Central Plant Quarantine Laboratory, National Plant Protection Service. In the period 2011 - 2015 Dr. Zhelyu Georgiev Avramov is the head of the "Phytopathology and FSD" department of the Central Plant Quarantine Laboratory, Bulgarian Food Safety Agency. In 2015, he started working as an assistant at the University of Forestry, Faculty of Agronomy, Department of Plant Protection, and since 2017 he has been senior assistant professor in the same department.

2. Conformity of the applicant's submitted documents and materials with the requirements according to the Regulations for Development of academic staff at University of Forestry

The presented documents of Assistant professor Zhelyu Georgiev Avramov, PhD, for participation in a competition for the academic position " associate professor " in the field of higher education 6. Agricultural sciences and veterinary medicine, professional direction 6.2. Plant protection, scientific specialty "Plant protection" (phytopathology) were prepared according to the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff at the Forestry University. The information provided in the reference on compliance with the minimum national requirements for the academic position "associate professor" shows that Dr. Zhelyu Georgiev Avramov, meets these requirements. According to the individual indicators, the points are as follows:

Group of indicators A: 50 points, with a required minimum of 50 points;

Group of indicators B: 100 items, with a required minimum of 100 items;

Group of indicators Г: 287.59 points, with a required minimum of 200 points;

Group of indicators Д: 675 items, with a required minimum of 50 items;

Group of indicators E: 115 (not required for holding the academic position "associate professor")

The report - self-assessment shows that the candidate exceeds the minimum required points in some indicators (Г and Д) and the groups of indicators total 1227.59 points, with a minimum of 400 points.

3. Evaluation of the candidate's educational and teaching activities

Ch. assistant professor Zhelyu Georgiev Avramov, has nearly 9 years of experience in an academic position at the Forestry University. Holder of the disciplines "Phytopathology" (from 2022), specialty "Agronomy" and "Forecast and Signaling", specialty "Plant Protection". Delivers lectures and exercises in the master's courses on "Plant Protection" Precision Agriculture" and "Environmental Management of Crop Plant Pests". He is the supervisor of 7 graduates who have successfully defended their diplomas. He is a participant in the implementation of educational practices with students, specialty "Plant Protection" and "Agronomy" in the disciplines "Phytopathology" and "Agricultural Phytopathology". During the period 2017-2023, Dr. Zhelyu Georgiev Avramov, assistant professor, led the practical exercises of 33 students in the course on "Use of plant protection products of professional use category, according to the Law on Plants" at the CPO-LTU. He was a mentor of a young scientist under project BG05M20P001-2-009-0034. He participated in the development of the curricula for the disciplines "General Phytopathology", "Agricultural Phytopathology", "Prognosis and Signaling" "Phytopathology", and "Pests of stored products.

4. Evaluation of the candidate's scientific, applied scientific and publication activities

4.1. Participation in scientific, scientific-applied and educational projects

Dr. Zhelyu Georgiev Avramov participated in the preparation and preparation of a tender technical specification for the approval and delivery of laboratory equipment for 3 projects under the PHARE program. In the period 2016-2017, he was the head of 1 scientific project financed by UF on the topic: "Diseases of medicinal and aromatic plants cultivated in Bulgaria - types of pathogens and distribution in Bulgaria". He participated in 3 projects at UF, as a member of the work team. He took part in a project on the topic "Modernization of higher education for sustainable use of natural resources in Bulgaria", financed by "Science and education for intelligent growth", in connection with which a two-week mobility was carried out and lectures were given at the University of Agrarian sciences and veterinary medicine in Bucharest, Romania. He is a participant in a project financed under the Erasmus+ program on the topic "Improving the practical skills of horticulture specialists in response to the requirements of the European Green Deal". Ch. assistant professor Zhelyu Georgiev Avramov, participated as an academic mentor of 1 student from the "Plant Protection" specialty under the project "Student practices - phase 2".

4.2. Characteristics of published scientific results

Ch. assistant professor Zhelyu Georgiev Avramov, participated in the competition with 29 publications and a published monograph on "Viral, phytoplasma and bacterial plant diseases". Seventeen of the publications are in refereed and indexed scientific publications - Scopus and Web of science, 11 of them are in Bulgarian refereed publications, 7 in foreign ones. 6 publications are presented in non-refereed scientific publications. 5 publications in collections of scientific forums are also submitted for participation in the competition. Seven of the publications are independent, 3 with one co-author, 9 with two co-authors, and 11 with three or more co-authors.

