

OPINION

regarding the competition for "associate professor" in the scientific specialty Entomology, announced in SG no. 97/21.11.2023 with candidate ch. assistant Dr. Dima Mateeva Markova by Prof. Dr. Vili Harizanova, appointed according to Order No. RD 16-47/22.01.2024 of the Rector of the Agricultural University - Plovdiv as a member of the scientific jury

1. Brief introduction of the candidate.

Ch. Assistant Professor Dima Mateeva Markova, PhD, was born on 24/04/1982. In 2004, she received a bachelor's degree at AU-Plovdiv, majoring in Plant Protection, and in 2005 - a master's degree, majoring in Ecology of Settlement Systems at AU-Plovdiv. From 2006 to 2020, he was successively a research assistant III degree, a research assistant II degree, assistant and chief assistant at IZK "Maritsa", department "Technologies in vegetable production". In 2015, she obtained the educational and scientific degree "doctor" in the scientific specialty Plant Protection (Entomology).

From 2021 to the present, she is chief assistant in the Department of Entomology at AU-Plovdiv, where she gives lectures, laboratory and practical exercises to students from bachelor's and master's courses in the disciplines: Non-insect pests, General entomology, Special entomology, Diseases and pests in green systems, Agricultural acarology and nematology.

She is scientific supervisor of graduate students, tutor of master's course, participates in national and international projects, works with laboratory equipment and office equipment. She is fluent in English and has good command of Russian.

2. General description of the scientific production.

In the competition for "associate professor" Dr. Markova participates with a total production of 65 papers, grouped as follows:

❖ *Scientific publications on the nomenclature specialty - 65 issues, of which:*

- *Publications related to the doctoral dissertation - 4 issues, which are not subject to consideration;*

- *Publications with an impact factor – 12 issues;*

- *Publications in peer-reviewed and refereed scientific journals – 7 issues;*

- *Publications in conference proceedings – 42 issues;*

Dima Markova's personal involvement in the mentioned 65 works is illustrated by the fact that two are independent, in 8 she is the first, in 31 she is the second, and in the remaining 24 she is the third and subsequent author.

❖ *Scientific and popular articles outside the nomenclature specialty - 16 issues.*

- ❖ *Co-author of two publications: "Biological production of tomato and cucumber seedlings" and "Technologies for the production of vegetable crops and potatoes".*

To prepare the opinion, 61 items are subject to analysis.

The candidate fulfills the minimum number of points required by ZRASRB for acquiring the academic position "associate professor" in the field of higher education 6. Agricultural sciences and veterinary medicine, professional direction 6.2. Plant protection, with the total number of points from the mandatory indicators being 574 against the required 400. In three of the groups of indicators, the exceedance is significant.

The contributions in the scientific works of the candidate are closely related to the scientific specialty of the announced competition and are grouped as original, scientific-applied and contributions of a confirmatory nature. I accept them without objection as presented in the Reference.

3. Teaching activity.

Dr. Dima Markova has been appointed as a chief assistant in the Department of Entomology at AU-Plovdiv on 04/06/2021 and her experience as a teacher at the date of the start of the competition procedure is 2 years, 9 months and 25 days.

Academic employment of the candidate.

Through the period from 2019 to 2023 in OKC "bachelor" u OKC "master" Dr. Markova had 1384.7 hours of direct classroom work from lectures, exercises and extracurricular work.

The teaching activity is complemented by the guidance of five successfully defended graduates.

4. Scientific research activity.

Areas of publication.

The main focus of the candidate's research work is studies on various pests (nematodes, insects and mites) of vegetable crops, greenhouse and field production, the most important of which are:

- Evaluation of the response of susceptibility in different varieties, samples and lines of vegetable crops, potatoes and rice to plant-parasitic nematodes, in connection with the selection of resistance;
- Study of alternative species for control of plant-parasitic nematodes;
- Determining the species composition and population dynamics of the main pests and beneficial species in the agrocenoses of vegetable crops;
- Research the efficacy of new plant protection products against pests in vegetable crops grown outdoors and in cultivation facilities;

- Development of integrated and biological plant protection systems for the protection of vegetable crops from pests;
- Development of technology for growing *Tribulus terrestris* L. as a semi-culture and identification of pests;
- Studying the influence of water deficit on growth indicators and attack by pests in pepper mutant lines.

Citation and referencing of scientific production.

The results of her scientific works are cited in 55 literary sources, 3 of them in Bulgarian publications, 49 in Bulgarian magazines and in foreign publications, and 3 in dissertations.

Participation in scientific projects.

The presented list of a total of 27 scientific projects, in which Dima Markova is a member, is indicative of her active research activity. Of the projects, 24 are national, financed by the SSA (14) and by the National Research Institute, Ministry of Education and Culture (10) and 3 are international, financed by the EU (1) and the International Atomic Energy Agency (2).

5. Notes and recommendations.

I have no comments or recommendations.

6. Conclusion.

Based on the analysis of the pedagogical, scientific and scientific-applied activities of Dr. Dima Mateeva Markova, I believe that the candidate meets the requirements of ЗРАСРБ, ППЗРАСРБ and the Regulations of the Agrarian University for its application. The presented scientific works are of a high level, fully related to the professional direction 6.2 Plant protection (scientific specialty Entomology), and quantitatively cover the required indicators for the academic position "docent".

All this gives me reason to **POSITIVELY** evaluate her overall activity.

I take the liberty of proposing to the honorable Scientific Jury to also vote positively, and the Faculty Council of the Faculty of Plant Protection and Agroecology at the Agricultural University - Plovdiv to elect Dima Mateeva Markova as "**associate professor**" in the scientific specialty **Plant Protection (Entomology)**.

Date: 15.03.2024
Plovdiv

PREPARED THE OPINION:

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(Prof. Vili Harizanova)