

REVIEW

on the materials for participation in a competition for the academic position of Associate Professor, Field of higher education 6. Agricultural Sciences and Veterinary Medicine, Professional field 6.1. Crop production, scientific specialty "Vegetable production", in the discipline "Fruit growing", announced by the University of Forestry in SG nr. 32 from 03.04.2020 г., procedure code: AGR-AsP-0320-37.

Candidate for participation in the competition is:

Chef Assist. Prof. Dr. Denica Dimitrova Serbezova

Reviewer: Dr. Valentin Iliev Lichev, professor of Professional field 6.1. Crop production, from Agricultural University-Plovdiv

1. Brief biographical data about the candidate

Denitsa Serbezova was born on January 29, 1980. She graduated in 2002 from the Agricultural University in Plovdiv, the specialty of viticulture and horticulture. Subsequently, he was a doctoral student and researcher in the Department of Berry Crops in Kostinbrod, at the Institute of Agriculture in Kyustendil. She specialized in 2003 (at AgroBio Institute in Sofia in connection with the Elisa serological method). Later, in 2006, she conducted a one-month specialization at the Research Institute of Pomology and Floriculture, Skierniewice, Poland in connection with the application of biotechnology in fruit growing. During the period 2009-2011. specializes at the Heilongjiang Academy of Agricultural Sciences in Harbin, China about the problems related to the researches of genetic resource and breeding of the raspberry.

In 2007, Chief Assistant Serbezova h defended her thesis on the title "Raspberry Selection - Economic and Biological Assessment of Elites" as a doctoral student in the Department of Berry Crops in Kostinbrod, at the Institute of Agriculture in Kyustendil.

From 2008 to the present, colleague Serbezova has been successively an assistant, and subsequently a chief assistant at the University of Forestry, Sofia. Initially she teaches the practical exercises with students in the disciplines of Fruit Growing and Viticulture, and later he gave lectures on Fruit Growing, Pomology, Selection of Fruit Species and others.

Denitsa Serbezova speaks English, Russian and Chinese, and also has good computer skills of WORD, EXCEL, PowerPoint and the Internet.

2. Conformity of the presented documents and materials of the candidate with the required ones according to the Regulations for Rules for the development of the academic staff in the University of Forestry.

In connection with his participation in the announced competition, Chief Assistant Serbezova submitted the necessary documents, namely - CV, notarized copy of the diploma of higher education and diploma of educational and scientific degree "Doctor", document for academic position, medical certificate, criminal record certificate, certificate of internship in the specialty, reference for the fulfillment of the minimum national requirements for the position for which she is applying, reference for the contributions in the scientific works, list of the scientific publications, etc.

3. Assessment of the teaching activity of the candidate

In addition to giving lectures and practical exercises with students in the disciplines of Fruit Growing, Pomology and Selection of Fruit Species, my colleague Serbezova was a supervisor of 6 students who developed a bachelor thesis. She has prepared 2 reviews of diploma theses and 13 curricula for full-time and part-time students for bachelor's and master's degrees. She has been a supervisor of students conducting student practice and has participated in working committees at the faculty level, as a member of the General Assembly and the Faculty Council, a member of the Accreditation Committee, a member of the State Examination Committee, a member of the Erasmus Committee and etc.

4. Evaluation of the scientific, scientific-applied and publishing activity of the candidate

Chief Assistant Serbezova has participated in 5 national scientific conferences, 5 international scientific forums, has been a leader of students participating with reports or posters at national or international forums. She received an award - a gold medal for good performance at the seventh national exhibition of inventions with the development of "Technology for integrated production of raspberries." She is a member of national and international scientific organizations, has participated in the editorial board and the organizing committee of scientific forums at home and abroad.

Chief Assistant Serbezova has published as follows: independently - a monograph, a individually or in a group 12 articles (published in peer-reviewed and indexed scientific journals), 15 articles (published in non-peer-reviewed and indexed scientific journals), one study (essay), one guide for practical exercises of fruit growing students, one manual (intended for entrepreneurs in perennials), as well as 6 scientific-applied brochures.

4.1. Participation in scientific, scientific-applied and educational projects

Chief Assistant Serbezova has completed training courses as follows: for online information systems, for innovative publishing platforms, for innovative doctoral training, for intellectual property management, for academic training methodology, for research methodology, for preparation, participation and management of projects, the basics of information technology. All these courses are organized by projects of the University of Forestry in Sofia.

From 2007 to the present, my colleague Serbezova has participated in 13 national scientific or educational projects, funded by the Agricultural Academy, the Research Fund, the University of Forestry and others. During the period 2009 - 2011, has also participated in an international research project in China in connection with research on genetic resources and raspberry selection.

4.2. Characteristics of the published scientific results

The main part of the scientific publications (8 in total) of the candidate is related to the results obtained from her selection activities with raspberry culture and research in other berry fruit species. A significant part of the publications (15 in total) are also devoted to the testing of rootstock combinations and various pruning options for apple and cherry. Fewer publications refer to some issues related to the production in Bulgaria of plums (3 pieces), pears (3 pieces), cherries and walnuts (1 piece each).