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

Ch. assistant professor Zhelyu Georgiev Avramov, presented information on 53 established citations, 35 of which are in scientific publications, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes, 12 citations are in monographs and collective volumes with peer review. 6 citations in non-refereed peer-reviewed journals were also identified.

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

In the reference submitted by the candidate, the following more important scientific, scientific-applied and methodical contributions are highlighted:

I. SCIENTIFIC CONTRIBUTIONS

1. New pathogens or their new hosts have been established, identified and proven in Bulgaria:

- The cucumber (*Cucumis sativus* L.) as a natural host of the tomato bronzing virus (TSWV) and the role of the vector *Franclinella occidentalis* as a vector of the disease;
- The spread of Tomato Brown Rugose Fruit Virus (ToBRFV) in tomato seeds and plant samples of tomatoes (*Solanum lycopersicum* L.) and pepper (*Capsicum annuum* L.) in new areas for Bulgaria;
- Stolbur phytoplasma on the cherry (*Prunus avium* L.) was proven for the first time in Bulgaria and a phytoplasma infection was established in weed vegetation (in the convolvulus - *Convolvulus arvensis*);
- Phytoplasma infection on lavender with the causative agent 'Candidatus *Phytoplasma solani*';
- The fungal pathogen *Phytophthora pseudocryptogea* was detected in raspberry plantations of the "Lyulin" variety in the orchards for organic production and the fungal pathogen on lettuce - the species *Phylosticta lactucae* Brezchnew, new to the country, as well as the fungal pathogens *Verticillium*, *Botritis*, *Alternaria* and *Septoria* spp..

2. New vectors of phytoplasma infections were found in Bulgaria and transmission of Bois Noir was proven in viruliferous individuals of the cicadas *Fiebiriella florii* and *Cicadella viridis*.

3. The species composition and distribution of soil-dwelling fungal pathogens on cereal crops with a fused surface in Bulgaria was studied.

II. SCIENTIFIC AND METHODOLOGICAL CONTRIBUTIONS

4. Methods for laboratory identification of viruses, phytoplasma, bacterial and fungal pathogens in various crops have been developed, validated and applied:

- molecular protocols through interlaboratory tests are applied in universal and target group-specific pathogens through conventional PCR and Real time PCR analyses;
- serological protocols for identification of viral and bacterial pathogens;
- application of semi-selective media for the identification of pathogenic bacteria of the genus *Agrobacterium* in laboratory conditions;
- sequence analyzes of specific genes of the pathogens for species, group or genus affiliation of the isolates.

III. SCIENTIFIC AND APPLIED CONTRIBUTIONS

5. The external symptoms of diseases caused by viral, phytoplasma, bacterial and fungal pathogens, their vectors and hosts are described.

- It has been confirmed that GFkV, GLRaV3 and GFLV are the most widespread viral infections in the grapevine in Bulgaria: GFkV is most typical of the "Merlot" variety; the most infected varieties with leaf curl are the varieties "Merlot" and "Cabernet Sauvignon", with GFLV - the red wine varieties "Cabernet Sauvignon" and "Mavrud", with ArMV - the varieties "Cabernet Sauvignon", "Merlot" and "Chardonnay";
- The visual symptoms of flowering in different drupe species during infection with plum powdery mildew (PPV) are described for the purpose of early diagnosis and after a study of the pathogen *Tranzschelia pruni-spinosae*, the causative agent of plum rust, its overwintering on trees near shells, a fact proving the source of infection on the trees in the plum orchards.

5. Evaluation of the candidate's personal contribution

The personal participation of Ch.assistant professor Zhelyu Georgiev Avramov in the conducted scientific and scientific-applied studies and presented scientific works is indisputable.

6. Critical notes and recommendations

I have no critical notes and recommendations for the presented materials.

7. Personal impressions

Ch. assistant professor Zhelyu Georgiev Avramov is a motivated and goal-oriented researcher and teacher, a proven expert in the field of phytopathology.

8. Conclusion

Based on a comprehensive assessment and the presented results, I propose that the candidate Dr. Zhelyu Georgiev Avramov to take the academic position of "Associate Professor" in the subject "PHYTOPATHOLOGY" in professional direction 6.2 PLANT PROTECTION.

Date: 10/04/2024

Author of the statement:

/assoc. prof. Katya Trencheva/