



Statement

Subject: competition for the academic position of "associate professor" in the scientific specialty of Plant protection (Phytopathology), announced in the State Gazette No. 62 of 21.07.2023 with candidate chief assist. prof. Neshka Georgieva Piperkova, PhD, Agricultural University - Plovdiv (AU)

By Assoc. prof. Yordanka Mihailova Kartalska -Tatarova PhD, appointed as a member of the scientific jury, according to order RD-16-902/25.09.2023, signed by the Rector of the Agricultural University – Plovdiv

1. Brief introduction of the candidate:

Neshka Georgieva Piperkova graduated from the VSI (currently Agricultural University) in 1987 at the Faculty of Plant Protection, and graduated with a master's degree in "Engineer- agronomist in plant protection", and in 2013 she obtained a PhD degree, after her successful defense of a doctoral thesis titled: "Study of curliness on the peach (*Taphrina deformans* /berk./tul.). Since 1988, after completing her higher education, she started working as an assistant professor in the department of Phytopathology, where her professional career began and continues up to this date.

During her career development, Dr Piperkova has completed specializations in electron microscopy in the University of Bologna, Italy and in modern horticulture at the University of Leuven, Belgium, with the knowledge and skills acquired, contributing to the realization of her scientific interests and professional success. Dr Piperkova speaks two foreign languages: Russian and English.

2. General description of the presented materials.

The scientific output of Dr. Piperkova, including her doctoral thesis and publications in research articles, meet the necessary requirements for the above mentioned position and correspond to the profile of the announced competition.

In the competition for the academic position of Associate Professor, Dr. Piperkova participated with a total output of 27 works, one book published on the basis of a defended dissertation work, grouped as follows:

Scientific publications on the nomenclature specialty - **27** items, of which:

- Publications, related to the PhD thesis - **3** items that are not subject of consideration;
- Scientific publications that are referenced and indexed in world databases with scientific information with an impact factor - **6** issues with a total **IF - 15,475**

- Scientific publications in refereed and indexed journals with scientific information - **9** items;
- Scientific publications in conference proceedings – **4** items;
- Scientific publications in non-refereed journals with scientific review or in edited collective volumes - **5** items.

The personal participation of Dr. Piperkova in the mentioned **24** papers is illustrated by the fact that in **3** of these she is single author, in **12** of them she is the first author, in **6** of them she is a second author, and in the remaining **5** she is the third author.

Student's handbooks/manuals - **2** items.

To prepare this statement **24** items are subject to analysis.

The information related to the fulfilment of the minimum national requirements under Art. 26, paras. 2, 3 and 5 of ZRASRB for scientific field 6: Agricultural sciences and veterinary medicine; professional field: 6.2. Plant protection (Phytopathology), from assist. prof. PhD Neshka Georgieva Piperkova - candidate for the academic position „Associate Professor“ forms the following indicators:

According to the indicator in group A - **50** points;

According to the indicator in group B – there are presented 10 publications, which formed **161.5** points;

According to the indicator in group G – there is one book and 13 scientific publications are presented, with a total of **208.3** points.

According to the indicator in group D - **225** points.

At the required minimum of 400 points for the position "Associate Professor", Dr. Piperkova has **594.1** points, thus exceeding the national minimum requirements. The distribution of scientific productivity by quartiles is as follows: **2** articles with quartile **Q1**; **3** articles with quartile **Q2** and **1** article with quartile **Q3**.

3. Teaching activity.

Dr. Piperkova's teaching experience so far amounts to 35 years and 6 months and her study load for the last 5 years is a total of **3130, 7** hours. She tutors students with lectures and exercises in five specialties in "Bachelors" and "Masters" degrees. She has co-authored two student's handbooks/manuals. Dr. Piperkova was involved in the development of both joint curricula and independent new curricula.

Her teaching experience is complemented by her successful leadership of 32 „Bachelors“ and „Masters“ defended thesis, which are eloquent proof of her high competence.

4. Scientific research activity

Areas of publications

The overall scientific research activities and achievements of Dr. Piperkova can be thematically summarized in three main areas:

- ♦ Diseases diagnosis and determination of the etiology of poorly investigated or diseases new to the country;
- ♦ Elucidation of pathological changes in the plant-pathogen system;
- ♦ Investigation of ability of some essential oils and antagonists as potential bio pesticides, to control some fungal pathogens.

In each of these areas the candidate's work demonstrates high professional competence. I accept and approve PhD Piperkova's author's report on her scientific contributions and the manner of their presentation, a significant part of which are original and new achievements.

In her research investigations, Dr. Piperkova applies both fundamental, as well as new, molecular methods for isolations and diagnosis of crop diseases. With the application of new, molecular method of next-generation sequencing, she managed to characterize and for the first time in the world to announce the discovery of a new virus on the cherry – *Cherry Trakiya virus* (CVT), detected by the analysis of total RNA. The ascomycete fungus was described for the first time in Bulgaria as *Pestalotiopsis* sp., isolated from blueberry, as well as the plant pathogenic fungus *Dactylonectria pauciseptata*, which cause the black root rot on the vine and plum. Another important aspect with practical importance which Dr. Piperkova developed and received results in are related to the biological activity of the fungus *Trichoderma viride* Tr6 and some essential oils on certain phytopathogens. During her research activity, the candidate provided important contributions, in order to develop the pathogenesis of *Taphrina deformans*, through the observation of the activity of some enzymes and biochemical indicators.

Citation and referencing of scientific production

Dr. Piperkova's research is presented through publications, with posters and sectional reports at 4 international congresses and symposiums, and with participation in 5 Bulgarian scientific forums, with the total Impact Factor **15,475**. Her works have been cited **42** times in articles, books and dissertations, resulting in her **h-index of 4**.

Dr. Piperkova participated in 1 international project, 3 national projects, and 1 internal AU project.

5. Notes and recommendations.

I have no comments or recommendations for the candidate.

6. Conclusion.

Based on the analysis of the pedagogical, scientific and scientifically applied methods, I consider that the candidate - **Chief Assistant Professor Neshka Pipirkova PhD** meets and exceeds the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations of the Agricultural University for its application. From the presented references it is evident that she is an established creative specialist in the field of phytopathology, with proven skills in training graduates, with emphasis on her scientific interests and the achievement of original and important publications and contributions.

On the basis of the scientific publications that are presented and the personal qualities of candidate, I confidently express my positive assessment of the overall contributions of Chief Assistant Prof. Neshka Georgieva Piperkova PhD. I would suggest to the honorable jury to also vote positively, and to the Faculty Council of the Faculty of Plant protection and agroecology at the Agricultural University - Plovdiv to choose the candidate **Neshka Georgieva Piperkova** for "**Associate Professor**" in the scientific specialty Plant Protection (Phytopathology).

Date: 23.11.2023

Plovdiv

PREPARED BY 

(Assoc.Prof.Yordanka Kartalska PhD)