



STATEMENT

by Prof. Dr. Margarita Ilieva Georgieva
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of the materials submitted for participation in a competition for borrowing the academic
position of "**professor**" by professional direction 6.5. Forestry,
scientific specialty "Forest reclamation, forest protection and special uses in forests"

In the competition for the academic position '**professor**', announced in the State Gazette, no. 102/08.12.2023 and on the website of the University of Forestry for the needs of the 'Plant Pathology and Chemistry' department at the Faculty 'Ecology and Landscape Architecture', as a candidate, Associate Professor Dr. Danail Dimitrov Doichev, holding the academic position of 'Associate professor' at University of Forestry.

1. Brief biographical data

Associate Professor Dr. Danail Dimitrov Doichev was born on 21.01.1972 in the town of Radomir, Pernik district. He completed his higher education in 1999 at the University of Forestry - Sofia, where he obtained the educational qualification of Master of Engineering in Forestry. In 2014, he successfully defended his dissertation on the topic 'Bark beetles (Coleoptera, Curculionidae, Scolytinae) in Scots pine (*Pinus sylvestris* L.) plantations in Southwest Bulgaria - species composition, distribution and damage'. During the period from 2000-2024, he held the academic positions of assistant, senior assistant and associate professor at the University of Forestry, Faculty of Ecology and Landscape Architecture, Department of Plant Pathology and Chemistry. In the period 2015-2023, Dr. D. Doichev conducts classes, including lectures, exercises and learning practices for students from the faculties of Forestry, and Ecology and Landscape Architecture.

Associate Professor Doichev is a member of the National Forest Protection Commission at the Executive Forest Agency under the Ministry of Agriculture and Food (2015-2023). He participated in the development of student training programs, scientific commissions for academic development, accreditation of scientific specialties, expert advice, preparation of applied expertise, national and international forums, etc. He is the leader and participant in 12 national and 3 international research projects and scientific and applied tasks.

2. General description of the presented materials, according to the indicators in the relevant scientific field and professional direction

In the submitted reference-self-assessment for compliance of the candidate's scientific production with the minimum national requirements in the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of University of Forestry for the field of higher education 6. Agrarian sciences and veterinary medicine, professional direction 6.5. Forestry, 886.14 points are indicated, accompanied by the relevant supporting material, with a minimum requirement of 550 points.

According to the individual groups of indicators, the distribution of the candidate's points is as follows:

- Group of indicators A – 50 items (minimum requirements of 50 items);
- Group of indicators B – 10 publications and 144.57 items are presented (minimum requirements of 100 items). All publications are in the peer-reviewed international scientific

journals, nine of them are in journals with Impact Factor or SJR index, and one is in a journal indexed in the global database Web of Science;

- *Group of indicators D* - received 236.57 points (minimum requirements of 200 points). 30 scientific works are presented - scientific publications in refereed editions, chapters of collective monographs, scientific reports in non-refereed editions and edited collective volumes.

- *Group of indicators D* - 300 points (minimum requirements of 100 points) - 20 items are presented. positive citations, all in scientific journals and series indexed in Web of Science or Scopus;

- *Group of indicators E* – 105 points (minimum requirements of 100 points) - participation in national scientific or educational projects, and a leader of one national project.

3. Characterization and evaluation of the candidate's activity

3.1. Educational and pedagogical activity

For the period 2015-2023, Associate Professor D. Doichev leads classes at the University of Forestry, including lectures, exercises and learning practices in the 'Forest Entomology' module in the disciplines 'Forest Protection' and 'Forest Entomology' for students majoring in Forestry; for students studying in the specialty Ecology and environmental protection for the disciplines 'Fundamentals of plant protection' and 'Integrated methods of plant protection', and in the discipline 'Protection of park vegetation' for students in the specialty Landscape Architecture.

Until now, Associate Professor Doichev is the supervisor of 25 graduate students in the Faculty of Forestry. Scientific supervisor to one successfully defended doctoral student and scientific supervisor to one full-time doctoral student enrolled at the end of 2023.

