

OPINION

by Prof. Dr. Hristina Yakova Kutinkova

regarding the competition for the academic position of *Associate Professor* in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.2. Plant Protection, scientific specialty Plant Protection (Entomology), announced in State Gazette No. 65 of August 8, 2025.

Candidate: Pavlin Emilov Vasilev, PhD, Chief Assistant Professor at the Department of Entomology, Faculty of Plant Protection and Agroecology, Agricultural University – Plovdiv

Developed by Prof. Dr. Hristina Yakova Kutinkova – retired, habilitated in the scientific specialty “Plant Protection (Entomology)”, appointed as a member of the scientific jury by Order No. RD 16-991/07.10.2025 from the Rector of the Agricultural University.

Brief Presentation of the Candidate

Chief Assistant Professor Dr. Pavlin Vasilev was born on April 1, 1989, in the city of Burgas. He graduated from the Agricultural University – Plovdiv in 2011 with a Bachelor's degree in Plant Protection and a professional qualification of Agronomist. In 2012, Pavlin Vasilev obtained a Master's degree in the scientific specialty Plant Protection (Entomology). From 2013 to 2016, he was a full-time PhD student at the Department of Entomology, Agricultural University – Plovdiv. In 2016, he successfully defended his doctoral thesis entitled “Aphids (*Hemiptera: Aphididae*) on stone fruit species – distribution, harmful activity and control” and obtained the educational and scientific degree of PhD in Plant Protection (Entomology). From August 2016 to December 2018, he worked as an agronomist / sales representative for Southern Bulgaria at “Agronom Holding” Ltd. Since January 2019, he has been appointed as an Assistant Professor at the Department of Entomology at the Agricultural University. In December 2019, he was promoted to the position of Chief Assistant Professor, which he continues to hold. His teaching experience at the Agricultural University is a total 6 years and 8 months. Dr. Vasilev also holds a professional qualification of Economist-Manager, obtained from the Center for Continuing Education at the Agricultural University – Plovdiv. He has attended courses for agricultural land and land improvement appraiser. He speaks Greek, Russian, and English, and possesses excellent computer skills. He is loyal and ethical in his relations with colleagues. He participated in three Erasmus+ mobility programs for training purposes.

General Description of Scientific Output

For the competition for *Associate Professor*, Dr. Pavlin Vasilev participates with a total scientific 25 publications, grouped as follows:

- Publications in the field of the scientific specialty – 25
 - Publications related to the PhD thesis – 3 (not subject to review)
 - Publications with impact factor – 2
 - Publications in peer-reviewed and refereed journals – 16
 - Publications in conference proceedings – 2
 - Popular science publications – 2

The personal contribution of Assist. Prof. Dr. Pavlin Vasilev to the 22 publications considered for the preparation of this opinion is as follows: 3 of them are individual (single-authored) publications; in 8 publications Dr. Vasilev is the first author; in another 8 – the second author; and in the remaining 3 – the third or subsequent author.

Teaching Activity

Chief Assistant Professor Dr. Vasilev has a total teaching workload (lectures, practical classes, and extracurricular work) of 3,147.8 hours for the period 2020/2021 – 2024/2025 academic years, with an annual load ranging between 532 and 735.3 hours, fully meeting the normative requirements for full-time teaching. He conducts practical classes in four disciplines in the Plant Protection Bachelor's program: General Entomology, Plant Quarantine, Forecasting and Signalization, and Biological Plant Protection; and in five disciplines in the Master's program: General Entomology, Pests of Agricultural Crops, Forecasting and Signalization, Biological Plant Protection, and Plant Quarantine. In addition, Chief Assistant Professor Vasilev supervises diplomant's theses and has successfully guided 22 Bachelor's and Master's students.

Research Activity

Research Areas:

The scientific work of Dr. Pavlin Vasilev is focused on the following areas:

- Determining the species composition, population density, and distribution of aphids (*Hemiptera: Aphididae*) and aphidophagous species in various agroecosystems in Bulgaria;
- Studying the efficacy of new plant protection products against different aphid species (*Hemiptera: Aphididae*) and other pests under laboratory and field conditions;
- Assessing the effect of immunostimulants and foliar fertilizers against aphids (*Hemiptera: Aphididae*) on fruit crops under laboratory and field conditions;
- Monitoring and control of fruit moths on stone fruit species using pheromone traps and dispensers;
- Monitoring pests on apple (*Malus domestica* Borkh.) in the Plovdiv region;
- Determining the entomofauna and the influence of various mulch types on potatoes (*Solanum tuberosum* L.) in the Plovdiv region.

