

STATEMENT

on the materials, submitted for participation in a competition for occupation of academic position "professor" in scientific field 6. Agricultural sciences and veterinary medicine, in professional direction 6.5. "Forestry", scientific specialty "Forest plantations, breeding and seed production", subject "Forestry", course "Forest genetics and breeding", Department of Dendrology, Faculty of Forestry, announced by University of Forestry in State Gazette No 37 of May 7, 2019, code of the procedure: FOR - P - 0419 - 07.

Applicant to participate in the competition: Assoc. Prof. PhD Peter Zhelev Stoyanov

<u>Prepared the statement:</u> Prof. PhD Milko Hristov Milev, University of Forestry, professional direction 6.5. "Forestry".

1. Short biography of the applicant

Assoc. Prof. Dr. Peter Zhelev is a Master of Engineering in Forestry (diploma series B82 No 011485 of 07.1985, Higher Forestry-Technical Institute). From 08.1985 to 02.1987 he worked as a forester in the State Forest Service "Trakia" - Plovdiv. After a full-time PhD study (1987–1990) at the Higher Forestry-Technical Institute (now University of Forestry – UF), in 1992 he defended his PhD thesis on the scientific specialty "Forest plantations, breeding and seed production" and obtained a PhD degree (diploma No 22820 from 03.02.1993). During the period 1992-1999 he consistently rose to the rank of assistant, senior and chief assistant at the UF. In 1999 he won a competition for associate professor (Certificate No 19926 of January 10, 2000) and until now is a titular habilitated lecturer mainly in the competition course "Forest Genetics and Breeding". He was the Head of the Department of Dendrology (2003-2007) and Deputy Rector of the UF (2007-2016).

Dr. Zhelev is a member of the Union of Scientists in Bulgaria, the Bulgarian Botanical Society, the American Genetic Association and the International Plant Propagator's Society.

2. Compliance of the submitted documents and materials of the applicant with those required under the Regulations for Development of Academic Staff at the University of Forestry

The submitted documents and materials are in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB) and the Regulations for the Development of Academic Staff at the UF (RDASUF), which was established at the first meeting of the Scientific Jury and reflected in Protocol No 1 of 11.07.2019.

In the documents for participation in the competition, Assoc. Prof. Peter Zhelev presented a list of 144 published materials. Of these, 32 publications and one handbook were published before the habilitation for "Associate Professor". The applicant's post-habilitation production, which is the object of a review under this competition, consists of 112 materials.

As a stand-alone document "Habilitation report" there is a material entitled "Population-genetic diversity of conifers in Bulgaria", developed in 16 pages. It was developed on the basis of a selection of 10 scientific articles covering a fixed topic and published in renowned periodicals (included in world-renowned scientific information databases). Seven of the articles are in journals with impact factor (No: 2, 3, 4, 6, 12, 16 and 28); total IF = 9.921. The other three articles are in journals with Scimago Journal Rank (No:

25, 27 and 30); total SJR = 0.390. A total of 96 citations were found for 8 of the articles (listed in the list but not reported to group D in the Self-Assessment Report). The focus is on population and variability studies, covering the most important and native to the Bulgarian flora species – Scots pine, Austrian pine, Macedonian pine, Mountain dwarf pine, European silver fir, *A. borisii-regis* and Cade juniper. The topics of the Habilitation report, the included articles and the substantiated contributions in them are in accordance with the competition and I accept they fulfill the requirement under item B4, having collected a total of 146.25 points (with a required minimum of 100 points) of the minimum national requirements under Art. 2b of the LDASRB and Art. 2a, para I of the RDASUF.

The sum of the points according to the indicators included in the annexes of the Rules of the LDASRB and the RDASUF for the respective professional direction of the competition are 2525.04 points in total, with a minimum of 550 points required.

The applicant has submitted copies of the publications listed and the required documents.

3. Assessment of the applicant's educational activities

Assoc. Prof. Zhelev has been a lecturer at the UF since 1992 for more than 27 years (Official Note No HR 4748-1 / 08.07.2019). He has gone through all the ranks for non-habilitated teachers and has been "Associate Professor" for more than 19 years. He has participated in the training of students from 4 specialties at the UF, and has lead lectures, exercises and practices. He has taught two courses of Bachelor's degree of "Forest Genetics and Selection" (for subject Forestry) in 2011 and 1997 on "Forest Timber and Non-timber Resources", modified from 2018 to "Natural Plant Resources" (for Business Management and Alternative Tourism subjects). Since 2001 he has been the major lecturer of two master's courses in the subject of Forestry - "Conservation of biological diversity" and "Tree Improvement".

