

## SCIENTIFIC OPINION

regarding a competition for an academic position of "Associate Professor" in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, Professional direction 6.1 Crop Production, scientific specialty "Crop Production", announced in SG No. 42/12.05.203 by "Konstantin Preslavsky" University of Shumen, with candidate Chief Assistant Dimitar Vasilev Dimitrov, PhD.

**Member of the scientific jury:** Prof. Dimitar Kirilov Sotirov, PhD, Institute of Agriculture - Kyustendil, AAS, Professional direction 6.1 Crop Production, Scientific specialty "Plant Breeding and Seed Production of Cultivated Plants", appointed by Order No. RD 16-097/07.08.2023 of the Rector of the University of Shumen.

### **I. Scientometric indicators of the presented scientific production**

From the attached reference under Art. 2b (2) and (3) of the Law on Development of Academic Staff in the Republic of Bulgaria it is clear that the candidate meets the necessary minimum national requirements by all criteria. The total number of points from the groups of indicators (A+B+G+D) is 629.3, with minimum requirements of 400 points for taking the academic position "Associate Professor".

### **II. Main directions in the candidate's research activity and most important scientific contributions**

The research activity of Chief Assis. Dimitar Dimitrov, PhD is in several main areas:

- ✓ Varietal study and breeding of tobacco and fruit species sweet cherry, sour cherry, peach, nectarine and different types of rootstocks for them.
- ✓ Development of new technologies - for growing oats and cotton.
- ✓ Plant protection - in fruit species, rapeseed, wheat and corn.

The most significant result of his work with tobacco is the recognized variety "Bistra 514" (in co-authorship), as well as the selection evaluation of Bulgarian and foreign oriental tobacco varieties and F1 hybrids obtained by applying various breeding methods.

Different cherry, peach and nectarine cultivars, in combination with clonal and seed rootstocks in a nursery, as well as during the different age periods were studied. Their reaction to stressful abiotic factors has also been thoroughly studied. Old local forms of the so-called "vineyard peach" and a mutation of the Melrose apple variety were found and studied too. All these researches are essential to achieving sustainable fruit production. In the oats, a new, economically effective technology for biological cultivation was developed and described, and in the cotton the influence of drip irrigation was evaluated and correlations between the qualitative and quantitative indicators were found. The response of nectarine cultivars to the fungal plant pathogen *Stigmia carpophila* causing shot hole disease in stone fruit species was studied, and the influence of the rootstock was also determined. The results of the research to determine the phytosanitary status (fungal diseases, weed composition and insects) and the economic qualities of different varieties of rapeseed and wheat, and hybrids of corn are also significant.

**III. Significance of the obtained results** (citability and recognition of the candidate in the scientific environment)

The obtained results have a high scientific and applied value and are directly related to solving specific problems in the field of crop production. The attached citation reference (5 articles in scientific publications, referenced and indexed in world-famous databases and 4 items in non-refereed journals with scientific review) shows that the candidate is known mainly in Bulgarian scientific circles in the field of tobacco research (7 citations) and only 2 citations are related to articles on the nectarine fruit species.

**IV. Initiative and research management skills. Additional activities** (expert activity, participation in editorial boards, teaching activity, trainings and specializations, etc.).

The candidate is a participant in 5 national projects developed by the Fruit Growing Institute at Plovdiv, SSA; in 1 project under the NOIR operational program and in 5 University projects, which is proof of good communication and teamwork



skills. His participation in international and national scientific forums highlights his ability to present the results of his scientific activity. He conducts classes in Viticulture, Soil Science, Vegetable Production, Fruit Growing, Crop Production and Herbology for the Plant Protection specialty at the University of Shumen. Outside his classroom activity is the related to lectures given at seminars organized by the National Agricultural Advisory Service on fruit pruning problems. He is currently the supervisor of 5 graduating students in Plant Protection specialty (Master's degree). He is a member of the International Society of Horticultural Sciences (ISHS), of the General Assembly of the University, of the quality committee at the FNS and a quality manager in the Department of Plant Protection, Botany and Zoology.

#### **V. Critical notes, questions and recommendations to the candidate**

I have no critical remarks about the candidate's scientific works. I allow myself to make a recommendation that he expand his publication activity by publishing mostly in foreign scientific journals with a higher impact factor, which will increase his citation and recognition in scientific circles.

#### **CONCLUSION**

The documents and materials submitted for participation in the competition for "Associate Professor" show that the scientific research, applied and expert activities of Chief Assistant Dimitar Dimitrov, PhD, meet the requirements of the Law on Development of Academic Staff in the Republic of Bulgaria.

This gives me reason to **positively evaluate** the overall activity of the candidate and to propose Chief Assistant Dimitar Vasilev Dimitrov, PhD be appointed to the academic position of "Associate Professor" in the field of higher education: 6. Agricultural Sciences and Veterinary Medicine, professional direction 6.1 Crop Production, in the scientific specialty "Crop Production" at the "Konstantin Preslavsky" University of Shumen.

23.09.2023

Kyustendil

Prepared the opinion:

  
/Prof. Dimitar Sotirov, PhD/