

## REVIEW

07C-2527/02.04.2025г.

on the submitted materials for participation in a competition for the academic position of "professor", field of higher education 6. "Agrarian Sciences and Veterinary Medicine", professional field 6.5 "Forestry", scientific specialty "Forest Crops, Selection, and Seed Production", in the discipline "Forest Crops" for the needs of the Faculty of Forestry, announced by the LTU in the State Gazette No. 10/20.12.2024. Procedure code: FOR-P-1124-153.

**Candidate for participation in the competition:** Assoc. Prof. PhD in Agric. Sci. Nasko Aleksandrov Iliev

**Reviewer:** Assoc. Prof., PhD in Agric. Sci. Ivaylo Nedelkov Tsvetkov, field of Higher education 6. "Agrarian Sciences and Veterinary Medicine", professional field 6.5 "Forestry", scientific specialty "Forest Crops, Selection, and Seed Production", pensioner, appointed as a member of the scientific jury by the Rector's of the University of Forestry order ZPS-89/17.02.2025.

### 1. Brief presentation of the candidate

Associate Professor Nasko A. Iliev graduated from the University of Forestry in 1992, with the qualification "Forestry Engineer", which according to the current legislation corresponds to 'Master' degree. In 1995, he was elected as a part-time assistant in the Department of Silviculture of the Faculty of Forestry at the University of Forestry. Since 1998, he has been a Chief assistant. In 1997, he defended a dissertation on the topic "Possibilities for increasing the use of the giant sequoia (*Sequoiadendron giganteum* (Lindl.) Buchh.) 'through seed and vegetative propagation' and acquired PhD degree in agricultural sciences. Since 2005, he has occupied the administrative position of "Associate Professor" in the Department of Forestry. From 2016 to 2020, he was the Deputy Dean of the Faculty of Forestry, and from 2016 to 2024, he was a member of the Academic Council of the University of Forestry.

Assoc. Prof. Nasko Iliev has a good command of English and Russian and very good computer skills. He has completed courses for improving professional qualification in the use of the Moodle and Blackboard Learn e-learning platforms and participated in a training course on heterovegetative propagation of woody plants, organized by the International Plant Propagators Society (IPPS). He is a member of the Union of Foresters in Bulgaria (since 2009), the Association for the Production of Ornamental Plants in Bulgaria (since 2013), as well as a former member of IPPS (1993 - 2015).

### 2. Compliance of the submitted documents and materials of the candidate with the requirements of the DAS regulations of the University of Forestry



The candidate Assoc. Prof. Nasko Iliev has submitted all the necessary documents required by the Law of the Development of Academic Staff (LDAS) in Republic of Bulgaria, the Regulations for application of LDAS and the Regulations for the Development of Academic Staff (DAS) in the University of Forestry for participation in the competition. All documents are duly and thoroughly described in the application for participation in the competition.

The comparative assessment of the values of the respective indices from the individual self-assessment report of the candidate shows that they meet or exceed the minimum national requirements for holding the academic position of "Professor", with the total score of achieved points exceeding almost thrice the minimum points required. (See the table).

Group of indices	A minimal number of points needed for the position of "Professor"	Accumulated points
A	50	50
B		
B (sum of points, indices 3 and 4)	100	100
Г (sum of points, indices 5 to 12)	200	270.8
Д (sum of points, indices 13 to 15)	100	855
Е (sum of points, indices 16 to 22)	100	338.3
Total sum of points	550	1614.1

### 3. Assessment of the candidate's training and teaching activities

Associate Professor Nasko Iliev has more than 26 years of teaching experience at the University of Forestry, Faculty of Forestry, Department of Forestry, as an "Assistant", "Chief Assistant" and currently an "Associate Professor". As such, he is involved in running lecture courses on "Forest Crops" for both full-time and part-time students in the specialty "Forestry", "Bachelor" degree, and on "Forest Crops" for full-time and part-time students in the specialty "Forestry", "Master" degree.

