



REVIEW

on the materials submitted for participation in a competition for an academic position "Associate professor" in professional area "6.5 Forestry", scientific specialty "Silviculture incl. Dendrology", declared by the Forest Research Institute – BAS in State Gazette, № 47/24.06.2022

Applicant for the position: Chief Assistant Yonko Dobrinov Dodev, PhD

Reviewer: Prof. Alexander Haralanov Alexandrov, D.Sc.

1. Brief biographic information about the applicant.

Yonko Dodev was born on 30 March 1983 in Etropole. He graduated from the University of Forestry – Sofia as "Master" on specialty "Forestry" in 2005. His average grade during the training course was Excellent (5.85) and of Diploma work – Very good (5) (University of Forestry № 068198). The grades on "Silviculture" and "Dendrology" were Excellent (6) too.

From December 2005 to February 2007 he was forester at the State Forestry "Etropole", after that he changed the position as deputy director of the State Forestry "Botevgrad" to October 2007. During the period March 2008 – January 2010 his job was at Foundation "Contemporaneity" and "Engineering EOOD".

From February 2010 to January 2011 he was forester at the Experimental base for beech forests – Etropole, while from February 2011 to October 2017 – Assistant Professor on Forestry and Chief Assistant at the same base since November 2017 up to now. All the time he was in charge of the Experimental base.

A PhD thesis on: "Ecological-sylvicultural characteristics of *Carpinus orientalis* Mill. forests at Etropole mountain and possibilities for their sustainable management" he defended in 2016 (BAS – FRI, Diploma: № 000826/05.01.2017).

2. Compliance of the submitted documents and materials of the applicant with those required under the Regulations for scientific degree and academic positions in the Forest Research Institute – BAS.

The minimum required point score by groups of indicators (A, B, Г, Д, E) for "ASSOCIATE Professor" in professional area "6.5 Forestry" is 500 (50 + 100 + 200 + 100 + 50) while the applicant has 688 points, which are total of attained indicators (respectively 50 + 137.5 + 200.5 + 205 + 95). This result exceeds with 188 points (38%) the necessary minimum point score for this academic position and fulfilled all indicators.

Two of submitted publications are out of reviewing as their subjects are out of the scope of professional area "Forestry incl. Dendrology". Towards them I would attached:

- Madjov, S., Y. Dodev. 2018. Study and determination of operational period of material credits accounting the economic processes. – In: Proceedings, 177-179.
- Madjov, S, Y. Dodev. 2021. Classification of the road-repair works. – In: Proceedings, 60-66.

To additional indicators of the Forest Research Institute (for priority) are included: Participation in forums (presented but unpublished reports) -

National reports	17
International reports	6

3. Common description of submitted materials (by type, by importance, place of publication, language of publication, authorship).

The applicant participates in the competition with 29 scientific publications. Their description by required groups is as follows:

By type

- Articles and reports, published in scientific issues, refereed in world-known basis data with scientific information	15
- Monographs	1
- Chapters of monographs	1
- Articles and reports, published in unrefereed journals with scientific reviewing or in proceedings	12

By importance

- Articles in journals with impact factor (IF) and impact rank (SJR)	7
- Articles in journals with other index	8
- Articles in journals and proceedings without JF, SJR and other index	14

Place of publication

- Monographs and chapters of monographs	2
- Articles in refereed Bulgarian and foreign journals	15
- Articles in un-refereed journals	3
- Articles in proceedings of international scientific forums	4
- Articles in proceedings of national scientific conferences, consultations and seminars	5

Dr. Yonko Dodev has published in journals with professional importance: Austrian Journal of Forest Science, Forest Policy and Economics, Land, Наука за гората, Silva Balcanica, Ecologia Balkanica and others.

Language of publication

- In Bulgarian	18
- In English	11

Authorship

- Single author	2
- First author	8
- Second author	1
- Third and subsequent author	18

About 35% of the publications are with his leading participation. He was looked for co-author by the researchers of the Forest Research Institute – Sofia (Assoc. Prof. Grud Popov, Assoc. Prof. Plamen Glogov, Assoc. Prof. Ivaylo Markov, Prof. Miglena Zhiyanski). He has two common publications with foreign researcher from Republic of Korea.

