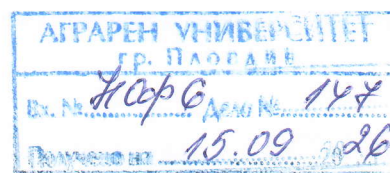


REVIEW



Referring to a competition for Associate Professor in the field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.1. Crop Production, scientific specialty Ornamental Plants, announced in State Gazette No. 48 of 26.05.2026, with candidate Chief Assistant Professor (Ch. Asst. Prof.) Valentin Panchev Panchev, Ph.D. from Agricultural University - Plovdiv, Faculty of Viticulture-Horticulture, Department of Horticulture

by Prof. Dr. Elena Tomova Iakimova appointed as a member of the scientific jury with Order No. RD-16-812/29.06.2026 of the Rector of the Agricultural University - Plovdiv.

Reviewer: Prof. Dr. Elena Tomova Iakimova, Institute of Ornamental and Medicinal Plants, Negovan, Sofia, Agricultural Academy, field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.1. Crop Production, scientific specialty Ornamental Plants.

In the competition for the academic position Associate Professor in the Department of Horticulture at Agricultural University – Plovdiv participates only one candidate.

1. General information on the candidate's career and thematic development

Educational record and qualifications: Ch. Asst. Prof. Dr. Valentin Panchev Panchev was born in June 1982 in Plovdiv. In 2001, he completed his secondary education in "Kamen Petkov" Technical School in Plovdiv, where he studied subjects such as ornamental dendrology, floriculture, park and landscape design, qualifying as a park construction technician. He continued his studies at the Agricultural University (AU) in Plovdiv, specializing in agronomy with focus on tropical and subtropical agriculture and receiving training in a range of disciplines related to crop production, including horticulture, botany, fruit growing, floriculture, etc. In year 2006 he successfully graduated in AU, obtaining a Bachelor's degree. Immediately afterwards, he pursued a Master's program at the same university, in 2007 upgrading his Bachelor's degree to a Master of Science degree in Landscape Design, with specialized training in ornamental dendrology, floriculture, and park perspective.

Mr. Panchev was awarded the educational and scientific degree of PhD in the scientific specialty of Ornamental Plants, after developing (as a part-time doctoral student) at the Department of Horticulture of AU since 2015 and successfully defending in December 2018 a dissertation titled "Studies on Various Propagation Methods for Species of Genus *Tilia*."

Employment history: Dr. Panchev began his professional career in a field related to ornamental horticulture simultaneously taking his MSc course; between 2006 and 2007 he worked in the trade and services sector at a firm named "Trakart – Georgi Ivanov" in Plovdiv, where he was responsible for maintaining the aesthetic appearance of plants used for indoor and outdoor landscaping. From 2008 to 2015 he worked in the field of education as a teacher at the Professional High School of Construction, Architecture and Geodesy in Plovdiv. From 2015 to 2019 was appointed on the academic position of Assistant Professor at AU, Plovdiv, where he was responsible for teaching students in subjects such as floriculture, ornamental dendrology, landscape design, and floral arrangement. Alongside Dr. Panchev's duties as Asst. Prof., he carried out his doctoral studies on a part-time basis. After obtaining his PhD, in March 2019, he has been promoted to Chief Assistant Professor in the Department of Horticulture at AU, Plovdiv. Currently and before, his work involves conducting practical classes and seminars for students in subject floriculture, ornamental dendrology, landscape design, and floral arrangement.

Professional training courses and specializations: Dr. Panchev has expanded his professional skills and knowledge through courses and specializations at various research centers. These include several training courses (held in 2013, 2014, 2018, and 2025) under the ENTER program (European Network for Teaching and Learning in Agriculture and Rural Development), leaded by eminent lecturers from prestigious universities in Vienna (Austria), Wageningen (Netherlands), AU, Plovdiv (Bulgaria), and others.

The interest in acquisition of new teaching approaches and experimental scientific methodologies related specifically to ornamental horticulture is noteworthy. This is evidenced by mobility undertaken through the Erasmus+ program at the University of Agriculture in Krakow, Poland (2017); the Czech University of Life Sciences in Prague, Czech Republic (2018); Yarmouk University in Irbid, Jordan (2019) and Mersin University in Mersin, Turkey (2025). In 2019, he participated in a one-month training workshop titled "International training workshop on safe production of grains," held in China.