He has supervised 26 graduates (15 for 'Bachelor' and 11 for 'Master' degree). He has been a scientific supervisor of one part-time doctoral student, which was finalized with a successful defense of the PhD thesis in 2019. He has participated as a member of scientific juries for assignment of Chief Assistant and defense of a PhD thesis. He is a co-author of the following textbooks, handbooks, and manuals of educational and practical importance: "Forest crops. Forest seed production", "Guide for the Restoration and Management of Riparian Forest Habitats in Bulgaria", "Guide for the Practical Restoration of Habitats 91 FO and 91 EO" and "Entrepreneur's Handbook in Forestry under the Conditions of Bulgaria's Membership in the



European Union". He has participated in updating three curricula and in two accreditation committees.

#### **4. Evaluation of the candidate's scientific, applied, and publication activities.**

The candidate Assoc. Prof. Nasko A. Iliev participates in the competition with the following materials:

- B3. Habilitation work - monograph Iliev N., Milev M., Aleksandrov P., Petkova K. 2015. „Production of seedlings of tree and shrub species”. Publ. House of University of Forestry, Sofia, 331. ISBN 978-954-332-127-8;
- D6. Publication of a book based on the defended PhD work "Opportunities for increasing the use of the giant sequoia (*Sequoiadendron giganteum* (Lindl.) Buchh.) through seed and vegetative propagation";
- D7. Articles and reports published in scientific journals, referenced and indexed in world-renowned databases with scientific information - 16 pcs;
- D8. Articles and reports published in non-refereed journals with scientific review or published in edited collective volumes – 17 pcs;
- D13. + D14. + D15. Citations – 77 pcs;
- E17. Supervision of a doctoral student successfully defended PhD thesis – 1 pc;
- E18. Participation in national and scientific or educational projects – 11 pcs;
- E19 Participation in international scientific or educational projects – 3 pcs;
- E20. Supervision of a national scientific or educational project – 2 pcs;
- E22. Published university textbook or textbook used in the school network – 1 pc.

In addition, the candidate's participation in the following professional activities, appearances and expert activities should be noted:

- ✓ Preparation of two guides of practical importance;
- ✓ Participation in conferences and scientific events – participant in 9 international conferences, one national conference, and one regional scientific workshop;
- ✓ The candidate coordinated two joint contracts with nurseries in England and Germany for the admission and training of students; He has been a consultant for the implementation of



activities under a project under the 'Life' program, realized by the Southwestern Forest Enterprise; He has been a member of the Organizing Committees of a National Student Conference (2018) and an International Scientific Conference (2020); He is a member of the Advisory Council of the 'Vitosha' National Park Directorate; He has been a member of a commission for the preparation of an expert assessment of the phytosanitary condition of plant sites in the city of Bansko (2021); He has participated in an Expert Technical and Economic Council composed about a report for a contract funded by the Executive Agency of Forestry (2011); He was a participant in a working meeting-discussion for debating the current issues on restoration of forests damaged by diseases, pests, fires and other natural impacts (2017). He has taken part in the preparation of two subordinate normative documents: "Regulation 4 on the registration of the state forest nurseries" and "Standard in the production and trade of ornamental plants in Bulgaria".

#### **4.1. Participation in scientific, applied science, and educational projects**

As a member of working groups, Assoc. Prof. Nasko Iliev has participated in four projects funded by the Research sector of the University of Forestry, two projects funded by the Scientific Research Fund of Bulgaria, one project funded by the EAF, and one project funded by another external counter-agent. He has also participated in the implementation of three international projects (one regional and two bilateral). In addition, he has participated in a project "Increasing practical knowledge in the field of agriculture and forestry", funded by the Rural Development Program, as well as in the implementation of the activity "Dissemination of results" of the project "Support for the development of scientific capacity in the University of Forestry", funded by the Operational Program "Science for Education and Smart Growth". He has been a leader of a project funded by the Research Sector of the University of Forestry. He has been a participant in the implementation of an infrastructural project for the establishment of Laboratory for Biotechnology and molecular biology at the University of Forestry.

#### **4.2. Characteristics of the published scientific results**

For participation in the competition, Assoc. Prof. N. Iliev has submitted one monograph, one book based on a defended dissertation for PhD in agricultural sciences and 33 scientific publications. Of the latter 16 are referenced and indexed in world-renowned databases of scientific information (only one is in a journal with an impact factor!), and the remaining 17 are in non-refereed journals with scientific review or in edited collective volumes. One of the listed publications is standalone article, and in the rest, he is a co-author, with 9 of them being with 1



co-author, 14 with two, 9 with three, and more co-authors. In 12 of the co-authored publications, Assoc. Prof. Nasko Iliev is the first author, in 13, he is the second author, and in the rest, he is the third or subsequent one. Seven of the published materials are in Bulgarian, and the remaining 26 are in English.

