



OPINION

Regarding the competition for the academic position of "Associate Professor" in the scientific speciality "Horse Breeding and Other Equine Sciences," announced in State Gazette No. 41 of May 5, 2026, with candidate Chief Assistant Professor Dr. Maya Georgieva Popova.

Reviewer: Prof. Dr. Tsonka Odzhakova, field of higher education "Agricultural Sciences and Veterinary Medicine," professional field "Animal Science," scientific speciality "Breeding of Farm Animals, Biology and Biotechnology of Reproduction," appointed as a member of the scientific jury pursuant to Order No. RD 16-811/29.06.2026 of the Rector of the Agricultural University – Plovdiv.

1. Brief presentation of the candidate.

Dr. Maya Georgieva Popova is a Chief Assistant Professor in the Department of Animal Sciences at the Agricultural University – Plovdiv and Chair of the "East Bulgarian Horse" Association. Her research activity is focused on the selection and breeding of horses, genetic resources, reproductive biology, physiology, and the conservation of autochthonous breeds, actively participating in national scientific programs and research projects. She is the author of scientific publications in international and national scientific journals, participates in the training of students, and develops active expert activity in the field of horse breeding.

2. General description of scientific production.

In the competition for "Associate Professor," Chief Assistant Dr. Maya Georgieva Popova participates with a total production of 22 works, grouped as follows:

- ❖ Scientific publications in the nomenclature speciality – 22 items, of which:
 - Publications related to the doctoral dissertation – 3 items, which are not subject to review;
 - Publications with impact factor – 7 items;
 - Publications in peer-reviewed and referenced scientific journals – 15 items;

The candidate's personal participation in the indicated 22 scientific works is illustrated by the fact that 3 articles are independent, in 13 she is the first author, in 4 she is the second author, and in the remaining 2 she is the third or subsequent author.

22 items are subject to analysis for the preparation of this opinion.

Chief Assistant Dr. Maya Popova is a co-author of the "Breeding Program for the Conservation and Breeding of the East Bulgarian Horse Breed" and the "Program for Breeding and Conservation of the Karakachan Horse Breed 2020–2030."

3. Teaching activity.

Candidate's teaching workload.

The teaching experience of Chief Assistant Dr. Maya Popova is 13 years and 4 months. The candidate actively participates in teaching activities at the Agricultural University – Plovdiv through lectures, exercises, and extracurricular activities. The submitted report shows that for the period 2021/2022 to 2025/2026, she has conducted 3517.9 hours.

4. Research activity.

Areas of publication.

Based on the submitted scientific works, the areas of publication can be synthesised into several main thematic directions:

- ❖ Selection, genetics, and horse breeding;

Genealogical and linear structure of Bulgarian horse breeds, breeding programs and selection strategies, heritability of selection-significant traits, conservation of genetic diversity.

- ❖ Morphology, exterior, growth, and development of horses;

Exterior characteristics, body measurements and indices, growth and development, comparative morphological studies between different breeds.

- ❖ Physiology, haematology, and biochemistry in horses;

Physiological status of horses, haematological and biochemical indicators, influence of age, breed, season and feeding, nutritional supplements and their impact.

- ❖ Reproductive biology and reproduction;

Estrus and sexual cycle, duration of pregnancy, age for inclusion in breeding, factors affecting reproductive indicators.

- ❖ Behaviour, monitoring, and modern technologies in horse breeding;

Ethology of free-range horses, GPS monitoring, camera traps and drones, spatial behaviour and herd management.

- ❖ Sustainable management of autochthonous breeds and conservation of genetic resources.

Conservation of the Karakachan and Danube horses, management of pasture ecosystems, biodiversity and nature conservation practices, sustainable use of genetic resources.

Chief Assistant Dr. Maya Popova meets the minimum national requirements for the academic position of "Associate Professor" in the field of higher education 6. "Agricultural Sciences and Veterinary Medicine," professional field 6.3 "Animal Science," according to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for its implementation at the Agricultural University.