From the educational and academic degrees held (Bachelor, Master, PhD), the supplementary training undertaken at prestigious national and foreign research centers, aimed at enriching the knowledge and encouraging the application of new theoretical, experimental, and practical scientific approaches for analysis in the field of crop production (specifically ornamental horticulture, landscape design, and related disciplines), and as well as from the nature of his professional work, it is evident that the career development of Ch. Asst. Prof. Dr. Valentin Panchev has focused primarily on topics related to ornamental plants. His professional growth is characterized by purposefulness, consistency, systematic enhancement of qualifications, and successful career progression through the consecutive academic ranks of Assistant and Chief Assistant Professor.

2. General description of the presented materials

The documents submitted by Ch. Asst. Prof. Dr. Valentin Panchev Panchev for participation in the competition for Associate Professor are well organized and presented in accordance with the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB) and the Regulations for the Implementation of the Act on Development of the Academic Staff in the Republic of Bulgaria (RIADASRB) in Agricultural University, Plovdiv.

Dr. Panchev is participating with a total output of 36 works, categorized as follows:

Scientific publications in the relevant academic field – 36 items, out of which:

- ❖ *For participation in the Associate Professor competition – 29 items;*
- ❖ *Publications related to the doctoral dissertation – 7 items (excluded from consideration);*
- ❖ *Publications with impact factor or impact rank – 6 items, indexed in Web of Science, with impact factor or Scopus impact rank (SJR), in quartiles Q3 and Q4; articles with Web of Science Impact Factor also fall into the category of journals with a Journal Citation Indicator (JCI), based on the indexing from the three years preceding the year of publication;*
- ❖ *Publications without an impact factor but indexed in Web of Science/CABI – 2 items;*
- ❖ *Publications without an impact factor or impact rank in peer-reviewed and indexed scientific journals – 11 items;*
- ❖ *Publications in conference proceedings (national and international) – 9;*
- ❖ *Book published based on a defended doctoral dissertation – 1*
- ❖ *Curricula – 3 items (Bouquet arrangement; Quality assessment and storage of vegetable and flower produce – separate versions for full-time and part-time study).*

The personal contribution of the candidate Dr. Valentin Panchev to the 29 scientific papers, considered for evaluation in this competition, is illustrated by the fact that in 10 of them he is a single author, in 5 is the first author, in 9 is the second author, and in the remaining 5 is on the third or subsequent position. For curricula he is a single author.

Summary on the fulfillment of the minimum national requirements /points by groups of indicators/ by Asst. Prof. Dr. Valentin Panchev, according to the criteria for Associated Professor in Act on the Development of the Academic Staff in the Republic of Bulgaria (ADASRB) and the Regulations for the Implementation of ADASR (RIADASRB) in Agricultural University, Plovdiv /the article 1a, paragraph 1/ for field of higher education 6. Agricultural Sciences and Veterinary Medicine, professional field 6.1. Crop Production

Group of indicators and Minimum requirements for the academic position Assoc. Prof. (points)	Criterion	Results of Ch. Asst..Prof. Dr. Valentin Panchev
A (1) – 50 pts.	Dissertation for obtaining the educational and scientific degree "doctor"	50 points
B (4) – 100 pts.	Scientific publications (at least 10) in peer-reviewed journals indexed in internationally renowned scientific databases	255 pts.
C (Sum of indicators 5 to 12) – 200 pts.		256.65 pts.
	(6) Published book based on a defended dissertation for the educational and scientific degree PhD	40 pts.
	(7) Scientific publications in journals refereed and indexed in world-renowned scientific information databases	145 pts.
	(8) Scientific publication in non-indexed peer-reviewed journals or in edited collective volumes	71,65 pts.
D (13 to 15) – 50 pts.	(13) Citations in scientific journals, referenced and indexed in world-renowned databases with scientific information	45 pts.
	(15) Citations or reviews in non-indexed, peer-reviewed scientific journals	10 pts.
Total: 400 pts.		Total: 616,65 pts.

Note: The table reflects only the total score based on criteria for metric indicators related to publication activity. Participation in research projects, specialized training, and some research and pedagogical activities is not reflected here but was taken into account when estimating the candidate's overall work.

