

## ETHNOBOTANICAL OVERVIEW OF GOGD (*Allium ramosum L.*): A TRADITIONAL EDIBLE WILD PLANT USED BY INNER MONGOLIANS

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**ABSTRACT.**— Plants have figured prominently in Mongols' food and shelter. The traditional collecting, processing and preservation of *gogd* (*Allium ramosum L.*) as a Mongol food are recorded. The authors present the way of preparation of the leaves and inflorescence of the plant as a dish or condiment and suggest efficient means for its conservation and utilization.

**Key words:** *gogd*, *Allium ramosum L.*, edible plant, Mongol food, utilization

**RESUMO.**— Plantas desempenharam um papel proeminente nas dietas e abrigos dos Mongóis. São registrados a colheita, o processamento e a preservação tradicionais de *gogd* (*Allium ramosum L.*) como uma comida Mongólica. Os autores mostram a maneira de preparação das folhas e inflorescências desta planta para ser um prato ou um condimento e eles sugerem meios eficientes para a sua preservação e utilização.

**RÉSUMÉ.**— Les plantes figurent fréquemment dans la nourriture et dans l'abri des Mongols. Les méthodes traditionnelles de la collection, préparation et préservation du *gogd* (*Allium ramosum L.*) comme une nourriture Mongole sont décrites. Les auteurs présentent la voie de préparation des feuilles et des inflorescences de cette plante comme un plat ou condiment. Ils proposent aussi une méthode efficace de la conservation et de l'usage de cette plante.

### INTRODUCTION

Mongols have been nomadic herders on the Mongolian Plateau grassland for centuries. At present, Mongols are distributed in Mongolia, the People's Republic of China (Inner Mongolia Autonomous Region, Qinghai, Xingjiang Uighur Autonomous Region, Liaoning, Jilin and Heilongjiang provinces), Russia (Buryatia Autonomous Republic Within Russian Federation), and Kazakhstan Republic (within Commonwealth of Independent States). Various factors, such as loss of

prime grassland to agriculture, have led some Mongols to adopt agriculture, although many continue to raise livestock. Khasbagan and Yumzab (1988) have discussed Mongol traditional botanical culture and usage of wild plants. These authors argue that the intimate relationship Mongols have traditionally had with their environment led them to utilize natural resources rationally.

*Allium ramosum* L. is similar to cultivated chive (*A. tuberosum* Rottl. ex Spreng.). However, *A. ramosum* has longer, hollower, and narrower leaves that are pointed at the end, and a perianth lobe with a red middle vein, while *A. tuberosum* has flat, solid leaves, and a perianth lobe with a green middle vein, distinguishing them from each other. Cultivated chive originated in the eastern part of Asia (Shan 1994), while *A. ramosum* is distributed widely in northern China, Mongolia, and Russia (Uljhutag 1985; Shan 1994; Yuquan 1994). *Allium ramosum*, also called *kherin gogd*, and *zherlig gogd* (*kherin* and *zherlig* mean 'wild' in Mongolian), is a common edible wild plant traditionally used by Mongols. In the thirteenth century *Secret History of the Mongols* (Anonymous 1240), the plant was recorded as *gogosum* and reported as being eaten by Temujin (name of Chinggis Khan) and his family (Khasbagan 1996). Lobsangchuiden (1918) called the plant *gogosu* and reported it as "a plant used as food by Mongols for a long time" in the *Records of Mongol Customs*. Yunatov (1958) noted that "the plant is used as food by herdsmen." The word *gogd* derives from *gogosum* (Eldentai and Ardezab 1986). In Inner Mongolia, our identification of collected specimens demonstrates that the plant referred to by locals as *gogd* is *A. ramosum*. *Gogosu* could have been another synonym, although we have not found any reference dealing with it.

The first two authors' investigations indicate that the plant remains a source of food in the Inner Mongolia Autonomous Region grassland area. Unfortunately, no systematic study of the plant's collection, processing, and preservation has been found in the literature. From 1986 to 1996, the first author carried out investigations in herding areas of the Inner Mongolia Autonomous Region. A number of Mongolian herdsmen, peasants, *lamas* (practitioners of Buddhism, most of them are also medical practitioners), and physicians were interviewed and specimens of the plant were collected. Additionally, the first two authors were born in Mongol grassland areas and are personally familiar with how the plant is used in their home area. During the course of research, twenty specimens were collected from different areas, identified, and housed at the Department of Biology, Inner Mongolia Teachers' University.

#### MONGOL FOOD CULTURE

In the mid 9<sup>th</sup> century, Mongols began to engage in nomadic herding (Dujian 1985). At present in Inner Mongolia, the geographic areas where Mongols reside can be grouped into herding areas, herding-farming areas, and farming areas. Major traditional food sources have been meat, milk, and milk by-products. Although these traditional food sources continue to be important in the first two areas, grains such as *Panicum miliaceum* L. var. *eftusum* Alef. have become an important source of food as well. While Mongols in the farming and herding-farming areas (most of them in eastern Inner Mongolia) have their own gardens to grow vegetables, such

as onions, cabbages and potatoes, many Mongols in the herding and herding-farming areas do not have access to gardens in order to grow vegetables for family consumption, because of nomadic or semi-nomadic herding practices. Individuals in these two areas get most of their fresh vegetables from a banner (administrative unit similar to a county) town. In these areas, some wild plants became important vegetable sources. For past ten years, we have identified twenty species of wild plants used as vegetables in Inner Mongolia (unpublished data), twenty species of wild plants used as tea (Khasbagan 1990), and fifteen species of wild plants used for their edible fruits (Khasbagan 1995).

