

OPINION

of

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of a dissertation for awarding the educational and scientific degree "**Doctor**"

in: field of higher education **3. Social, economic, and legal sciences**

professional field 3.8. **Economics**

PhD Programme *Economics and Management (Industry)*

Author: Stefan Deyanov Georgiev

Topic: *"Changes in the quality and economic indicators in wine production when using enzyme preparations"*

Research supervisor: Associate Professor Tanya Petrova Yankova-Lilova, PhD

1. General presentation of the procedure and the PhD student

On the grounds of order No. PD-21-1116 dated 25.05.2023 of the Rector of Plovdiv University Paisii Hilendarski (PU), I have been appointed as a member of a scientific jury in connection with the provision of a procedure for the defence of a dissertation on the topic *"Changes in quality and economic indicators in wine production when using enzyme preparations"* for the acquisition of the educational and scientific degree "**Doctor**" in the field of higher education 3. Social, economic, and legal sciences, professional field 3.8. Economics, PhD programme of Economics and Management (Industry).

The author of the dissertation is Stefan Deyanov Georgiev – full-time doctoral student at the Department of "Management and Quantitative Methods in Economics" with scientific supervisor Associate Professor Tanya Petrova Yankova - Lilova, PhD., from Plovdiv University Paisii Hilendarski.

The materials presented by Stefan Georgiev on paper and electronic media are in accordance with Article 36 (1) of the *Regulations for the Development of the Academic Staff of PU* and includes the following documents: (1) an application to the Rector of PU to open the

procedure for the defence of dissertation work; (2) CV in European format; (3) protocol from the departmental council related to reporting the readiness to open the procedure and preliminary discussion of the dissertation work; (4) dissertation; (5) abstract in Bulgarian and English; (6) a list of scientific publications on the topic of the dissertation; (7) copies of scientific publications on the subject of the dissertation; (8) declaration of originality and authenticity of the attached documents.

Stefan Georgiev has presented *three publications*, two of which are independent.

2. Relevance of the topic

The relevance of the dissertation work is dictated by the fact that the progress of technologies, the accumulation of new knowledge, the dynamics of consumer demand and preferences have their impact on the industrial development of wine production, the business environment and market realities. In this aspect of considering the problem, it turns out to be vitally important for the Bulgarian industrial wine producers to be able to maintain their positions in the market with competitive behaviour.

The author rightly emphasized that in the last few decades, one of the most significant innovations in winemaking technology is the use of enzyme preparations, which is why their use is the subject of research in the dissertation work. There is indisputable evidence that there is not enough research and summary data on the changes that enzyme preparations cause in the qualitative and economic indicators of winemaking, which implies the exact formulation of the subject of his research.

In the dissertation work "*Changes in qualitative and economic indicators in wine production when using enzyme preparations*" all the requirements of the regulatory framework were considered and a combined research strategy was used, which included the application of both quantitative and qualitative methods. Stefan Georgiev's research strategy includes a survey with pre-selected respondents among industry specialists and shop owners. The author has registered, summarized, and used experimental data, the result of his own research, through which he compared the effect of the application of industrial enzyme preparations in different methods of vinification of red grapes. The relationship between the changes in quality indicators and the resulting changes in the economic indicators of wine producers has been established. The dissertation presents an analysis and evaluation of the economic effect of the production activity of the winery, the investment in real assets and the overall efficiency of an investment project.

Stefan Georgiev's research is interdisciplinary, but by its very nature it is aimed at the economic aspects of the use of enzyme preparations in wine production. The author has

presented an appropriate conceptual model for evaluating quality and economic indicators. This model aims to provide a systematic and scientifically based approach to the study of the economic parameters of winemaking depending on the use of enzyme preparations and the chosen technology. The model visualizes the logical connections and dependencies between the fundamental stages that are passed through to reveal the influence of enzyme preparations on the quality of red wines produced and, accordingly, on the economic indicators of production.

3. Knowing the problem

In the main parts of the dissertation, the author has presented theoretical and methodological questions, which are bound in a good logical sequence. I believe that the problem under consideration is relevant, both in a scientific and in a scientific-applied sense. In his dissertation work, Stefan Georgiev demonstrates an excellent degree of knowledge of the state of the problem and the existing literature on the subject. The presented conceptual model visualizes the way in which the formulated hypotheses were verified and enables a reasoned decision to be made on their acceptance or rejection. This model also provides a theoretical framework, guideline, or prototype for researchers interested in conducting empirical research in wine production with a view to developing more detailed and objective findings about the economic aspects of this industry.

4. Research methodology

The chosen research methodology corresponds to the goals and objectives of the dissertation work. The presented analyses show the author's ability to compare different principles and approaches, to summarize and interpret data, to formulate conclusions. The methods and results described in the dissertation logically correspond to the originally planned work plan and have evidentiary value in relation to the stated hypotheses. The author's contributions are based on the results and conclusions achieved by the theoretical and empirical research.