3.1. Main research fields of the candidate

The research work of Ch. Asst. Prof. Valentin Panchev, PhD, is characterized by a wide range of competences and experimental skills in several areas of research on ornamental plant species. He demonstrates profound knowledge in specific, as well as adjacent fields and subfields of ornamental horticulture.

The objects of his scientific research include numerous species and varieties from various genera and families of annual and perennial, flowering and foliage, bulbous, pot, herbaceous, shrub, and tree species with ornamental qualities.

Thematically the studies can be grouped into four major categories, as follows:

/A/ Ecological and physical methods for stimulating seed development: investigation into the influence of ultrasound on the germination and vital indicators of seeds of ornamental flower and tree species.

/B/ Optimization of agricultural technologies in flower crops: study of fertilization regimes, variety testing, and technologies for year-round cultivation of ornamental species for cut flowers and park landscaping.

/C/ Biotechnology, *in vitro* micropropagation; *in vivo* vegetative and seed propagation: development of effective protocols for tissue cultures, overcoming deep dormancy, and hormonal stimulation of rooting in valuable tree and shrub species.

/D/ Monitoring, biodiversity, and ornamental evaluation: study of natural populations of protected endemic species and assessment of the dynamics in the ornamental qualities of flower crops under different cultivation technologies.

The research involves:

Studies in vitro: Development of a protocol for *in vitro* propagation of linden trees from the species *Tilia platyphyllos* Scop. (large-leaved linden), *Tilia cordata* Mill. (small-leaved linden), and *Tilia tomentosa* Moench. (silver linden); Development of a protocol for micropropagation of *Angelonia angustifolia*.

Studies in vivo: Ultrasound treatment of seeds from various ornamental species and varieties: zinnia (*Zinnia elegans*), bladder senna (*Colutea arborescens*), snapdragon (*Antirrhinum majus*), two lupine species (*Lupinus polyphyllus* Lindl. and *Lupinus*

mutabilis Sweet), magnolia (*Magnolia grandiflora* L.), peacock flower (*Caesalpinia pulcherrima* L.), cherry laurel (*Laurocerasus officinalis* L.), and corms of 3 gladiolus varieties. Investigation of certain agricultural practices in growing gladioli for cut flowers - nitrogen fertilization levels, planting distances of corms, vegetative and ornamental characteristics. The overwintering possibilities under the climatic conditions of the city of Plovdiv were studied for 5 gladiolus varieties. Application of the organic bio-fertilizer as a dose dependent component of substrates for growing seedlings of annual flowers - antirrhinum, tagetes, zinnia and verbenas. Study of the potential of seed-propagated sweet William plants (*Dianthus barbatus* L.) to be grown outdoors over a 2- and 3-year period. Study of the onset of phenophases in large-leaved linden depending on the age of seedlings and climatic conditions. Investigation of the possibility to improve the cultivation technology of 3 dahlia (*Dahlia variabilis*) and 3 gladiolus varieties by leaving the tubers/corms to overwinter in the soil instead of digging them up. Study of the possibilities to overcome dormancy and improve seed germination of 3 linden species through stratification and treatment with gibberellic acid. Treatment of cuttings from *Ficus benjamina* and *Ficus alii* with auxin to improve the rooting process. Field survey of some of the habitats for the volume and stability of populations of the Balkan endemic *Goniolimon dalmaticum*. Analyzing ginkgo (*Ginkgo biloba*) leaves isolated from plants in different plantations, for the content of the biologically active health-promoting substances bilobalides and ginkgolides A, B, and C.

3.2. Demonstrated skills or aptitude for research management (project management, attracted external funding, etc.)

Ch. Asst. Prof. Dr. Valentin Panchev is a successful coordinator and team member in scientific and youth projects with external and internal funding (a total of 15 projects, serving as Project Coordinator for 3 of them). This testifies to his capacity to administer activities, work in a team, and contribute to the external funding of research projects.

