

REVIEW

**of a foreign scientific consultant, PhD, professor
Wirginia Kukula-Koch for PhD doctoral student Abdrakhmanova Gulmira
Marsovna, who completed a dissertation on the topic: “Pharmacognostic
study and prospects for the use in medicine of *Nitraria schoberi* L., growing on
the territory of Central Kazakhstan”,
submitted for the degree of Doctor of Philosophy PhD in the specialty
6D110400 – “ Pharmacy”**

The dissertation (PhD) work of Abdrakhmanova Gulmira Marsovna is devoted to the scientifically important and priority task - the pharmacognostic study of medicinal plant raw materials *Nitraria schoberi* L.. Within the framework of the study the chemical composition of extracts obtained by ultrasound assisted extraction and their biological activity was studied. The obtained results indicate the possibility to use *Nitraria schoberi* L. in medicine as a domestic medicinal plant raw material.

It is important to underline that the realization of the dissertation tasks was achieved using modern instrumental methods and research techniques were used.

During the period from May 10 to May 25, 2021, a foreign scientific internship in Poland was planned, which, unfortunately, did not take place due to the unstable epidemic situation and dynamically changing restrictions due to the Covid-19 pandemic in Poland. Despite the current situation, Abdrakhmanova Gulmira Marsovna showed herself on the positive side, established herself as an initiative, qualified specialist, mature researcher, and worked online following my consultations, maintaining timely feedback.

The results of the dissertation research were tested at international scientific and practical conferences and in a foreign scientific publication included in the Scopus database, which proves their theoretical and practical significance.

When carrying out research on the topic of the dissertation together with doctoral student Abdrakhmanova G.M. an article based on the results of a pharmacognostic study, namely, histochemical analysis, was published in the international scientific journal *Research Journal of Pharmacy and Technology* (Q3, 48%).

It is necessary to note the practical significance of the dissertation (PhD) work - Abdrakhmanova Gulmira scientifically substantiated new prospects for the use of medicinal plant raw materials *Nitraria schoberi* L. in medicine.

In my opinion the PhD candidate, Ms. Abdrakhmanova Gulmira Marsovna is an established, highly qualified specialist in the field of pharmacy, who knows how to independently set goals and solve complex scientific problems, and in organizing effective interactions with a consultant, has proven herself to be a responsible, proactive and communicative doctoral student, which deserves to be awarded the required degree.

In connection with the above, I believe that Abdrakhmanova Gulmira Marsovna deserves to be awarded the degree of Doctor of Philosophy (PhD) in specialty 6D110400 - "Pharmacy".

Foreign scientific consultant:

**PhD, Professor of the Department
of Pharmacognosy of Medical University
in Lublin, Poland**

Wirginia Kukula-Koch

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