5. Characterization and evaluation of the dissertation and contributions

The presented dissertation work "*Changes in the qualitative and economic indicators in wine production when using enzyme preparations*" has a volume of 292 pages, of which: introduction, three chapters, summaries, conclusions and conclusions, contributions - 121 pages; bibliography of the used literary sources – 7 pages, table of contents – 2 pages, list of abbreviations – 8 pages; scientific publications – 1 page; declaration of originality – 1 page; appendices – 151 pages. 4 schemes, 187 tables and 44 diagrams are included to support the exposition. The

bibliography used is represented by a total of 113 sources, of which 65 in Bulgarian, 27 in English, 4 in Russian, 3 in French and 14 Internet sources.

The dissertation is structured according to generally accepted criteria and contains all the necessary sections – introduction, literature review, objective, research tasks, hypotheses, methodology, limitations, results, discussion, conclusions, cited literary sources and contributions. In the dissertation, the object of the study, the subject, the objectives, the hypotheses, and the tasks are clearly structured and defined. The presentation of the dissertation is structured logically and coherently, with a good ratio between the individual parts and appropriate structure in relation to the set goal, formulated hypotheses, and tasks.

The purpose of the research is clearly formulated in the work, and in the process of its realization, the specific tasks and hypotheses are specified in a logical sequence. The dissertation work has an interdisciplinary character, which is a reason to look for its innovative value in several directions. The valuable thing in this research is that the proposed conceptual model can be used for analogous studies of the influence of different additives on the economic indicators in the production of beverages and foods. The obtained results provide opportunities to create economically justified innovative technologies to produce a wide range of red wines and to design new enterprises based on these technologies.

I accept the mentioned contributions in dissertation work and consider that they are formulated precisely and meaningfully and build a good idea of the success of the author's experimental strategy. The fact that the achieved results are significant and are the result of many years of work on the topic of the dissertation is clearly highlighted.

6. Assessment of the PhD student's publications and personal contributions

The dissertation and publications on the topic of the dissertation work presented by Stefan Georgiev fully meet the minimum national requirements (Article 2b, Paragraphs 2 and 3 of the Law on the Academic Staff Development in the Republic of Bulgaria) for the acquisition of an educational and scientific degree "Doctor" in the scientific field and professional field of the procedure. The ideas presented by the doctoral student in the publications directly correspond to the topic of the dissertation and prove the author's abilities and skills in conducting scientific research. This expertise is also supported by Stefan Georgiev's practical experience. I believe that the attached publications ensure the necessary publicity of the results of the dissertation research before the scientific community in the country. I accept that the dissertation research conducted was carried out entirely by the doctoral student, and the results obtained, and the conclusions and recommendations drawn from them are his personal contribution.

7. Abstract

The abstract comprehensively reflects the essence of the dissertation and the achieved results of the conducted research. All sections of the dissertation are presented correctly, and enough figures and tables have been selected to illustrate the main results.

8. Recommendations for future use of dissertation contributions and results

My impression of the results presented in Stefan Georgiev's dissertation is that the researched problem has been mastered in detail and in essence. The exposition is coherent, structured and justified. I believe that the proposed dissertation allows future scientific research on the topic in the direction of enriching the methodological toolkit. I recommend the author of the dissertation to present the results of his scientific research at international scientific forums, as well as to continue publishing scientific works in refereed and indexed international databases Scopus and Web of Science.

CONCLUSION

Having familiarized myself with the dissertation presented in the procedure and the accompanying scientific works and based on the analysis of their significance and the categorically contained scientific, scientific-applied and applied results in science, **I confirm** that the presented dissertation and the scientific publications to it, as well as the quality and originality of the results and achievements presented in them, **meet all the requirements** of the *Law on the Academic Staff Development in the Republic of Bulgaria (LASDRB), the Regulations for the Implementation of LASDRB and the relevant Regulations of PU Paisii Hilendarski*.

The doctoral student Stefan Georgiev meets the minimum national requirements, and no plagiarism has been found in the scientific works presented in the competition.

The dissertation shows that its author has in-depth theoretical knowledge and practical skills in the field of the doctoral program *Economics and Management (Industry)* by demonstrating very good organizational qualities and skills for independent planning and conducting scientific research.

Based on the above, **I confidently give my positive assessment** of the conducted research, presented in the dissertation, the abstract, the achieved results, and contributions, **and I propose to the respected scientific jury to award the educational and scientific degree "Doctor"** to Stefan Deyanov Georgiev in field of higher education 3. Social, economic and legal sciences; professional field 3.8. Economics; PhD programme "Economics and Management (Industry)".

15.06.2023

Opinion prepared by:

(Associate Professor Margarita Lyubanova Ruseva, PhD)