#### COLLECTION, PROCESSING, AND USAGE OF *GOGD*

*Collection.*—Collecting *gogd* is a part of everyday life during the growing season of a year. *Gogd* is collected when it is about ten cm tall, and the peak time for harvesting is May through July. The above-ground parts, consisting primarily of leaves, are picked by women, elders, and children near residential areas, or by men traveling on horseback or animal-drawn carts to distant places in order to collect large amounts of *gogd* (4 to 5 kg, fresh weight) for preservation and future use. It is also common for individuals during the course of traveling on foot and doing outdoor work, such as herding livestock, to gather the plant daily in order to obtain enough fresh material (around 0.3 kg) for a family meal. In August and late July, when the plants blossom, people collect the inflorescence, which is also called *soriz*. Approximately one to two kg in fresh weight are usually gathered and processed in a similar way to that of the leaves.

*Processing and Usage.*—After collection, *gogd* can be processed as a main dish. The leaves are washed and cut into 2-3 cm pieces and preserved with salt in a container. One kg of *gogd* is commonly mixed with 0.15-0.20 kg of salt. The inflorescence is ground and a similar ratio of salt is added. The dish may be eaten immediately or kept in a container to be eaten within a few days.

*Gogd* leaves are also added to pots of cooking mutton to make the broth and meat more palatable. Some Mongols prefer adding *juuhei* (liquid that stays above yogurt when yogurt is made in a container) in the soup. Mongols also serve steamed or boiled dumplings stuffed with *gogd* leaves which are then cut into small pieces and mixed with ground mutton and *juuhei*. This dish is customary in the Kheshigten Banner of Ulaanhad League.

Preservation for winter usage is also common. The amount of material collected is related to availability and could reach as much as seven kg. The processed leaves, inflorescences, or mixture, according to availability and individual family preferences, are placed in containers for future use, and salt added in amounts dictated by individual preferences. This preservation method is seen in Kheshigten Banner and Left Barin Banner, Ulaanhad League and the two Ujimchin Banners of Xilingol League. In Left Barin Banner, Ulaanhad League, five to six kg of *gogd* is collected in late fall when the growing season of the plant ends. After preservation, the dish is ready to be eaten in a few days and is called *soriz* in Left Barin Banner (Ulaanhad League). It is served on a small plate with other dishes at meal-time.

Fresh *gogd* may be used as a condiment for dishes. *Gogd* may also be sun dried for a few days, ground into a powder, and used as a condiment in winter. *Soriz* may be processed similarly to *gogd*, but only the inflorescence is used and then mixed with salt (1 kg inflorescence, 0.1 kg salt, 0.5 kg sour milk). Once the mixture is ground into a pulp, it may be served as a condiment for other dishes. Additionally, a small amount of *soriz* (about 0.01kg) is added to sheep blood intestines and cooked as sausage.

### DISCUSSION

It is a Mongol taboo to dig out the roots of *gogd* in most areas (Ulaanhad and Xilingol Leagues). Considerable care is therefore taken while collecting leaves and blossoms so as not to damage the roots. This is an example of traditional Mongols conservation of wild plants.

Utilization of *gogd* as a food by Mongols has been restricted to the level of family consumption. Deteriorating grassland conditions and increasing population pressures are threatening *gogd* as a resource. Consequently, some Mongols are growing wild *gogd* near their homes. The authors believe that this is an important step toward overcoming a current shortage of wild plant resources.

Of special note is that many Mongols assert that *gogd* is efficacious as a tonic for stomach ailments. Although there is no written information regarding this claim, further work is needed to better understand the nutritional and medicinal values of *gogd*, as well as possibilities for potential large-scale production.

### ACKNOWLEDGMENTS

We are grateful to indigenous herdsmen, peasants, *lamas*, and Mongolian physicians we interviewed during our investigations in Inner Mongolia Autonomous Region, the People's Republic of China.

### LITERATURE CITED

- ELDENTAI and ARDEZAB. 1986. Annotated and Restored Secret History of Mongols. Inner Mongolia Education Press, Huhhot. (In Mongolian).
- DUJIAN, W. 1985. A brief history of Mongols. Inner Mongolia People's Press, Huhhot. (In Chinese).
- KHASBAGAN. 1990. A preliminary study of plants used as Mongolian traditional tea. *Acta Botanica Yunnanica* 12: 43-48. (In Chinese).
- KHASBAGAN. 1995. Ethnobotanical study on wild edible fruits of Mongols in Arhorchin Banner, Inner Mongolia, China. *Journal of Inner Mongolia Normal University (Natural science edition)* 72: 60-63. (In Chinese).
- KHASBAGAN. 1996. Wild edible plants recorded in "Secret History of Mongols." *Journal of Arid Land Resources and Environment* 10: 87-94. (In Chinese).
- KHASBAGAN and YUMZAB. 1988. Traditional Mongolian botanical culture. *Journal of Inner Mongolia Normal University (Natural science edition)* 10: 87-94. (In Mongolian).
- LOBSANGCHUIDEN. 1918. Records of Mongol Customs. Inner Mongolia People's Publishing House, Huhhot. (In Mongolian).
- SHAN, C. 1994. Resources of Forage Plants in Chinese Grasslands. Liaoning Nationality Press, Shenyang. (In Chinese).

- ULJIHUTAG. 1985. Key to the Forage Plants in Grasslands of Mongolian People's Republic. National Publishing House, Ulaanbaatar. (In Mongolian).
- YUNATOV, A. A. 1958. (translated by H. ZHAOHUA). Forage Grassland Plants of the Mongolian People's Republic. Science Press, Beijing. (In Chinese).
- YUQUAN, M. 1994. Flora of Inner Mongolia, Vol. 5, (2<sup>nd</sup> edition). Inner Mongolia People's Publishing House, Huhhot. (In Chinese).