It should be noted that adding of the publication from "Advances in Bulgarian Science" (G7.3) in the list of publications from category G7 is unacceptable since the publisher itself (NACID) makes mention that all materials are published as provided by the authors and without additional editing ([https://nacid.bg/Periodical/Advances/NACID\\_Advances\\_in\\_Bulgarian\\_Science-1-2012.pdf](https://nacid.bg/Periodical/Advances/NACID_Advances_in_Bulgarian_Science-1-2012.pdf)).

#### **4.3. Reflection of the candidate's scientific activity in the literature (citability)**

The submitted information shows that the candidate's scientific production has been cited 77 times in total, of which 37 are citations in scientific publications, referred and indexed in world-renowned databases of scientific information or monographs and collective volumes, 20 in monographs and collective volumes with scientific review and 20 in non-referred journals with scientific review. The multiple exceeding of the minimal number of citations required shows the importance and significance of the subject matter covering the candidate's scientific interests.

#### **4.4. Contributions of the candidate's works (scientific, scientific-applied, applied)**

##### **Scientific contributions**

- ✓ Co-authorship in the preparation of a university textbook "Forest Crops. Forest seed production". The textbook is richly illustrated, with 254 reference sources being used in the book. For the first time, an up-to-date classification of seed materials is presented according to their durability, together with the possibilities for storage of newly formed groups - semi-dry and wet seed materials of tropical species. The issue of long-term storage of seed materials has also been given a modern interpretation;
- ✓ A contribution of a scientific and methodological nature is the development of the issue related to the prospects of forest seed production in the country, which has been prepared after a thorough analysis of the National Seed Database and the activity of the seed collection centers;
- ✓ A significant contribution is the participation in the development of methodologies for micropropagation of common ash (*Fr. excelsior* L.) and sycamore (*A. pseudoplatanus* L.)

##### **Scientific and applied contributions**



- ✓ For the first time, a comprehensive study of the sources of reproductive materials of Norway sycamore (*A. platanoides* L.), listed in the Bulgarian National Register of Forest Seed Production Basis, was carried out;
- ✓ For the first time in the country, the sowing qualities of seeds of *Sterculia platanifolia* L. were studied;
- ✓ The sowing qualities and the nature of seed dormancy in the seeds of some more rarely distributed and used species (*A. platanoides* L., *Pr. Avium* L., *A. pseudoplatanus* L.) were studied;
- ✓ A number of contributions are related to studies in the field of vegetative propagation of tree and shrub species: 1) For the first time, an attempt was made for vegetative propagation and reintroduction of common yew (*T. baccata* L.) in natural habitats in Strandzha and Vitosha mountains; 2) A methodology for successful rooting of etiolated/de-etiolated cuttings of sycamore (*A. pseudoplatanus* L.) in combination with long-term treatment with indolebutyric acid (IBA) has been proposed; 3) The influence of the type and concentration of the auxin used, the genotype of the donor plant and the timing of cuttings on the quality of the formed root system in three cultivars of *Chamaecyparis lawsoniana* A. Murray bis Parl. has been studied; 4) It has been shown that, depending on the morphometric parameters of the graft, the scion and the chosen method, successful grafting can be achieved during active phenophases, such as the summer period (*Prunus avium* L., *A. platanoides* L., *A. pseudoplatanus* L.); 5) For the first time, successful grafting by copulation of two lilac cultivars (*S. vulgaris* L.) on a rootstock of *Ligustrum ovalifolium* Hassk. has been achieved; 6) High percentage of success has been attained in chestnut (*Castanea sativa* Mill.) after grafting on a lateral cut at the beginning of the vegetation period, which offers a competitive alternative to the bud grafting, which is usually done in autumn time;
- ✓ The influence of certain selective herbicides on seed and vegetative seedlings of North American hybrid poplars (*Populus* spp.), black pine (*P. nigra* J. F. Arn.), Atlas cedar (*C. atlantica* L.) and Austrian oak (*Q. cerris* L.) has been studied, which outlines guidelines for their use in the silvicultural practice;
- ✓ A review of the historical development of afforestation in the country was prepared;



