

STATEMENT

Plamen Stefanov Stoyanov, Ph.D.

Assoc. Professor, Department "Bioorganic Chemistry"

Faculty of Pharmacy, Medical University - Plovdiv

Of PhD thesis for awarding the educational and scientific degree „**Doctor**“ in the field of higher education 4. Natural sciences, mathematics and informatics; professional field 4.3. Biological sciences; doctoral program Botany

Autor: Petya Boycheva Atanasova

Subject: ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS IN THE AREA OF THE NORTHERN BLACK SEA COAST

Scientific Supervisor:

Professor Dimcho Zahariev Ivanov, PhD – Konstantin Preslavsky University of Shumen

Scientific consultant:

Professor Dobri Ivanov, PhD – Medical University „Prof. Dr. Paraskev Stoyanov“ – Varna

1. General presentation of the procedure and the Ph.D. student

By order № P-109-333 from 06.08.2021 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna I have been appointed as a member of the scientific jury for providing a procedure for the defense of a dissertation on "Ethnobotanical study of medicinal plants in the region of the northern Black Sea coast" for obtaining the educational and scientific degree "Doctor" in field of higher education 4. Natural sciences, mathematics and informatics; professional field 4.3. Biological sciences; doctoral program Botany. The author of the dissertation is Petya Boycheva Atanasova - a full-time doctoral student in the Department of Biology at the Faculty of Pharmacy of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna with scientific supervisor Prof. Dimcho Zahariev Ivanov, Ph.D. and scientific consultant Prof. Dobri Ivanova, Ph.D. According to the Minutes of the first meeting of the scientific jury, I was assigned to prepare an statement on the dissertation.

The set of materials on paper and electronic media presented to me by Petya Atanasova is in accordance with the requirements of the Medical University - Varna.

Petya Atanasova was born on January 3, 1973. In 1999 she graduated from the Technical University of Varna, specialization in Ecology and Environmental Protection, Master's degree.

From 2005 to 2009 and from 2012 to 2019 Petya Atanasova worked as a biologist at the University Botanical Garden in Varna, and from 2019 until now she is a biologist at the Department of Biology, Faculty of Pharmacy, MU - Varna.

On August 1, 2019, Petya Atanasova was enrolled in a regular form of study in the doctoral program Botany at the Department of Biology, Faculty of Pharmacy, Medical University - Varna.

2. Relevance of the subject

Undoubtedly, the topic of the dissertation is relevant and interesting, as in recent years there has been a growing interest in medicinal plants used in both folk and official medicine. The importance of the topic of the dissertation stems from the fact that the object of study are Bulgarian medicinal plants in order to learn, store and update knowledge about them. Given the large number of medicinal plants distributed in our country, the updating and systematization of ethnic knowledge for them is a necessary condition for their competent use and storage, both by the scientific community and by biopharmaceutical industries.

3. Knowledge of the problem

The literature review covers 33 pages and it mainly presents the information available in the scientific literature on cultivated, poisonous and foreign medicinal plants, as well as research on them and their application. A total of 354 literature sources are cited in the dissertation, which shows that the doctoral student is well acquainted with the relevance of the research nationally and globally.

4. Research methodology

To achieve this goal - ethnobotanical research on the use of medicinal plants for prevention, treatment and in the lives of locals on the North Black Sea coast of Bulgaria have been used a wide range of methods: floristic, documentary, sociological, statistical, mathematical and others. All methods used are described in detail in the Materials and Methods chapter.

5. Characteristics and evaluation of the dissertation and contributions

The presented dissertation is developed through the use of modern ethnobotanical methods. It follows the standard structure for this type of development. The dissertation is written on 177 pages and is illustrated with 68 figures, 14 tables and contains 8 appendices. The conclusions and contributions formulated at the end of the dissertation are logical and correspond to the obtained results. For the first time, an extensive ethnobotanical study was conducted on the use of medicinal plants by locals in the floristic subregion of the North Black Sea coast. The database for the ethnobotanical knowledge of the inhabitants of the Northern Black Sea coast about the use of medicinal plants has been updated. The quantitative ethnobotanical indicators of the used medicinal plants in the above-mentioned area have been established and the connection between the knowledge about the different applications of the medicinal plants and the demographic indicators of the local population has been studied.

6. Assessment of the doctoral student's publications and personal contribution

The doctoral student has presented 5 scientific publications in connection with the dissertation, in three of them she is a leading author, which is proof of her active participation in the elaboration and writing of the present work. Three of the publications have been published in journals referenced in international databases in

the respective Q3 and Q4 quartiles. A significant part of the results obtained were reported in six scientific forums, one of which abroad.

7. Summary of the dissertation

The content of the dissertation is correctly and completely reflected in the abstract.

8. Recommendations for future use of dissertation contributions and results

I recommend the doctoral student to continue the ethnobotanical research for the Southern Black Sea coast.

CONCLUSION

The presented dissertation work of Petya Boycheva Atanasova and the publications to it correspond to Academic Staff Development Act in the Republic of Bulgaria and Regulation on the Implementation of the Academic Staff Development Act in the Republic of Bulgaria. The dissertation contains scientific and scientific-applied contributions. The dissertation shows that the doctoral student Petya Atanasova has theoretical knowledge and practical skills for independent research in the field of Botany. This gives me reason to give my **positive assessment** and to propose to the esteemed scientific jury **to award** the educational and scientific degree "**Doctor**" to **Petya Boycheva Atanasova** in the field of higher education: 4. Natural sciences, mathematics and informatics; professional field 4.3. Biological sciences; doctoral program **Botany**.

11.09.2021 г.

Prepared the statement:

Assoc. Professor Plamen Stoyanov, Ph.D.