

## METHOD OF ISOLATING LAGOCHILIN FROM PLANTS OF THE GENUS *Lagochilus*

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Lagochilin — the main component of the total extractive substances of many species of plants of the genus *Lagochilus* — possesses a hemostatic action [1]. Methods have been described for obtaining lagochilin from *Lagochilus inebrians* with a yield of 1% [2, 3]. Our aim was to develop the best method of isolating lagochilin from raw material. In order to choose a rational extractant permitting the maximum yield of lagochilin, we performed a series of model experiments using organic solvents and aqueous solutions of them: chloroform, dichloroethane, isopropanol, 80% isopropanol, ethanol, and 70 and 80% ethanols. Except for chloroform and dichloroethane, these solvents extract a large amount of accompanying substances, and it is therefore difficult to isolate pure lagochilin.

Chloroform extraction was conducted by the steeping method at room temperature for 12 h (method 1), by heating twice for 4 h (method 2), and by extraction in a Soxhlet apparatus for 6 h (method 3). The total extractive substances obtained by the above methods were treated with hot 15% caustic soda solution, and dichloroethane was added. The mixture was cooled to 20-25°C and was left for 14-16 h for the lagochilin to crystallize. The yield of lagochilin by method 1 was 1.8%; by method 2, 1.9%; and, by method 3, 1.7%.

The lagochilin obtained consisted of yellow crystals and, after recrystallization from acetone, melted at 167-169°C.

When dichloroethane was used as the extractant, the raw material was first wetted with a 15% solution of caustic soda and, after 10-12 h, was extracted with dichloroethane twice for 3 h at the boiling point of the solvent. The hot extract was cooled to 10-12°C and was left for crystallization for 14-16 h. The yield of lagochilin was 2.3%, mp 168-169°C.

Thus, extraction with boiling dichloroethane gives purer lagochilin in high yield. By this method it was established that *L. inebrians* gathered in Samarkand province contained 2.3% of lagochilin, *L. setulosus* gathered in Chimkent province 1.1%, and *L. gypsaceus* gathered in Kashkadar'ya province 2.1%.

## REFERENCES

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