- Participation in projects with funding external to the Agricultural University (AU):
 - National Scientific Program "Young Scientists and Postdoctoral Students"—2021. Funding organization: Ministry of Education and Science; Project Coordinator.
 - National Scientific Program "Young Scientists and Postdoctoral Students - 2"—2022–2023. Funding organization: Ministry of Education and Science; Project Coordinator.
- Projects with internal funding from the Center for Scientific Research, Technology Transfer, and Intellectual Property Protection (CSRTTIPP) at AU, Plovdiv:
 - Project Coordinator of "Study on the possibilities of different agrotechnological practices to improve the development and ornamental properties of various gladiolus (*Gladiolus hybrida* L.) genotypes," ongoing, implementation period: 2024–2026
 - Team member in project: "Evaluation of grafting effectiveness in vegetable crops of the Solanaceae and Cucurbitaceae families," 2023–2026.
 - Team member in project: "Optimization of the microclimate in plastic greenhouses with a view to improving conditions for conducting scientific research activities," 2022–2025.
 - Team member in project: "Study of plant genetic resources of *Ginkgo biloba* in Southern Bulgaria and the Black Sea coast. Introduction of new valuable forms suitable for urban landscaping," implementation period: 2015–2017.
 - Team member in 9 consecutive projects on "Landscaping, improvement, reconstruction, and inventory of the dendrological park at the Agricultural University, Plovdiv," executable in one- or two-year period between 2016 and 2026.
- Evidence of good organizational and managerial skills in administering scientific and teaching activities includes Dr. Panchev's active role as a member of the General Assembly of the Agricultural University, Plovdiv; member of the General Assembly of the Faculty of Viticulture and Horticulture; Member of the Faculty Council of the Faculty of Viticulture and Horticulture (two terms), and Secretary of the Department Council of the Department of Horticulture (from 2015 to present).
- Scientific Secretary of the "Agrobiology" section in three conferences organized by the Union of Scientists in Bulgaria, Plovdiv Branch.

4. Evaluation of the candidate's pedagogical background and activities. Contribution to the training of young researchers

Dr. Panchev's pedagogical preparation, teaching activities, and active role in training students leave a very good impression. He is an effective and successful lecturer with stable teaching experience, established in the period 2021–2026 at the Agricultural University, Plovdiv. During this time, his total teaching workload amounted to approximately 3,680 hours, including lectures, practical exercises, and extracurricular activities. The average annual workload is approximately 736 hours, consisting of an annual average of 188 hours of lectures, 356 hours of practical exercises, and 192 hours of extracurricular activities.

Dr. Panchev was responsible for the following tasks:

- Undergraduate (Bachelor's) Courses:
 - Conducting practical exercises: 13 disciplines in the field of ornamental horticulture.
 - Delivering lectures: 5 disciplines.
 - Educational training practices: 3 disciplines.
- Graduate (Master's) Courses:
 - Exercises and lectures in 6 disciplines.
- Developed curricula for three disciplines:
 1. Bouquet Arrangement - elective for the Ornamental Horticulture specialty, Bachelor's degree, full-time education; 2. Grading and Storage of Vegetable and Flower Produce—full-time education; 3. Grading and Storage of Vegetable and Flower Produce—part-time education.
- Academic supervisor to 23 diploma students in Bachelor's and Master's courses.
- Tutor/Class Advisor for 1st and 2nd-year undergraduate students – 2016- 2026
- In charge of maintaining the educational assortment in dendrology.
- To further highlight his contribution to student and youth training, it is worth noting that back in 2013, at Sofia University "St. Kliment Ohridski," he completed an ICT-based teaching course: "Methodological Training for Lesson Construction Using Information and Communication Technologies".
- In a student scientific forum, held in 2023, dr. Panchev was awarded a certificate by the Student Council at Plovdiv University "Paisii Hilendarski" for his contribution to the supervision and organization of the 10th National Student Scientific Conference "Ecology—A Way of Thinking".

5. Significance of the obtained results, evidenced by citations, publications in prestigious journals, awards, membership in international and national scientific bodies, etc.

