

## THESIS POSITION

for awarding academic position "Associate Professor" of Scientific specialty „Plant Breeding and Seed Production“, Professional field 6.1 – Crop Science, Field of higher education 6- Agricultural Sciences and veterinary medicine

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With candidate: Chief Assistant Professor PhD **Nadia Georgieva Daskalova**

Member of the scientific jury: Assoc. Prof. PhD **Grozi Delchev Delchev**

### **1. General characteristics of the research and scientific-applied activity of the candidate**

In connection with the implementation of the minimum national requirements for holding the academic position of "Associate Professor", Chief Assistant Professor PhD Nadia Daskalova presents a dissertation for the award of educational and scientific degree "Doctor" on the topic: "Team in synthetic wheat and hybrids to improve some selection traits", which covers the requirement of Indicator 1 of 50 points.

The candidate presents a habilitation thesis - a monograph on "Obtaining synthetic amphiploids in the group *Aegilops-Triticum-Secale-Dasypyrum* and their application in the selection of wheat in our country" with ISBN 9786192410964, accompanied by a separation protocol with 70% participation in Chief Assistant Professor PhD Nadia Daskalova. It covers the required 100 points under Indicator 3.

Chief Assistant Professor PhD Nadia Daskalova presents 13 articles published in scientific journals, referenced and indexed in world-famous databases with scientific information, bearing 169 points. 8 of them are with IF, and the other 5 are also in the world databases (Web of Science and / or Scopus), but without IF. It also presents 13 articles published in unrefereed journals with scientific review or published in edited collective volumes, bearing 34.4 points. In total, these articles carry 203.4 points under Indicator 4, with a requirement of 200 points.

The personal participation of Chief Assistant Professor PhD Nadia Daskalova in the 26 scientific articles presented in the competition is illustrated by the fact that 1 is independent, in 12 is the first author, in 7 is the second author, and in the remaining 6 is the third or next author. Of the presented publications, 14 are in English and 12 are in Bulgarian.

Dr. Daskalova has participated in a total of 13 research projects, 11 of which at TU-Varna and 2 at DZI - General Toshevo..

### **2. Assessment of the pedagogical preparation and activity of the candidate**

Chief Assistant Professor PhD Nadia Daskalova is an established lecturer in the Department of Plant Breeding at the Faculty of Mechanical Engineering at the Technical University, Varna. She enjoys respect and authority among students and academics. According to the attached reference, Dr. Daskalova gives lectures on the subject Phytopharmacy with students from the Bachelor's and Master's degrees.

The candidate conducts exercises with students - bachelors, full-time and part-time education, specialty "Agronomy" in the disciplines: Plant Breeding (first and second part), Plant Protection, four parts (Herbology, Phytopathology, Entomology, Integrated Pest Management), Breeding and Seed Production cultivated plants, Genetics and biotechnology, Phytopharmacy.

Dr. Daskalova conducts exercises with students - masters, full-time and part-time training in "Seed Production and Plant Protection" and "Production of sowing and planting material" in the disciplines :: Production of seeds from cereals and fodder crops, Good plant protection practices and principles of integrated pest management; Plant quarantine, Forecast

and signaling.

In addition to the exercises in these disciplines, Chief Assistant Professor PhD Nadia Daskalova also conducts production practices with students from the Bachelor's Degree in Plant Protection, Plant Breeding and Internship.

Dr. Daskalova has developed 6 curricula related to 4 disciplines: Phytopharmacy (for Bachelor's and Master's degrees); Training practice in Plant Protection; Production practice in Plant Breeding; Work experience.

Dr. Daskalova's teaching activity is complemented by the guidance of 11 successfully defended graduates, including 9 bachelors and 2 masters.

The candidate is the author of "Handbook of Herbology" and co-author of 3 manuals: "Guide to practical exercises in Herbology (Plant Protection - Part 1)", Guide to exercises in crop production - Part 1 (Cereals), Guide to laboratory exercises in plant growing - part 2 (Technical and essential oil crops).

### **3. Main scientific and applied scientific contributions**

According to the nature of the achievements, the contributions contained in the scientific production of Chief Assistant Professor PhD Nadia Daskalova, can be defined in 2 categories: contributions of a scientific nature and contributions of a scientifically applied nature.

Scientific contributions are:

1. Studies on the cross-breeding of wheat and the resulting amphiploids with related species in the group *Triticinae* to create fertile hybrids.
2. Preparation and characterization of synthetic amphiploids as a starting material for selection.
3. Classification and relatedness of species in *Triticum* and *Secale*.

Scientific-applied contributions are:

1. Newly selected lines of common wheat of the cross *Triticum aestivum* × *Aegilops variabilis* with resistance to fungal pathogens.
2. New lines of common wheat obtained with the participation of the synthetic amphiploid №530.
3. Selected durum wheat lines with the participation of amphiploid 8BAP.
4. Selected offspring of two-grained einkorn with the participation of amphiploid 5BAP.
5. Selection of low-stemmed inbred rye lines.

I appreciate the presented monographic work as a valuable scientific work, with contributions to the enrichment of the national collection of cereal plant genetic resources. The monograph contains valuable scientific information and can be very useful for all specialists involved in the selection of self-pollinating field crops.

The results obtained in the research of Chief Assistant Professor PhD Nadia Daskalova are useful for all students, PhD students and teachers with interests in experimental work and experimental work in crop production, as well as researchers involved in genetics, selection and cultivation of cereals.

### **4. Significance of contributions to science and practice**

The researches of Chief Assistant Professor PhD Nadia Daskalova have been implemented at a very good scientific and methodological level. In her scientific works, the candidate, along with the classical ones, applies a number of modern research methods, which gives grounds to accept the obtained results as reliable and can give answers to the set goals and objectives in the research.

The obtained scientometric data are presented in the publications in a successful and appropriate way through text, comparative analytical tables, diagrams, figures, etc.

The publications are written in very good scientific language. The conclusions are accurate and well specified. The ability of Dr. Daskalova to develop problems comprehensively

and successfully and to integrate with diverse specialists is impressive.

The data from the performed researches and analyzes are used in the scientific practice, as evidenced by their citation by Bulgarian and foreign authors. This is evident from the presented list of citations.

Scientific works of Chief Assistant Professor PhD Nadia Daskalova have been cited 11 times in scientific journals, referenced and indexed in world-famous databases with scientific information, bearing the author 165 points. Her works have been cited 5 times in non-peer-reviewed journals with scientific review, bearing 25 points. In total, citations carry 190 points on Indicator 5, with a requirement of 50 points.

#### **5. Critical remarks and recommendations**

My recommendation to the candidate is to publish more independent scientific papers in the future.

#### **CONCLUSION**

Based on the above in the opinion, I consider that Chief Assistant Professor PhD Nadia Georgieva Daskalova appears at the competition with a large volume of scientific production and a variety of teaching activities. She has all the qualities of a modern university lecturer, who skillfully combines his scientific achievements and practical experience with her teaching skills.

Based on the acquaintance with the presented scientific works, their significance, the scientific, scientific-applied and applied contributions contained in them, I find it reasonable to propose **Chief Assistant Professor PhD Nadia Georgieva Daskalova** TO TAKE THE ACADEMIC POSITION "Associate Professor" in the Scientific Specialty "Breeding and Seed Production of Cultivated Plants", Professional field 6.1. Plant Growing, Field of Higher Education - 6. Agricultural Sciences and Veterinary Medicine.

Заличена информация  
по Регламент (ЕС)  
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**Date: 01.11.2021**

**MEMBER OF THE JURY:**

(Assoc. Prof. PhD Grozi Delchev)