

ACADEMIC REVIEW

on the materials for participation in a competition announced in SG 42/12.05.2023, for the occupation of an academic position "Associate Professor", higher education field 6. Agricultural sciences and veterinary medicine, Professional direction 6.1. Plant Growing, scientific specialty Plant Growing

A member of the scientific jury: Prof. Boryana Mincheva Stefanova, PhD from RIMSA-Troyan; professional field 6.1. Plant Growing, Scientific specialty: Fruit Growing, order for the appointment of RN RD 16-097 from 07.08.2023 of the Rector of the University of Shumen.

I. Brief introduction of the applicant

Dimitar Vasilev Dimitrov graduated from the Academy of Agricultural Sciences Master in 2000, majoring in "Plant Protection" at the Agricultural University of Plovdiv. From 2003 to 2006 he was a doctoral student, until 2010 - an assistant at the Agricultural Experiment Station - Khan Krum SE, AA. He defends a dissertation for the award of the E S D "Doctor" in Professional direction 6.1 Plant Growing, (Selection and Seed Production of Crops), on the topic *Study of parental forms of oriental tobacco from Northern Bulgaria*. In the period from 2010 to 2018, he was a chief assistant at the Agricultural Experiment Station - Khan Krum State Enterprise, Agricultural Academy of Bulgaria, and then at Konstantin Preslavsky University of Shumen. He has acquired additional qualifications and levels of English language proficiency and certificates for Bikam Plus Clarivate Analytics, Web of Science; and Elsevier, Databases - Scopus, ScienceDirect, Mendeley.

II. Scientometrical indicators of the presented scientific production

In accordance with the normative requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for its implementation in the University of Shumen, in the current competition for "Assoc. Prof.", Chief Assistant Dimitar Dimitrov, PhD participates as the only applicant, whose documents and materials are in full compliance in terms of type and content. Lists and copies of materials are

presented, certifying the existence of 34 scientific publications. It is clear from the completed self-assessment that:

According to indicator A, PhD Dissertation is presented from 2010 - **50 p.**

Group B indicators (11 scientific publications refereed and indexed in world-renowned databases with scientific information) – **254 p.**

Total number of points for group G indicators – 255.3 p., including

- G 7 – (6 publications) **100 p.**; G 8 – (17 publications) **130.3 p.**; G 12 - Confirmed /only distinctiveness, homogeneity and stability/ Bistra 514 tobacco cultivar /*N. tabacum* L./ - **25 p.**

As the lead author, Dimitar Dimitrov presents 21 papers, which is more than 60% of the scientific output. He is the second author of 8 publications, which is 23%. This gives significant value to the presented materials, and in the other publications he is a co-author in the team with which he works.

Total number of points for group D indicators (Citations) – **95 p.**

Group E (Participation in projects) **10 projects.**

The Minimal National Requirements (MNR) for the occupation of the academic position of "Associate Professor" for PD 6.1. Plant Growing are a sum of 400 points. From the presented materials Ch. Assistant Dimitrov gets **654.3 POINTS ALTOGETHER** from groups A+B C+D+E. The fulfillment of the required conditions is 1.6 times (163%). In the self-assessment report, the applicant indicates an amount of **629.3**, however, in my opinion, the points for the authorship of a variety (25) and points from group E projects (for which a report is attached) are not taken into account, which will further raise the percentage of over-fulfilment.

III. Main directions in the applicant's research activity and the most significant scientific contributions

In reference to the scientific contributions in the works, **10 original contributions** were formed and presented, which undeniably show the fundamental significance of the developed scientific problems in plant growing - fruit growing, tobacco, cotton, 4 scientific and applied contributions and 3 contributions of a

confirmatory nature. I fully accept the reference, as I determine the following contributions as more significant:

1. tobacco - A new cultivar of oriental tobacco "Bistra 514" was created and approved through intercultural hybridization. A comparative assessment of Bulgarian and foreign cultivars was conducted, the effects of actual (HP) and hypothetical (MP) heterosis and correlation dependences between vegetative and reproductive indicators were determined.

2. fruit growing - main contributions are published as data on 1) cherry rootstocks 20-181 and 20-192 selected in FGI of Plovdiv; 2) red-leaved peach hybrid No 9-205, grown in a nursery, with high drought resistance and good resistance to diseases and enemies; 3) Studies on the rooting rate of 8 flat peach cultivars in a nursery; 4) The growth dynamics of peach and nectarine rootstocks in a nursery were studied; The growth and reproductive performances of an exceptional collection of 13 nectarine cultivars in a plantation were determined; 5) The impact of abiotic factors on growth and reproductive performances in peaches and nectarines, cherries and sour cherries and their reaction to some economically significant diseases was studied.

3. local genetic resources, storage and management - the so-called "vineyard peach" with small-sized fruits and a primitive taste and a mutation of Melrose apple cultivar from the area of the village of Khan Krum in Shumen Region with very good indicators of fruit weight and high soluble dry matter (Brix) content.

4. work with cotton - regarding the effect of drip irrigation and the productivity of irrigation water in cotton and correlation dependences were conducted.