The active teaching work includes the guidance of 107 graduates and he is regular participation as a member of the state examination committees for graduation at both bachelor's and master's degrees. He is the supervisor of 6 PhD students, three of them with already defended PhD theses, one has been finished training with the right of defence and two are in the process of training, incl. one foreign PhD student.

Assoc. Prof. Zhelev has contributed with his participation in the infrastructure project for the establishment and equipment of the University Laboratory for Biotechnology and Molecular Genetic Research. He instructs PhD students and graduates in mastering methods for working in this lab.

4. Assessment of the applicant's scientific, applied and publication activities

4.1. Participation in scientific, applied science, infrastructure and educational projects

The applicant has participated in the development of 36 projects. He was the leader of 16 of them. According to their nature, projects can be classified as follows:

- a) Scientific projects (21, with 11 being the head):
 - international 7, with 4 being the head;
 - national, funded by the Research Fund 6, with 3 as the head;
- institutional, funded by the UF from the State Budget under Ordinance No 9 of the Ministry of Education and Science 5, with 3 being the head;
- institutional, funded by other Bulgarian contracting entities 3, with 1 being the head. b) Applied projects (13, with 4 being the head):

- administered by UF 5, of which 2 being the head;
- non-administered by UF participation as an expert in 8 issues, with 2 being the head.
- c) Educational projects 1, having been the head.
- d) Infrastructure projects participation in 1 pc.

4.2. Characteristics of published scientific results

The characteristics of the published scientific results can be seen in the Self-Assessment Report presented in the indicators of groups B and G. However, in the last does not include 6 of the publications in the List: No 13 (with IF); No 53 (in journal not refereed in world-renowned databases), No 59 and No 60 (in proceedings of scientific conferences); No 75 and No 76 (co-author of books). It is noteworthy that 60% of them are in English, 27% are in Impact Factors and 12% are in Impact Rank (SJR) journals.

The candidate's post-habilitation creative work includes 112 publications, of which 86 are scientific publications, one study guide, 4 popular science books, 14 popular science and applied articles, 3 reviews and 4 other publications (for anniversaries and others). Seven of the publications are as sole author and in 17 Dr. Zhelev is a leading author.

4.3. Reflection of the applicant's scientific activity in the literature (citations)

The list of cited references includes a total of 601 pcs. Of these, 270 are in scientific journals with Impact Factor, 150 are in scientific journals without Impact Factor and 181 are citations in monographs, books, dissertations, conference proceedings and more. Citations in foreign language editions prevail, 518 are in Latin (mainly in English) and 83 are in Cyrillic, incl. 55 in Bulgarian, the others are in Russian, Ukrainian and Serbian. 66 of the candidate's publications were cited. In terms of the citation index (group G), the minimum requirement (100 points) is the highest exceeded with 1575 points (without the 96 citations of 8 of the articles in the habilitation report). This characteristic shows the wide visibility of the scientific creativity and the popularity of Assoc. Prof. Zhelev among specialists both in Bulgaria and especially well-known abroad.

4.4. Contributions to the applicant's work (scientific, applied)

The contributions to the scientific publications of Assoc. Prof. Peter Zhelev have been summarized in 8 directions: 1) on the genetic diversity within and among populations of tree species, as well as on the genetic processes occurring in them; 2) on variability in plant species based on morphological and morphometric features; 3) on the breeding of main local tree species; 4) conservation of the genepool of the tree species; 5) on the dendrological characteristics of the species and dendroflora of Bulgaria; 6) on ecological features and conservation of biodiversity and natural environment; 7) on the biology and ecology of medicinal plants; 8) on the genetics of wildlife populations. I accept the contributions submitted by the author and their classification. I place in last (8th) these for wildlife. They are on the border of the area of the competition but should be mentioned because they represent the broad genetic interests and competencies of Dr. Zhelev. This is the reason to define the applicant as a high-class scientist and an excellent expert in his field, possessing many-sided encyclopedic knowledge.