- ✓ A large-scale study of the condition, growth, and productivity of existing forest crops in the country with dominant participation of common cherry, Norway sycamore, and sycamore was carried out, which proved that the species in question can form sustainable pure stands;
- ✓ For the first time, a conceptual and theoretical framework has been presented as a basis for developing a unified methodology for quantitative assessment of competitiveness of the forestry companies in Bulgaria;
- ✓ Pioneering studies have been carried out on the effect of mechanical protectors for deciduous and coniferous seedlings on their survival, and growth in height and diameter;
- ✓ Participation in activities for promotion of training in agroforestry as a modern form of sustainable land use, including the development of teaching aids, a lecture course program, etc.

#### **Applied contributions**

- ✓ A key contribution is the co-authored monograph "Production of tree and shrub seedlings". Thematically, the edition is the most extensive one developed by Bulgarian authors. It includes 218 tree and shrub species from 111 genera, illustrated with 158 figures and a list of 481 used reference sources. In the monograph, several practical aspects and technological possibilities for the production of tree and shrub seedlings in nursery conditions are described in detail in the light of modern scientific knowledge;
- ✓ A thorough analysis of the distribution of black locust (*R. pseudoacacia* L.) in the country has been made (occupied areas, age structure of plantations, afforestation technology, management, diseases and pests, and methods of combating them). The black locust seed production sources have been explored. The seed production, the sowing qualities of seeds, and the effect of the applied pre-sowing preparations have been analyzed as well;
- ✓ An attempt has been made to provide a comprehensive overview of the silvicultural practices at the sycamore based on a comparative analysis of the existing database of natural stands and plantations of the species in the country

#### **5. Assessment of the candidate's contribution**

In single-authored papers and those, in which the candidate is the first author, the personal contribution is dominant. In co-authored publications, the candidate's contribution is presumed to be equal to that of the other authors, except in cases where otherwise is noted.

#### **6. Critical remarks and recommendations**



I have no significant critical remarks regarding the documentation submitted for the competition. I have recommendations in several aspects, namely the candidate should: 1) Demonstrate higher activity in the preparation and leadership of research projects as well as targeted efforts to take part in collaborative projects with prestigious institutions from abroad; 2) Increase the quality of publication activity, which would allow to improve his scientometric profile in the world-renowned databases for scientific information (Web of Science, Scopus), which means better international recognition; 3) Realize his considerable scientific and teaching experience in future supervision of higher number of doctoral students.

### **7. Personal impressions**

My impressions of Assoc. Prof. Nasko Iliev dates back to the mid-1990s, when in the Laboratory of Tissue Cultures of the Forest Research Institute we used to work with colleagues from the University of Forestry on the implementation of a joint project financed by the National Science Fund. In his collegial relations, Assoc. Prof. Nasko Iliev has always been distinguished by goodwill, correctness, and loyalty, and in his work activity by purposefulness, conscientiousness, and responsibility. My memories from the time of our joint membership in the Eastern European Branch of the International Plant Propagators' Society (IPPS) are that the candidate possesses very good communicational and organizational skills.

### **8. Conclusion**

The candidate in the competition, Assoc. Prof., PhD in Agric. Sci. Nasko A. Iliev, convincingly meets the minimal national requirements laid in the LDAS, the Regulations for application of LDAS, and the Regulations for development of the academic staff in the University of Forestry for holding the academic position of "Professor", which is evident from the documents submitted.

In connection with the above-mentioned, I propose that Assoc. Prof., PhD in Agric. Sci. Nasko A. Iliev be elected to occupy the administrative position of "Professor" in the field of higher education 6. "Agrarian Sciences and Veterinary Medicine", professional field 6.5 "Forestry", scientific specialty "Forest Crops, Selection, and Seed Production" in the academic discipline "Forest Crops".

Date: 2 April 2025

Sofia

Reviewer: ..

/Assoc. Prof. Dr. Ivaylo N. Tsvetkov/