The contributions can be defined as thorough and original, some of them of an innovative character, which is a serious argument in support of the candidacy for Associate Professor of Ch. Assistant D. Dimitrov.

IV. Assessment of the applicant's personal contribution My acquaintance with the presented publications gives me reason to state that the

scientific achievements of the applicant enrich the existing knowledge and are applicable in science and practice. The obtained scientific and scientific-applied results and achievements are published and shown in the presented competition documentation.

V. **Significance of the obtained results** (citability and recognition of the applicant in scientific circles)

According to the MNR and the rules for holding the position of Associate Professor, the presented citations are fully sufficient to show a high level of reflection of the applicant's scientific output. The journals where the publications are cited are *Journal of Fungi*, *Journal of Mountain Agriculture on the Balkans*, *Journal of Central European Agriculture*, *Agricultural Sciences and Technology* are refereed and indexed in world databases with scientific information. It can be said with conviction that his scientific work is recognizable in scientific circles both in Bulgaria and abroad.

VI. **Initiative and research management skills. Additional activities** (expert activity, teaching activity, trainings and specializations, etc.)

✚ From 2007 to 2025 Ch. Assistant Dimitar Dimitrov is a participant in AAB projects at FGI of Plovdiv (5 projects) with managers Prof. Zhivondov and Ch. Assistant Sv. Malchev on topics related to genetic resources and selection of peaches, nectarines and cherries.

✚ For the period 2019-2023, he participated in 5 projects at the University of Shumen, supervised by Prof. D. Zahariev.

✚ Reference for participation in prestigious scientific forums, for the last 3 years, shows congresses in Romania, France, Montenegro and scientific conferences with international participation held in Bulgaria.

✚ Ch. Assistant D. Dimitrov, is the supervisor of 5 graduates in Plant Protection in 2023.

✚ The applicant holds certificates for Participation in a round table on the topic: Pedagogical practices and continuing education - current problems and challenges and a master class.

Increasing the digital competences of pedagogical specialists/good practices (2022); Tradition and innovation in teaching/introduction to modern teaching methods (2022); Working with the University Platform of the University of Shumen for Learning in an Electronic Environment (2020)

✚ Since 2020, he has been a member of the Executive Board of the University of Shumen; a member of the quality committee at the Faculty of Natural Sciences; responsible for the quality of the RZBZ Department.

✚ 2023 – member of ISHS (International Society for Horticultural Science)

✚ Besides giving lectures at the University of Shumen, Dimitrov was a lecturer for the National Agricultural Advisory Service /NAAS/ - Razgrad office 03.06.2023 and Shumen office 03.22.2023.

✚ He participated in the jury of a student competition under project BG05M20P001-2.016-0022 "Modernization of higher education for sustainable use of natural resources in Bulgaria", co-financed by the EU through European Structural and Investment Funds (2023)

✚ He works with students, as a member of the jury of national competitions (2021; 2022) organized by Professional High School of Agriculture and Food Technology of Shumen "Young Farmer" under the auspices of Agricultural University of Plovdiv and the Ministry of Education and Science.

VII. Personal impressions

I have very good impressions from the general overview of the scientific, research and teaching activities of Ch. Assistant Dimitar Dimitrov, PhD. The achieved research, educational and applied results have a significant contribution to the development of science. The applicant presents himself as a fully formed and authoritative scientist.

VIII. Critical notes, questions and recommendations to the applicant

In his academic career, as a lecturer since 2018, at the Faculty of Natural Sciences of Konstantin Preslavsky University of Shumen, Chief Assistant Dimitrov has taught classes in Soil Science, Fruit Growing, Vegetable Production,

Viticulture, Plant Growing, Herbology for the specialty Plant Protection at the "Bachelor's degree", but it is not specified what horary and what occupation it covers. However, I believe that he can fully perform the lecturer's activity related to the academic position of "Associate Professor" for which he is applying.

As recommendations for the future work of Ch. Assistant Dimitrov, I think it would be very good to arouse the interest and attention of students to the biodiversity of wild species from the local gene pool and the search for valuable forms for selection and to enrich the national gene pool, since the area of the village of Khan Krum in the Shumen region is rich in genetic resources; he could continue his research with new cultivars of nectarines, by creating a fruit collection, for the benefit of the education of the students at the University of Shumen, because the nectarine is an attractive fruit crop and deserves a thorough study. I would recommend looking for opportunities for publications with foreign authors, as well as for participation in international projects, with the aim of applying scientific achievements and popularizing the results among a wider circle of specialists. I am convinced of his successful future development as a scientist and selectionist.

CONCLUSION

The documents submitted for participation in the competition show that the research and applied activities of Chief Assistant Dimitar Dimitrov fulfil the criteria of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations on the terms and conditions for obtaining scientific degrees and for holding academic positions in the University of Shumen.

This gives me the reason to **positively evaluate the overall activity** of the applicant and to propose Ch. Assistant Dimitar Vasilev Dimitrov to be appointed to the academic position "Associate Professor" in the field of higher education 6. Agricultural sciences and veterinary medicine, professional direction 6.1. "Plant Growing" (Plant Growing).

25.09.2023

RIMSA of Troyan

REVIEWER:


/Prof. Boryana Stefanova, PhD/