# COMPARATIVE ANALYSIS OF SPECIES OF LAMIACEAE FAMILY DISTRIBUTED IN KUGHITANG AND BAIYSUN BOTANIC-GEOGRAPHIC REGIONS

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**Abstract:** This article presents a comparative analysis of the representatives of the Lamiaceae family distributed in the flora of Kughitang and Baiysun botanic-geographic regions. A diagram was formed based on the analysis. Based on the conducted research, the species found in these regions and the species common to two botanical geographic regions were analyzed.

**Keywords.** Comparative analysis, Endem, botanical-geograhric region, Lamiaceae

**Аннотация**: В статье представлен сравнительный анализ представителей семейства Lamiaceae, распространенных во флоре Кохитангского и Байсунского ботанико-географических районов. На основе анализа была построена диаграмма Венна. На основе проведенных исследований проанализированы виды, встречающиеся в этих регионах, а также виды, общие для двух ботанико-географических регионов.

**Ключевые слова.** Сравнительный анализ, Эндем, ботанико-географический регион, Lamiaceae.

**Annotatsiya**: Ushbu maqolada Ko’hitang va Boysun botanic geografik rayonlari florasida tarqalgan Lamiaceae oilasi vakillarining solishtirma tahlili keltiriladi. Taxlil asosida venn diagrammasi shakllantirildi. Olib borilgan tadqiqotlar asosida ushbu hududlarda uchraydigan turlar va ikkita botanik geografik rayon rayon uchun umumiy bo’lgan turlar taxlili amalga oshirildi.

**Kalit so’zlar.** Qiyosiy tahlil, Endem, botanik-geografik rayon, Lamiaceae

**Introduction**. Koghitang and Baisun botanical-geographical regions are neighboring regions and border each other at a distance of 10 km. The bordering areas of both districts consist of a limestone and oleaginous landscape. A variety of species can be found in both areas. In studying the flora of the Surkhan State Reserve, which belongs to the Kohitang botanical region, A. Ibragimov's dissertation "Flora of the Surkhan State Reserve (Kohitang ridge)" was written for the candidate of biological sciences, and O.Turginov's study of the Boysun botanical-geographical region based on the results of the research.

**Material and methods.** The research was carried out in 2022 and 2023 by the method of field observation and analysis based on the data in the relevant literature. Herbarium specimens from the National Herbarium of Uzbekistan (TASH) were used.

**Results.** According to the results obtained 1564 species belonging to 89 families and 524 genera have been identified in the flora of Boisun botanical geographical region[1], of which 87 species belonging to 27 genera of the Lamiaceae family are found.

It was found that there are 1147 plants belonging to 79 families and 415 genera in the flora of Kughitang botanical-geographic region. There are 69 species 21 genera belonging to the Lamiaceae family. The flora of Kughitang and Baiysun botanical regions was determined using P. Jaccard's similarity coefficient.

$$K_j = \frac{c}{a+b-c}$$

Here, $K_j$ - is the similarity coefficient of Jaccard;
c- total number of species of flora;
According to this formula, the distribution coefficient of species is equal to 0.8.

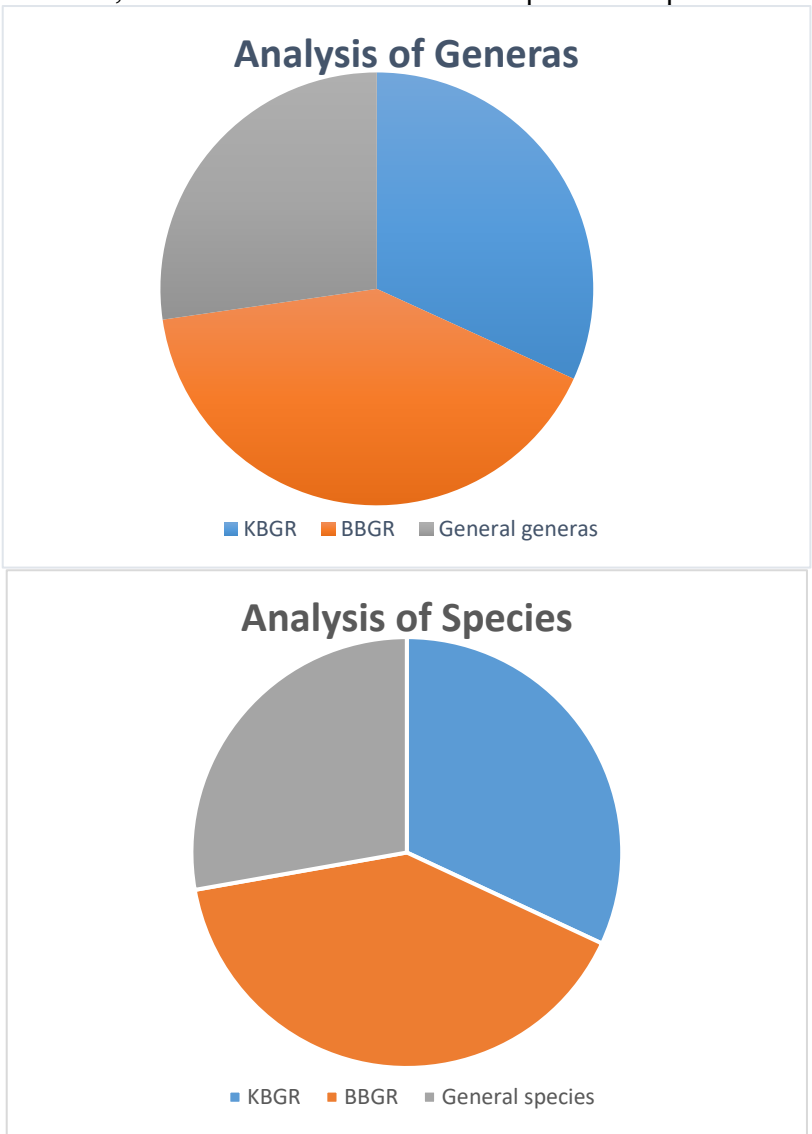


Fig. 1. Comparative analysis of plants distributed in botanical geographic regions within genus and species.

**Conclusion and discussion.** In conclusion, the prospects of studying areas by dividing them into botanical-geographical regions are very broad. It eliminates learning difficulties. It allows in-depth analysis of endemic plants or plants included in the Red Book of the Republic of Uzbekistan, as well as rational use of flora.

It was found that many species are common to the botanical-geographic regions of Kughitang and Baysun. Taking into account the large number of representatives of the Lamiaceae family, which is a plant with essential oil, it shows that in extracting various alkaloids or medicinal substances from them, it is necessary to have accurate information about the flora of the area where they are located and the number of species.

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