ЛЕСОТЕХНИЧЕСКИ УНИВЕРСИТЕТ
ФАКУЛТЕТ ПО ГОРСКО СТОПАНСТВО
Регистрационен индекс на дата
ФГС-3866/ЛВРЗ-26-

OPINION

on the dissertation for obtaining the educational and scientific degree "Doctor" (PhD), in the field of higher education 6. Agricultural science and veterinary medicine, professional field 6.5. Forestry, scientific specialty "Silviculture (incl. Dendrology)"

Author of the dissertation: **Teodora Milchova Markova** – PhD student at the Department of Dendrology at the University of Forestry, Sofia

Dissertation Topic:
"Classification of the forest vegetation of Plana Mountain"

Reviewer: Professor Dr. Georgi Hinkov Ivanov, Forest Research Institute – BAS; Field of Higher Education 6. Agricultural Sciences and Veterinary Medicine, Professional Field Forestry, Scientific Specialty "Silviculture (incl. Dendrology)", appointed by Order No. ZPS-145/02.04.2026 by the Rector of UF

1. Relevance of the problem
The chosen topic is relevant due to several main reasons. Plana Mountain has been poorly studied from a phytocoenological and botanical point of view. The dissertation includes maps that provide additional information on the presence and status of forest habitats in the region, based on the establishment of numerous field plots and the interpretation of the collected. Following the mapping conducted in the 2011-2013 period within the Natura 2000 network, this is one of the first similar studies where a correction is made to the work performed by the MOEW (Ministry of Environment and Water) and the reliability of the results is established.

2. Degree of knowledge of the state of the problem and creative interpretation of the literature review
The PhD student Teodora Markova has excellent knowledge of the state of the forest phytocoenoses in Plana Mountain. The literature review is detailed and sufficient in volume. All aspects of abiotic and biotic environmental factors are covered. A large number of current and historically important publications in the field of vegetation classification have been reviewed and cited. The theses and conclusions are properly structured and precede the contributions reflected in the results of the dissertation.

3. Aim, objectives, hypotheses and research methods. Relevance of the chosen research methodology to the stated aim and objectives of the dissertation
The main aim is to study the forest phytocoenoses in Plana Mountain using the Braun-Blanquet floristic-structural method. In connection with this, the following tasks are correctly formulated: analysis of existing information, conducting phytocoenological descriptions, preparing syntaxonomic and ordination analyses, relating plant communities to the respective habitats, and mapping forest vegetation and forest habitats in a GIS

environment.

4. Visualization and presentation of the results

The obtained results are sufficiently and clearly visualized in tables, graphs, maps, and photographs. Current software and statistical programs were used in the development of cluster dendrograms, syntaxonomic schemes, and ordination schemes.

5. Discussion of results and literature used

The results logically follow the interpretation of the collected data and the applied methodological approaches. The results reflect the set goal and tasks, leading to adequate conclusions, recommendations, and corresponding scientific and scientific-applied contributions. Within the forest phytocoenoses, 15 types of associations have been identified, for which diagnostic, dominant, and constant species are indicated. Brief characteristics of the habitats are provided, as well as figures showing the biological and phytogeographical spectra of the species. A total of 158 articles are cited in the literature used, half of which are in Cyrillic.

6. Contributions of the thesis

I accept all the presented scientific and scientific-applied contributions. I consider the first contribution to carry the greatest weight and importance: "For the first time, using the Braun-Blanquet method, all types of forest phytocoenoses on the territory of Plana Mountain have been studied and systematized."

7. Assessment of the extent of the dissertator's personal involvement in the contributions

The dissertation is the personal work of the PhD student Teodora Markova. This is evident both from the two published articles in which she is the first author, and from the scientific and scientific-applied contributions formulated in the extended abstract (autoreferat).

8. Critical comments and questions

I have no specific notes or questions. I recommend that the PhD student continue her scientific work and publish in both Bulgarian and international scientific journals.

9. Published articles and citations

The PhD student has listed two published articles, which are entirely related to the current dissertation work.

10. Assessment of the publications on the dissertation: number, nature of the publications in which they are printed. Reflections in science – use and citation by other authors

In both publications on the dissertation thesis, Teodora Markova is the first author. The first publication is in a scientific journal with an SJR rating, and the second is in a national scientific journal. Both journals sufficiently and objectively reflect the results of the dissertation thesis. The required scientometric indicators for the number points from published articles have been achieved.

Presented abstract reflects objectively the structure and content of the dissertation.

CONCLUSION:
On the basis of the different research methods learned and applied by the PhD student, the correctly derived experiments, the made generalizations and conclusions, I consider that the presented dissertation meets the requirements of the FRAADB and the Regulations of the University of Forestry for its application, which gives me the reason to evaluate it as **POSITIVE**.

I take the liberty of suggesting that the Honourable Scientific Jury also vote in the affirmative and award the Assistant Landscape Architect Teodora Milchova Markova the educational and scientific degree ***"Doctor"*** in the scientific specialty "Silviculture (incl. Dendrology)".

Date: 16.05.2026 г.
Sofia

PREPARED THE OPINION: .....
(Prof. Dr. Georgi Hinkov Ivanov)