

STATEMENT

About the competition for the academic position of "Associate Professor" in the field of higher education 6. Agrarian Sciences and Veterinary Medicine, professional field 6.2. Plant Protection (Herbology, physiological and phytopathological mechanisms in plant protection), announced by the Department of "Plant Protection, Botany and Zoology" of the Faculty of Plant Protection, at the University of Shumen "Bishop Konstantin Preslavski", in the State Gazette No. 63/01.08.2025 with candidate **Senior Assistant Professor Dr. Maria Zhivkova Kaschieva**

Member of the scientific jury: Prof. Dr. Veselin Alexandrov Arnaudov from Shumen University "Bishop Konstantin Preslavski", appointed according to Order No. RD 16-238/31.10.2025 of the Rector of Shumen University as a member of the scientific jury.

1. General characteristics of the candidate's scientific research and applied scientific activities.

From the submitted reference of the candidate, Senior Assistant Professor Dr. Maria Zhivkova Kaschieva, for fulfilling the minimum national requirements of the PPZRASRB and the Regulations for the Development of the Academic Staff at the University of Shumen for holding the academic position "Associate Professor", it is evident that the candidate exceeds the required minimum number of points necessary to hold the academic position "Associate Professor", according to the Regulations for the Development of the Academic Staff at the University of Shumen.

In the competition for "Associate Professor", Senior Assistant Professor Dr. Maria Zhivkova Kaschieva participated with a total output of 21 scientific works (monograph books - 2 pcs. and scientific publications 19 pcs.), grouped as follows:

Indicator A – 50 points. Defense dissertation on the topic "Enrichment of the fodder beet gene pool through the application of in vitro techniques and morphological and cytological characterization of the resulting plants".

Indicator B – 100 points, with a required minimum of 100 points. Habilitation work – monograph "Inventory of weed diversity in arable areas located in Protected Area BG0002051 - Kaliakra Complex".

Indicators G5 – 100 points, with a required minimum of 100 points – Published monograph that is not presented as the main habilitation work "Saffron Crocus (*Crocus sativus* L.) from the field to the spice" UI "Bishop Konstantin Preslavski" - 153 pages.

Indicators G7 and G8 – 230.4 points with a required minimum of 200 points.

D7 – Publications in publications that are referenced and indexed in world-renowned databases of scientific information – 7 issues **and D8 Articles** and reports published in non-refereed journals with scientific review or published in edited collective volumes- 12 pcs.

Of the 21 scientific papers submitted in connection with the competition for the academic position of "associate professor", 10 (47.6%) were published in Latin, 11 (52.4%) - in Cyrillic. The personal participation of Dr. Maria Kaschieva in the indicated 21 scientific papers is illustrated by the fact that in 2 (9.5%) of them she is the sole author, in 4 (19.1%) the first, in 9 (42.9 %) - the second and in 6 (28.5%) - the third and subsequent author.

She has reported and promoted the results of her research activities at 8 national and international conferences. The number of citations noted is 14, 7 of which are in publications referenced and indexed in world-renowned databases and 7 - in non-refereed publications in peer-reviewed journals.

2. Assessment of the candidate's pedagogical training and activities.

The educational and pedagogical activity of Dr. Maria Kaschieva is related to the training of students from the Bachelor's Degree Program in the specialty "Plant Protection", "Ecology and Environmental Protection", "Pedagogy of Teaching in Biology and Chemistry" and "Pedagogy of Teaching in Geography and Chemistry" and the Master's Degree Program, specialty "Plant Protection" of the University of Shumen. Total teaching and teaching experience - 14 years.

As a senior assistant professor in the Department of Plant Protection, Botany and Zoology of the University of Shumen, she teaches the disciplines - "Plant Physiology", "Herbology", "Agrochemistry", "Selection and Seed Production of Cultivated Plants", to students from the Bachelor's Degree Program, specialty "Plant Protection", and "Herbology" to students from the Master's Degree Program, specialty "Plant Protection" of the University of Shumen and "Plant Protection in Urban Conditions", in the specialty "Ecologically Appropriate Management of Cultivated Plant Pests" in a joint master's degree program with the University of Forestry - Sofia.

