

15.3.2

Does your university as a body have a policy to identify, monitor and protect any IUCN Red Listed species and national conservation list species with habitats in areas affected by the operation of your university?

Samarkand State University focuses on food security:

Rare nature research: What kind of plant is *Lagochilus inebrians* Bunge?

Day by day, due to the irregular use of plant resources by humans, the diversity of green plants is disappearing. Due to climate change and global warming, vegetation cover is in crisis. Many unique types of plants are disappearing in the flora of Central Asia under the pressure of anthropogenic and climate change factors. In particular, a number of plants belonging to the mint family are among them. The mint family is one of the largest plant families on earth. Its representatives are widespread mainly in countries with a warm and temperate climate. This family includes about 200 genera and 3000 species. 360 species belonging to 53 genera are known to grow in Central Asia, and 238 species belonging to 39 genera are known to grow in Uzbekistan. The mint family is one of the widespread families in the flora of Uzbekistan, and it is distinguished from other families by its wealth of useful species. Representatives of such groups as mint, salvia, ziziphora, *L. inebrians*, organums have been used in medicine, food, confectionery and perfume industry for a long time. *L. inebrians*, is a medicinal plant that belongs to the mint family and has been used in folk medicine since ancient times. 3 species growing in Samarkand region are included in the Red Book of Uzbekistan. One of the significant works conducted at Samarkand State University to study the bioecological properties of this unique plant and to determine new methods of its reproduction is "View species of *L. inebrians* in vitro conditions" breeding and establishment of a collection in

the Botanic Garden of SamSU" is a research on the subject. Under the scientific guidance of Akbar Ahmedov, associate professor of the Department of Botany, the researcher conducts scientific research on the methods of reproduction and bioecological properties of the *L. inebrians*.



There are 46 types of the genus *Lagochilus* on Earth, 13 in Uzbekistan, - says researcher Gulbonu Torakulova. - Today, most populations of this species are in danger of extinction. Therefore, it is necessary to carry out monitoring work in order to preserve them in nature. Currently, it is important to breed *Lagochilus* species in vitro and establish a collection. The analyzes of the use and use of *L. inebrians* in the national economy showed that among the existing species of *L. inebrians*, in addition to honey and essential oil-producing species, medicinal and decorative, that is, ornamental species are also widespread in our country. it became known. *L. inebrians* is one of the valuable medicinal plants, which are effective in calming the nervous system, treating skin diseases, controlling blood pressure, and stopping internal and external bleeding.

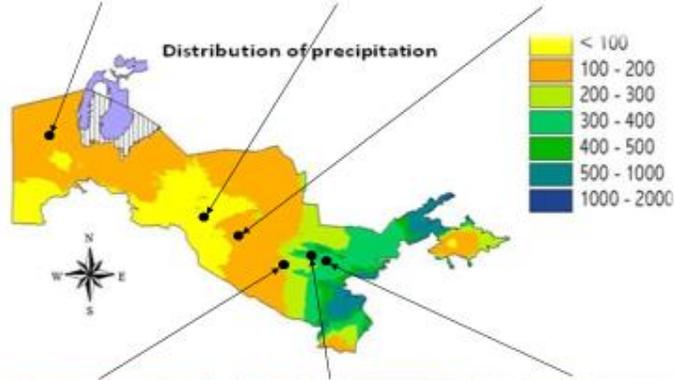
➤ **Study sites and climate**

Lagochilus acutilobus, Ustyurt *Lagochilus vvedenskyi*, Kizilkertau *Lagochilus gypsaceus*, Kokchatau



Plant codes

- L. acutilobus* (LA)
- L. gypsaceus* (LP)
- L. inebrians* (LI)
- L. olgae* (LO)
- L. proskorjakovii* (LP)
- L. vvedenskyi* (LV)



The studied *Lagochilus* species and their sampling sites across Uzbekistan. Colors on map specify the mean annual precipitation (mm)



Lagochilus inebrians, Gubdintaus *Lagochilus olgae*, Nuratau *Lagochilus proskorjakovii*, Nuratau

Perspectives in Plant Ecology, Evolution and Systematics: Akhmedov et al. 2021

➤ **Study species**



All photos: Akbar Akhmedov