4.3. Reflection of the candidate's scientific activity in the literature (citation)

In connection with her scientific production, the colleague presented 16 citations, of which 1 citation in referenced world-famous databases, 1 citation in a monograph and 14 citations in non-refereed journals with a scientific review.

4.4. Contributions in the works of the candidate

4.4.1. Main contributions of an original character

- Based on a monograph with clearly regulated methodological, fundamental and applied contributions, a complete technology for growing raspberries has been developed.

- 145 new raspberry genotypes, of which 37 hybrids and 108 elites are differentiated by groups, based on evaluation indicators, which contribute to updating the methods of selection, varietal study and competitive variety testing of raspberries.

- A collection by signs of raspberries has been created, as well as comprehensive information with new and original data on plant genetic resources in berries, which is in line with the European database and provides easy access and better exchange in the scientific space.

4.4.2. Main contributions of a confirmatory character.

- New studies have confirmed that the rootstocks Maxma 14 and Gisela 5 do not affect the chemical composition of the leaves and fruits of the varieties grafted on them.

- The shortening of the height of stem affects the growth and reproductive manifestations of cherry trees. As the cutting height decreases, the thickness of the stems and the size of the fruit increase.

- On the rich soils in our country are suitable formations for intensive cultivation of apple as a slender spindle, while for less productive soil systems for traditional cultivation, incl. improved floor crown

4.4.3. Main contributions of scientific and applied character.

- A database for the phenophases of flowering and fruit ripening has been prepared, which is important for determining the deadline for many agro-technical and selection activities, as well as the breeding of the most suitable habitats for raspberries.

- The parameters for several of vegetative traits and growth features of widespread and promising raspberry varieties and hybrids that can be used to update the technology for their cultivation have been established.

- After a thorough field study, the walnut varieties Izvor 10, Sheynovo and Silistrenski are recommended for wide distribution in practice.

5. Assessment of the personal contribution of the candidate

The scientific publications and teaching aids presented by the candidate are written as follows: independent - 6, with one co-author - 12, with two co-authors - 6 and with three or more co-authors - 13.

6. Critical remarks and recommendations

- I consider it inappropriate to publish the independent articles G8 / 8 and G7 / 10 and the collective G8 / 12, referring to the state and perspectives of pear production, cherry production and plum production in Bulgaria, respectively. In such titled similar articles about a certain fruit species, it is usually the practice in the advanced countries and in our country to address many aspects related to the production of the fruit species, which are developed by authoritative authors - narrow specialists on the respective problem. To make this critical note even more useful for my colleague Serbezova, I would recommend her to co-author a similar article, which deals with the state, problems and perspectives for the development of raspberry production in Bulgaria. On this topic, I believe that the author has the necessary training and in combination with appropriate co-authors could present an authoritative article, very useful for both science and practice.

- The first conclusion in Article G8 / 10 is not clear enough, where it is written that "the growth manifestations of cherry trees are best expressed by shortening the stem to 70 and 110 cm". It could be said how the different pruning affects the thickness of the tree trunks and the volume of their crowns, especially since some of these indicators have proven differences between the variants.

- Similarly, the contribution of 4 of those of a confirmatory character is vaguely formulated, namely, "plant and reproductive manifestations and signs of business and economically important varieties of cherries are better expressed in the rootstock Maxma 14....".

Summarizing this section, I said that the critical remarks and recommendations made do not belittle the scientific and scientific-applied activity of the candidate, which has many dignity. The purpose of my recommendations is for my colleague to increase her accuracy in her future publications.

7. Personal impressions

I know the chief assistant Serbezova from her student years when I gave her lectures and practical exercises in Pomology at the Agricultural University. Even then, she impressed me with her studiousness and desire to improve her self. Subsequently, we met at the so-called open days in fruit growing and other forums. Based on my observations, I can assure you that my colleague Serbezova is a precise researcher, ethical and hardworking. She has the necessary preparation to solve complex tasks. It can be relied on.

8. Conclusion

Based on the analysis of the teaching, scientific and scientifically applied activity of the candidate, I consider that Denitsa Dimitrova Serbezova meets the requirements of the Law for development of the academic staff in the Republic of Bulgaria and the Regulations for its application, which I can argue with: I did not find the infraction of the procedure for the competition, Dr. Serbezova, as the only candidate in it has the educational and scientific degree "Doctor"; holds the academic position „ Ch. assistant Professor” at the University of Forestry -Sofia for more than 5 years; it is provided with the required classroom and extracurricular employment; has published a monograph and sufficient in volume, structure and quality, unrelated to the doctoral dissertation scientific production, with clearly identified original scientific and applied scientific contributions. All this gives me a reason to positively evaluate the entire activity of Denitsa Dimitrova Serbezova and to vote for her award of the academic position "Associate Professor" in the field of higher education. 6. Agricultural

Sciences and Veterinary Medicine, professional field 6.1. Crop production, scientific specialty "Fruit growing".

Reviewer's signature:

Review submitted at: 1.8.2020 г.