4. Evaluation of scientific, scientific-applied and publication activities

4.1. Scientific scientific-applied and innovative activity

The total number of scientific works presented in the competition is 40, including: chapters of monographs – 5 pc.; book chapters - 1 pc.; publications in scientific journals: – 31 items; referenced and indexed in world-famous databases with scientific information (Web of Science, Scopus) – 29 items; publications in Web of Science journals with IF (impact factor) – 7 items; publications in Scopus journals with SJR – 13 items; journal publications in Web of Science without IF – 9 nos.

4.2. Scientific and scientific-applied contributions

The scientific materials presented in the competition have an original character. The achieved scientific and scientific-applied contributions can be grouped into the following categories:

- *Faunal studies of forest insect species* - new insect species were found for the fauna of Bulgaria, North Macedonia and the Balkan Peninsula; existing data on the distribution of various species of moths, bark-beetles and longhorn beetles are summarized and new data are reported; new data on food plants of longhorn beetles in Bulgaria are reported, as well as new plant-host relationships of insect species.

- *Natural regulators of the number of forest pests* - data on established fungal infections in various types of insect pests - bark beetles and moths in Bulgaria are summarized; parasitoids and infections with entomopathogenic fungi on *Ips typographus* were found; the virulence of individual isolates of entomopathogenic fungi on bark beetles was evaluated; new host-

parasitoid relationships were reported for representatives of the Cerambycidae family; a new parasitoid and a new predator of *Thaumetopoea pityocampa* were discovered; new relationships between nematodes and bark beetles and protozoa and bark beetles, etc., were found.

- *Biotic and abiotic factors causing damage to forest tree species* – long-term studies have been conducted on the health status of forest ecosystems in Bulgaria, and the main insect pests (bark beetles, sawflies, etc.) causing damage have been identified; the complex of fungal pathogens in conifer and broadleaf forests was investigated and new host-pathogen relationships were reported for Bulgaria.

- *Investigation of saproxylic organisms and dead wood* - a complex of saproxylic fungal species was established and quantitative data were obtained on the stocks of dead forest biomass in beech stands.

- *Monitoring of forest ecosystems* - an innovative method was applied, based on unmanned aerial vehicles and field surveys, to assess the phytosanitary condition of damaged forest plantations in hard-to-reach protected areas; based on long-term monitoring, a database was created on the health status of the main coniferous and broad-leaved species in different regions of Bulgaria in permanent trial areas that are part of the European network ICP Forests for the assessment and monitoring of the impact of atmospheric pollution on forest ecosystems.

5. Evaluation of the candidate's personal contribution and check for plagiarism

In the submitted materials for the competition of 40 scientific works, the candidate is an only author in one publication, and in four nos. he is a first author. Of all materials, 32 pcs. are written in English, and the rest are in Bulgarian. The candidate's personal contribution stands out in the presented scientific works, which outline his scientific interests in the field of forest entomology, study of natural regulators of major insect pests, monitoring of forest ecosystems.

6. Critical Notes

It would be better if the contributions indicated in the habilitation report (Appendix 11) are not also included in the contribution report (Appendix 12).

7. Personal impressions

I have known Assoc. Prof. Dr. Danail Doichev for many years. My personal impressions are related to our joint participation in projects, conducting scientific expertise, trainings, etc., where Dr. Doichev stands out as a seasoned scientist and teacher with high competences in the field of forest protection, with proven scientific interests in forest etymology, study of entomofauna and entomopathogens by main insect pests, protection of forest ecosystems, etc.

8. Conclusion

The original scientific and scientific-applied contributions in the field of forest protection and forest entomology, the presented high-quality scientific output, the experience in educational and expert activities, give me reason to vote positively for the election of Assoc. Prof. Dr. Danail Dimitrov Doichev as a 'professor' in professional direction 6.5. Forestry, scientific specialty 'Forest reclamation, forest protection and special uses in forests' in the discipline 'Forest Entomology'.

10/04/2024

/Prof. Dr. Margarita Georgieva/