Scientific contributions are contained in publications numbered 1-5, 7-10, 11-16, 18-19, 22-28, 30-31, 33-34, 36-37, 39, 40-43, 46-47, 50-52, 54, 55, 57, 63-64, 66-72, 77-80, 84-85, 88-89, 94, 96, 99-100. More important are: the use of isoenzyme markers to detect variability in our populations of Scots pine (4, 25) and Austrian pine (4, 27), Macedonian pine

(2, 66), Mountain dwarf pine (3, 57), Common oak and Sessile oak (1, 41), Silver birch (43) and Old World sycamore (7); the heredity of progenies (18, 24) and provenances (34) of Scots pine, European silver fir (36) and Old World sycamore (40); for the separate three geographical groups (Western, Central and Eastern) for the purpose in Bulgaria (15); the application of DNA markers for the study of biodiversity in firs (12, 28, 30); for specific adaptation of European silver fir to conditions at different altitudes (16); about the high genetic diversity of European hornbeam in the Balkans compared to other parts of Europe (17); for the high differentiation and geographical isolation of *Sorbus torminalis* in Eastern Europe (5) and the average overall population and geographical differentiation for *S. domestica* (10) and others.

Methodological contributions are contained in publications with numbers: 21, 45, 48, 58, 60, 74-76, 81-82, 86, 97, 102-104. More important are: the dynamics of restoration of spruce forests after natural disturbances (21, 45, 48, 74, 86, 102); on micropropagation at Silver birch (58); the pioneering (for Bulgaria) methodology for the determination of high conservation value forest habitats (60); to mitigate the impact of climate change on our forests (75); for the management of forests in the Natura 2000 conservation network (76); on the monitoring and conservation of forest genetic resources (81-82); on the conservation of the genetic resources of Hungarian oak and Turkey oak (103-104) and others.

Most publications, especially the projects developed under the guidance and with the participation of the applicant, have an applied effect.

5. Assessment of the applicant's personal contribution

I am convinced, including on my direct impression, that the methodological provision, the experimental work, the reporting of results and their interpretation, the formulation of conclusions, recommendations and contributions are largely with the personal involvement of Assoc. Prof. Zhelev. He has an active and very often leading role in teamwork and project research.

6. Critical notes and recommendations

I did not find any significant gaps in the submissions. In Self-Assessment Report has not been completed position E23 in Table 3 (for publishing university study guide - No 87 in the Publication Reference). This activity is assessed by 5 points. Indeed, the applicant has output under this criterion (E) for 375 points (indicated in Table 2) and the required 100 points are significantly exceeded. But this fact gives a sense of dose negligence. Assoc. Prof. Zhelev has many other activities such as participations in scientific forums in Bulgaria and abroad (over 50), incl. as a member of scientific committees, councils, expert groups and others, the most important of them would be a good to be supplemented in his CV. I note that justification for contributions could more clearly include the projects under development. I noticed the following minor technical gaps: The date of the candidate-led educational project (item 2.1. in the list) is not specified. The project summary table makes an error about the number of applied projects (the guided 2 are summarized twice). One of them is presented sparingly - with only the phrase "Red Book".

My main recommendation is to write a textbook on the basic course "Forest Genetics and Selection", which, along with updating the matter, I would be convinced with many merits - given the qualities of Assoc. Prof. P. Zhelev.

7. Personal impressions

We have known each other since student years and my personal impressions are excellent - both as a scientist and as a teacher and as a human being, especially dedicated to the students. Here I will add the significant contribution of Assoc. Prof. Zhelev as Deputy Editor-in-Chief of the journals Forestry Ideas and Propagation of Ornamental Plants, which are progressing thanks to his competencies and efforts.

Throughout his academic career, Assoc. Prof. Zhelev has proven to be a diligent and disciplined lecturer, incorporating up-to-date information and scientific innovations in teaching topics. He also regularly supervises doctoral studies. He is widely recognized for his professionalism and scientific competences, combined with excellent foreign language skills. He is distinguished as one of the most ethical colleagues both among students and PhD students, as well as among the academic staff and the employees of the UF. The feedback from our foreign and foreign specialists in the field is also markedly positive, and often with superlatives. I think that Assoc. Prof. Zhelev completely covers the idea of a well-established academic scientist and an educated teacher.

8. Conclusion

I give a definitive positive assessment of the scientific creativity and the activity of the applicant and I offer Assoc. Prof. Dr. PETER ZHELEV STOYANOV to take the academic position of "professor" in the course "Forest Genetics and Selection" of professional direction 6.5. "Forestry".

Prepared the statement:

Statement delivered on: September 3, 2019.