- Citations: The results reported in the scientific works of Dr. V. Panchev have found a positive response in the international scientific community. In connection with this competition, for this competition 5 citations (excluding self-citations) of 3 scientific papers are presented, with the citations appearing in prestigious publications with an impact factor or impact rank, refereed and indexed in the global databases Web of Science and Scopus. According to my own reference check in these databases, more citations can be found, but those selected by the candidate are completely sufficient to fulfill the required total number of points according to the criteria for this indicator. Although citations are not restricted to a specific period, those listed by Dr. Panchev refer only to works published by him after acquiring the academic rank of Chief Assistant Professor (2019–2025).
- Quality of the scientific work and the achieved results: The results reported in the scientific publications of Dr. Panchev show a very good theoretical background regarding the specific problems, a profound review of available literature sources, appropriate paper structuring, a sound scientific style, and clear data visualization when describing results, along with a critical approach during discussions. The research is based on an effective and, in most cases, interdisciplinary approach involving the application of diverse experimental techniques.
- The candidate's activity in terms of presenting and popularizing his research results can be estimated as very good. In addition to published materials, it includes poster and oral presentations at scientific forums and conferences in Bulgaria with international attendance, as well as scientific events abroad - totaling 18 instances (2 national and 16 international in Slovakia, Romania, Bulgaria, Turkey, Bosnia and Herzegovina).
- His integration of Dr. Panchev into the national scientific community is further attested by his membership in the Union of Scientists in Bulgaria, Plovdiv Branch.

The interest to the reported in Dr. Panchev's papers results, the international recognition through citations, and the publications in reputable scientific journals provide clear evidence of the significant scientific value of the conducted research and underline a real capacity of the candidate for becoming an Associate Professor.

6. Significance of the contributions to science and practice. A reasoned response to the question of the extent to which the candidate possesses a clearly defined research profile

I acknowledge the significance of all original scientific, applied-scientific, and methodological contributions described below, as systematized based on the outcome of the candidate's research and teaching duties.

I. Original Scientific Contributions

1. An effective protocol for *in vitro* propagation of linden is established. The most suitable explants are apical and stem cuttings, and the most successful disinfection is achieved by combining 5% $\text{Ca}(\text{OCl})_2$ and 2% AgNO_3 . MS nutrient media enriched with 5 μM mT or 5 μM BAP and 0.01 μM IBA proved to be the most effective. Halved macronutrients in the MS medium supplemented with 0.3 mg/L IBA led to the most successful rooting of micro-cuttings. (*Publication B5 from the Reference of Minimum National Requirements under the metric criteria for the academic position of Associate Professor, stated in ADASRB and its Specific Regulations RIADASRB for AU, Plovdiv*).
2. It is found that enriching the MS nutrient medium with 0.5 mg/L BAP facilitates the highest multiplication factor (1.4) and the largest number of shoots per explant of *Angelonia angustifolia*. The highest rooting percentage is achieved using 0.1 mg/L BAP (*Publication B1*).
3. Three new habitats of the protected species *Goniolimon dalmaticum* were discovered in the localities of "Kosharite," "Polyanite," and "Omay," situated at the foothills of the Slavyanka Mountain, Hadzhidimovo Municipality, Blagoevgrad district. Initial data show the presence of a significant number of well-developed plants, with a predominant share of generatively propagated plants (B2).
4. For the first time under Bulgarian conditions, the influence of primary climatic factors on the development and transition of individual phenophases of broad-leaved linden (*Tilia platyphyllos* Scop.) seedlings, obtained from seeds collected on the 75th and 90th day after flowering was determined. The influence of mean daily temperatures and cumulative rainfall on the period between individual phenophases of germination, cotyledon development, first true leaf, and third true leaf is described by a linear regression model with high determination coefficients. The period for the formation of the first true leaf is longer, and seedlings obtained from 75-day-old seeds display higher sensitivity to changes in meteorological conditions (B3).
5. It was shown that the effect of treating seeds of lupine, snapdragon, calathea, peacock flower, and zinnia, as well as gladiolus corms with ultrasound on their vitality is described by a polynomial regression with high determination coefficients, showing that the impact exhibits stable performance. To maximally improve the vital status of seeds, a 4- or 6-minute sonication is recommended (B6, G7.3, G8.6, G8.7, G8.9).
6. In order to overcome seed dormancy in cherry laurel and linden, effective approaches are developed. For cherry laurel, treating the seeds with ultrasound for 10 minutes followed by stratification for 90 days is recommended, while for linden, a stratification period of 9 or 12 weeks or treatment with 600 and 800 mg/L gibberellic acid is suitable (B9, G8.5).
7. Seasonal and geographical differences regarding the content of biologically active substances ginkgolides A, B, C, and bilobalides, in the leaves of female ginkgo trees located in 6 different settlements in Bulgaria were established. The concentration of these substances is highest at the beginning of summer and decreases in spring and autumn. Leaves from trees in Plovdiv and Hisarya regions have the highest content of the studied compounds. The content of ginkgolide A is the highest, followed by ginkgolide B and ginkgolide C (B10).
8. By performing a detailed literature review the information regarding the propagation of linden from seeds is updated and analyzed. As a result, it is emphasized that this method of propagation is a difficult and complex process requiring in-depth knowledge to overcome deep seed dormancy. The wide application of linden trees makes the knowledge in this area highly relevant and necessary (G7.6).