4. Main directions in research of the applicant and the most important scientific contributions.

The research activity of Dr. Yonko Dodev is in the most part in four directions:

- Ecology and biology of *Carpinus orientalis* Mill. Management of its stands.

- Status of coniferous plantations with emphasis on the established ones outside their natural area.
- Management of coppice oak forests.
- Ecological and social functions of forests.

The most important scientific contributions of the applicant could be summarized as follows:

- The natural regeneration and succession processes in *Carpinus orientalis* forests are established.
- The biological peculiarities of coppice oak forests regarding their management are studied.
- The vital status of coniferous plantations at oak belt is set up.
- Methods for evaluation of some social functions of forests are developed.
- The distribution of dendro-flora of Etropole mountain, Lozen mountain and Wild forest is analyzed.

5. The most significant scientific-applied contributions and introduced activity.

These scientific applied contributions are the following ones:

- A variety of uneven gradual felling in hornbeam forests according their composition and productivity is developed.
- A version of short-term gradual felling in coppice oak forests on the territory of North-Central State Enterprise is suggested.
- A model for shelterwood cutting in coniferous plantations outside natural area, in order to their transformation into deciduous stands, is created.
- Recommendations for management of some forests with purpose of enlarging their social functions are made.

6. Reflection of scientific publications of the applicant in the literature (citations)

The scientific publications of the applicant are cited 18 times. From them 13 times in well-known scientific journals – Forest Ecology and Management, Forest Science (Bulgaria), Central European Forestry Journal, Polish Journal of Entomology and others as well as 5 times in monographies and proceedings. The citations are mainly by Bulgarian researchers – 83%, while by foreign researchers – 17% (from Spain and Check Republic).

7. Participation in research and applied projects.

Dr. Yonko Dodev took part in 8 research projects – 1 international and 7 national ones. He was leader of two national research projects (with Executive Forestry Agency and South-west State Enterprise).

8. Teaching activity (Leader/Consultant of PhD students, training of University students etc.)

There is no information about teaching activity of the applicant in the Universities and in the research institutes of the Bulgarian Academy of Sciences and Agricultural Academy.

9. Evaluation of the personal contribution of the applicant.

The personal contribution of Dr. Yonko Dodev in 10 publications is definitively defined (as single and first author). In the remaining 19 common publications his contribution is in corresponding parts for management of *Carpinus orientalis* stands, of coppice oak stands, of transformation of coniferous

plantations outside their natural area and of some social forest functions.

The other personal contributions of the applicant are 23 reports represented at:

- Training courses and seminars of "Youth movement for development of the rural areas in Bulgaria"- total 15, incl. 9 national and 6 international ones.
- Courses on marking and forest management – 7.
- Thematic monitoring on the program "Erasmus +" (Ministry of Education and Science).

10. Critical notes and recommendations.

- There are not sufficient arguments for allegation that "... the optimum conditions for existence and development of Norway spruce is altitude of 1700 m" as well as the conclusion that "Optimums of Scots pine and Norway spruce are closer to the upper limit of their contemporary distribution" (page 28) (Popov, G., G. Kostov, I. Markov, Y. Dodev, D. Georgieva. 2018. Coniferous plantations in Bulgaria. Sofia, 122). There is no mark who is author of different chapter.
- Partial repetition of data for East hornbeam area and percentage of its afforestation area are admitted in some publications.
- The term "ecosystem services" should be replaced with "ecosystem uses (benefits)" as the Nature incl. forests do not make "services" but contribute to benefits. (In sense of Bulgarian language).
- Primary sources of dendrological descriptions for Bulgaria are the publications of Prof. Boris Stefanov (1934, 1958) while some of cited authors borrowed from his scientific works.
- I recommend to the applicant to include *Fagus sylvatica* L. in his future research activity as this species is principal for the Experimental base for beech forests – Etropole.

11. Personal impressions.

It seems to me Dr. Y. Dodev made persistent efforts to preserve the building fund of the Beech forests base in Etropole.

12. Conclusion.

On the grounds of the evaluation of the research and scientific-applied activity of Chief Assistant Yonko Dobrinov Dodev PhD, I recommend him for the academic position "Associate Professor" (Docent) in professional area "6.5 Forestry", scientific specialty "Silviculture incl. Dendrology".

26 September 2022

Reviewer:

/Prof. Alexander H. Alexandrov D.Sc./