Dr. Maria Kaschieva is a participant in 2 educational projects of the Ministry of Education and Science and 7 research projects funded by the University of Shumen. She is the author or co-author in the development of 8 curricula and is the supervisor of 5 successfully defended graduate theses (3 in the Bachelor's and 2 in the Master's degrees).

3. Scientific research activity. Areas of publication.

The research work of Dr. Maria Kaschieva is related to

- Study of various chemical and bioactive substances of plant origin as potential means for controlling phytopathogens and weed vegetation.
- Study of the composition of the epiphytic mycoflora on the seeds of different sorghum genotypes and sorghum-Sudan grass hybrids and their influence on seed quality.
- Development of in vitro method for obtaining haploid plants from fodder beet.
- Identification of new types of pathogens on apricot leaves in the Shumen region and the influence of abiotic factors on the yield and quality of different cherry varieties.
- Study of the specific and biological characteristics of alternative agricultural crops and the possibilities for their cultivation in Bulgaria.
- Study of weed vegetation in arable agricultural areas.
- Studying different agricultural methods and practices, with a view to using them to restore natural habitats.

4. Major scientific and applied scientific contributions.

In the reference for scientific contributions in the works, a total of 17 contributions has been formed and presented, of which 8 are of an original nature, 2 - scientifically applied, 4 - applied and 3 scientifically methodological, showing the importance of the developed scientific problems in the field of herbology, physiology and plant phytopathology in agricultural crops.

5. Significance of contributions to science and practice.

The main areas of work of Dr. Maria Kaschieva are aimed at establishing the action of various chemical and bioactive substances and their use as potential means for controlling various phytopathogens; studying the species composition of the epiphytic mycoflora on sorghum seeds and their influence on seed quality; establishing the efficacy of fungicides and various alternative means for controlling the fungal pathogen *Alternaria alternata* on stevia; development of in vitro method for obtaining haploid plants from fodder beet (*Beta vulgaris* L. var. *crassa*) and inventory of the weed composition in the cultivated areas within the protected area "Kaliakra Complex". The candidate has in-depth knowledge of the subject of scientific research work. As the most significant merits in the scientific research work of Dr. Maria Kaschieva, I could point out:

The identification of chemical and bioactive substances of plant origin with well-expressed allelopathic, cytological and antibacterial effects on plant and phytopathogenic cells.

Determining the species composition of epiphytic mycoflora on sorghum seeds and their influence on seed quality.

Development of in vitro method for obtaining haploid plants from fodder beet.

The inventory of the weed composition in the cultivated areas within the protected area "Kaliakra Complex".

6. Critical notes and recommendations.

I have no critical remarks or questions for the candidate, but I would like to make the following recommendations.

1. To make efforts in the future to focus their efforts in one specific scientific field, which will help build a more clearly defined profile of scientific research work.
2. To increase the number of independent publications and to publish its scientific results in renowned scientific journals with an impact factor in order to be better recognized in academic circles not only in our country, but also abroad.

Conclusion.

Based on the analysis of the overall research, applied and teaching activities of Senior Assistant Professor Dr. Maria Zhivkova Kaschieva, I believe that the candidate meets the requirements of the Act on Academic Affairs and the Regulations on the Terms and Procedures for Holding Academic Positions at the University of Shumen.

This gives me reason to evaluate **positively** the overall activity of the candidate and to propose **Senior Assistant Dr. Maria Zhivkova Kaschieva** be appointed to the academic position of "**Associate Professor**" in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.2. Plant Protection (Herbology, physiological and phytopathological mechanisms in plant protection).

Date: 10.12.2025.

Shumen

PREPARED THE STATEMENT:

(Prof. Dr. V. Arnaudov)