Group of indicators "A" - Successfully defended dissertation for the educational and scientific degree "Doctor" in 2017 – 50 points.

Group of indicators "B" - 10 scientific works, with which the candidate forms 180 points, against a requirement of 100 points.

Group of indicators "G" - 12 scientific works published in journals that are referenced and indexed in world-renowned databases of scientific information, with which the candidate forms 207 points, against a requirement of 200 points.

Group of indicators "D" - 4 citations are presented in scientific journals, referenced and indexed in world-renowned databases of scientific information. The total sum of scientometric indicators for "Associate Professor" formed by Chief Assistant Dr. Maya Popova is 497.5, against minimum requirements of 400 points.

After analysing the presented scientific production and report, I allow myself to point out the following contributions:

Original scientific contributions

For the first time, a complex assessment of the breeding status, genealogical structure, and genetic diversity of Bulgarian horse breeds has been performed, identifying trends relevant to their conservation and selection (**B3, B4, B10, B1**). New scientific data have been obtained regarding physiological, haematological, biochemical, and reproductive indicators in different horse breeds, and the influence of age, sex, season, and other biological factors on them has been assessed (**B7, B8, B9**).

Scientific contributions

Genetic parameters and selection-significant traits have been determined, which can be used in the improvement of breeding programs. The exterior features, growth, and development of Bulgarian horse breeds have been analysed, creating scientific prerequisites for more precise selection evaluation (**G4, G1, G2, G9, G12**). Scientific information on the reproductive biology of horses and the factors affecting their reproductive capacity has been enriched.

Applied contributions

Scientifically based recommendations for the improvement of selection and breeding activities in Bulgarian horse breeds have been developed. The results obtained can be used in the development of programs for the conservation and sustainable management of autochthonous genetic resources. The scientific results have been implemented in the educational process and support the training of students and specialists in the field of horse breeding (**G8, G11, G10, G6**).

Citation and referencing of scientific production.

Indicators for the significance and relevance of the candidate's scientific production are citations and publication in prestigious journals. The 4 presented citations are in scientific journals referenced and indexed in world-renowned databases of scientific information with a quartile of Q1–Q4 and with SJR: 0.157; SJR: 0.47; SJR: 0.524; SJR: 0.224.

Participation in scientific projects.

Chief Assistant Dr. Maya Popova participated in the national scientific program "Reproductive Biotechnologies in Livestock Breeding in Bulgaria (REPROBIOTECH)" (2018–2021). She is a scientific supervisor of two research projects and a participant in one project funded by the Agricultural University – Plovdiv.

In the period 2019–2021, within the framework of the National Scientific Program "Young Scientists and Postdoctoral Students," Dr. Popova conducted research focused on the selection, genetic, morphological, physiological, and reproductive features of Bulgarian horse breeds. The results obtained contribute to the assessment of breeding status, genetic parameters, and reproductive indicators, as well as to the better conservation and sustainable development of national genetic resources. The research provides a scientific basis for improving selection programs and increasing the efficiency of breeding work in horse breeding.

5. Remarks and recommendations.

None.

6. Conclusion.

Based on the analysis of the pedagogical, scientific, and scientific-applied activity of the candidate, I consider that the realised results, publications in prestigious journals, scientific and applied contributions, and citations meet the requirements of the ZRASRB, the Regulations for its implementation, and the Regulations of the Agricultural University for its application.

All this gives me grounds to assess her overall activity **POSITIVELY**.

I allow myself to suggest to the honourable Scientific Jury to also vote positively, and for the Faculty Council of the Faculty of Agronomy at the Agricultural University – Plovdiv to elect Chief Assistant Dr. Maya Georgieva Popova as "Associate Professor" in the scientific speciality "Horse Breeding and Other Equine Sciences."

Date: 29.07.2026

City: Plovdiv

PREPARED THE OPINION:

Prof. Dr. Ts. Odzhakova