SCIENTIFIC CONTRIBUTIONS OF ORIGINAL CHARACTER

- A comprehensive study has been conducted on the species composition of aphids on peach (*Prunus persica*) throughout Bulgaria. It has been established that this fruit crop is attacked by eight aphid species of the family *Aphididae*, among which *Myzus persicae* and *M. varians* are of major economic importance.
- On plums and myrobalan (cherry plums), nine aphid species of the same family have been identified. It has been proven that the dominant species on plum are *Hyalopterus pruni* and *Brachycaudus helichrysi*, with the former being more widespread and occurring in significantly higher densities. The prevailing species on myrobalan are *Phorodon humuli* and *B. helichrysi*.
- Four aphid species (*Hemiptera: Aphididae*) have been identified as pests on nine apple cultivars in the Plovdiv region. The dominant species have been found to be the rosy apple aphid (*Dysaphis plantaginea*) and the green citrus aphid (*Aphis spiraeicola*). The susceptibility of the apple cultivars to aphid infestation has also been determined.

SCIENTIFIC AND APPLIED CONTRIBUTIONS

- Studied the efficacy of new plant protection products against various aphid species (*Hemiptera: Aphididae*) and other pests under laboratory and field conditions. The experiments proved that bioinsecticides, when applied at the proper concentration, can effectively control different aphid species and larvae or adults of the Colorado potato beetle.
- In light of the ban on neonicotinoids in Bulgaria, field trials were conducted to assess the efficacy of four chemical insecticides from different classes – flupyradifurone, sulfoxaflor, flonicamid, and acetamiprid – for the control of the mealy plum aphid (*Hyalopterus pruni*) on plum and the green citrus aphid (*Aphis spiraeicola*) on apple. It

was proven that all tested insecticides provided effective control of both species, even at the lowest approved concentration.

- The effect of immunostimulants and foliar fertilizers against aphids (*Hemiptera: Aphididae*) on fruit crops was evaluated under laboratory and field conditions. The use of natural immunostimulants with high silicon content can reduce the use of chemical insecticides or at least decrease the number of treatments.
- Monitoring and control of fruit moths on stone fruit species were conducted using pheromone traps and dispensers. It was established that Isomate OFM TT dispensers, applied before the flight of *Grapholita funebrana* males, significantly reduced fruit damage.
- The RIMpro-Cydia 3 forecasting model for the control of the codling moth (*Cydia pomonella*) was applied and showed good results only for the first generation. A recommendation was made to farmers to carry out direct monitoring of the second generation of the pest.

CONTRIBUTIONS OF CONFIRMATORY CHARACTER

- The entomofauna and the influence of different mulch types on potatoes (*Solanum tuberosum* L.) in the Plovdiv region were studied. It was established that the population density of *Leptinotarsa decemlineata* Say, *Myzus persicae* Sulz., and *Aulacorthum solani* Kalt. was lower in plots with straw or alfalfa mulch compared to those without mulch.

Citations and Referencing of Scientific Output

The scientific publications of Dr. Vasilev have been cited 18 times in international journals, confirming the international recognition of his scientific work.

Participation in a Projects

Dr. Vasilev has participated as a team member in three international research projects related to sustainable agriculture, plant protection, and ecological approaches, funded through various programs of the National Science Fund.

Remarks and Recommendations

I have no critical remarks regarding the research, teaching, or project activity of the candidate. I would recommend that in his future work, Chief Assistant Professor Dr. Vasilev test pheromone capsules for monitoring both male and female moths, as well as dispensers for apple pests – 80 units per hectare, which would save a great deal of manual labor.

CONCLUSION

Based on the presented documentation and the analysis of the scientific, applied, and teaching activities of the candidate, I conclude that Chief Assistant Professor Dr. Pavlin Vasilev meets the requirements of the Act for the Development of the Academic Staff in the Republic of Bulgaria (ADAMSRB), its Implementing Regulations, and the Rules of the Agricultural University for its application for occupying the academic position of Associate Professor in the scientific specialty Plant Protection (Entomology). The submitted materials meet the scientometric requirements for the position of **Associate Professor**. The candidate's research is relevant, and the results demonstrate significant scientific and applied contributions in the field of entomology. All this gives me reason to provide a **POSITIVE** evaluation of his overall activity. I therefore propose that the Academic Jury also vote positively and that the Faculty Council of the Faculty of Plant Protection and Agroecology at the Agricultural University – Plovdiv elect Chief Assistant Professor Dr. Pavlin Vasilev as **Associate Professor** in the scientific specialty **Plant Protection (Entomology)**.

Date: November 10, 2025

Prepared by:

Place: Plovdiv

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