II. Scientific-Applied Contributions

9. For the first time, the reactions of a large selection of gladiolus varieties Purple Flora, Priscilla, Plum Tart, Oscar, Green Star, as well as Fado, Oasis, and Amsterdam, to Bulgarian environmental conditions is described. It is found that flowering is longest in Plum Tart variety (83 days) and Amsterdam variety (167 days). A strong positive correlation exists between plant height and the number of leaves, as well as between inflorescence stem length and the number of developed flowers. The

Purple Flora and Amsterdam varieties exhibit the largest inflorescence length, number of developed flowers and low share of undeveloped flowers, which determines their superior ornamental value. The productivity of the Amsterdam variety is the highest (B4, G8.12).

10. Nitrogen fertilization is optimized in order to improving the growth and the ornamental value of gladiolus. Accelerated transition through individual phenophases, the earliest flowering, and the formation of the largest number of flowers are observed at the application of $16 \text{ kg} \cdot \text{da}^{-1} \text{ N}$ (B7).

11. A species-specific response of snapdragon, marigold, zinnia, and verbena to the application of the organic biocompost Lumbrical is established, with a stronger effect manifested in snapdragon plants, expressed in more intensive phenophase transitions, improved seed germination, increased root system volume, and a greater number and area of leaves. It is determined that the optimal amount of this fertilizer constitutes 20% of the total substrate volume (B8).

12. To improve the vital parameters of difficult-to-germinate magnolia seeds, it is recommended to apply a combined treatment of 0.01% Biolan and 12 hours at a low positive temperature of 4°C . The resulting seedlings exhibit greater height and the highest survival rate of 80% compared to those from untreated seeds (G7.4).

13. The optimal timeframe for harvesting seeds from the three most commonly used linden species (*T. cordata* Mill., *T. platyphyllos* Scop. and *T. tomentosa* Moench) for seed propagation is determined. It is found that the most suitable period is in August whereby the resulting seedlings from all three linden species demonstrate the greatest length (G8.1).

14. In connection with climate change and with a view to intensifying technology and reducing cultivation costs for gladiolus and dahlia (*Dahlia variabilis*), the possibility for overwintering of corms and tubers of three varieties from both species was established. The corms and tubers that successfully overwintered in the soil developed more vigorous plants with higher values for height, leaf number, and inflorescence/flower size as compared to the stored ones. A positive influence is established on the phenophase transitions in both plant species (G8.2, G8.3, G8.4).

15. The type of cuttings used for propagating *Ficus alii* and *Ficus benjamina* is evaluated, and the use of stem cuttings pre-treated with indole-3-acetic acid (IAA), instead of leaf cuttings, is recommended. Regarding the rooting of cuttings from both ficus species, a species-specific performance is observed. Better development of the root system is observed in *Ficus benjamina* (G8.8).

16. The possibility for perennial cultivation (up to the 4th year) of *Dianthus barbatus* for park landscaping is proposed. It is established that with increasing age, the flowering period shifts and in most cases its duration increases. The number of flowers is greatest in 2- and 3-year-old plants and decreases in the 4th year, which is why it to cultivate this species within a 2- or 3-year framework is recommended (G8.10, G8.11).

III. Methodological Contributions

Among the contributions described in the *Original Scientific* and *Scientific-Applied* sections, those with specific methodological orientation stand out under numbers 1 and 2 (development of protocols for *in vitro* propagation of linden and angelonia); **contribution 5** (ultrasound treatment of seeds of lupine, snapdragon, calathea, peacock flower, zinnia, and gladiolus corms to overcome dormancy, improve germination, and seed parameters); **contribution 6** (to overcome dormancy in cherry laurel and linden seeds, ultrasound treatment and stratification or treatment with 600 and 800 mg/L gibberellic acid are recommended); **contribution 10** (optimization of nitrogen fertilization in gladiolus to improve growth and increase the ornamental qualities of plants); **contribution 11** (application of the organic biocompost Lumbrical as a fertilization component for snapdragon, marigold, zinnia, and verbena); **contribution 12** (improving vital parameters of difficult-to-germinate magnolia seeds through combined treatment with 0.01% Biolan and placement for 12 hours at 4°C); **contribution 15** (for ficus propagation, the use of stem cuttings pre-treated with the auxin indole-3-acetic acid is recommended).

A methodological contribution to the candidate's teaching activity is the development of curricula for full-time and part-time, mandatory or elective forms of education for Bachelor's and Master's degrees at AU, Plovdiv (course topics: Bouquet arrangement; Grading and storage of vegetable and flower produce).

The outlined contributory nature of the scientific, scientific-applied research, and methodological achievements reliably illustrates that the candidate in the competition for Associate Professor has a clearly defined profile of research and teaching activity in higher education within various disciplines under the specialty Ornamental Plants.

7. Critical notes and recommendations

No critical remarks are indicated. Recommendations: Given the current scope of Dr. Panchev's research related to the distribution in the country of some endemic species with ornamental qualities, as well as the application of non-traditional methods for improving the *in vitro* and *in vivo* reproductive potential of differently categorized ornamental plants, the prolongation and expansion of his work in this direction would be a logical continuation of the present research activities. It would offer an opportunity to further increase his professional competence by developing effective approaches for biodiversity conservation and for improving the reproduction, growth, and development of valuable plant objects used in ornamental horticulture.

Studies addressing the properties and physiological determinants of ornamental plants accumulating heavy metals (hyperaccumulators) would also be of interest. Such a research niche could find practical implementation in landscape projects aimed at phytoremediation of contaminated with heavy metals urban and industrial areas, through the use of eco-friendly, aesthetically pleasing solutions - such as growing of ornamental species capable of extracting from the soil and mounting in their tissues high amounts of heavy metals whereas maintaining their vitality and decorative value.

8. Personal impressions and reviewer's opinion

I do not know Dr. Panchev personally, but my primary good impressions were formed by the correct systematization of all activities presented in the documentation submitted for the Associate Professor competition. The evidentiary materials are convincingly supported by formal letters. I recognize the significance of the scientific outputs, good publication activity, the resonance of his papers in the form of citations, the participation in scientific projects with external and internal funding. I also acknowledge the successful for the level of his current academic position pedagogical activity. I note with satisfaction the prominent original, scientific-applied, and methodological contributory nature of Dr. Panchev's research and teaching performance.

Ch. Asst. Prof. Panchev's achievements demonstrate that he is an ambitious and capable specialist with high potential for research and the ability to work both independently and as a team member. The characteristics of Dr. Panchev that are taken into consideration in the current evaluation, indicate an interest in developing new experimental and pedagogical approaches and refining the existing ones. Altogether, the described qualities of the candidate clearly determine him as a successful researcher and a promising educator, deserving the relevant progression of his further career as habilitated academic staff at AU, Plovdiv.

CONCLUSION

Based on the analysis of the teaching, scientific, and scientific-applied achievements of the candidate, I estimate that Chief Assistant Professor Valentin Panchev Panchev, PhD, fully meets and even exceeds the minimum requirements of the ADASRB and its Specific Regulations (RIADASRB) at AU, Plovdiv, under the criteria for metric indicators in Area of Higher Education 6. Agricultural Sciences and Veterinary Medicine, Professional Field 6.1. Crop Production.

The overall assessment of the presented candidate's professional profile gives me a ground to convincingly vote **POSITIVELY** for the appointment of Ch. Asst. Prof. Valentin Panchev Panchev, PhD to the position of Associate Professor.

Cumulatively, I would like to suggest to the esteemed Scientific Jury also to vote **POSITIVELY**, and to the Faculty Council of the Faculty of Viticulture-Horticulture at Agricultural University, Plovdiv, **TO ELECT** Chief Assistant Professor **Dr. Valentin Panchev Panchev** as **ASSOCIATE PROFESSOR** in Professional Field 6.1. Crop Production, Scientific specialty **Ornamental Plants**.

Date: 03.09.2026

REVIEWER: prof. dr. Elena Tomova Iakimova
(qualified electronic signature)