Seven Mongolian Medicinal Plants in Duke Gardens

By Enkhkhuslen Bat-Erdene
Introduction

Mongolia is a landlocked country in East Asia, sandwiched between Russia and China, covering 603,909 square miles. With a population of 3.3 million, Mongolia is the most sparsely populated country in the world. Mongolian geographical features are primarily Siberian forest taiga, high mountains, Gobi desert, and Central Asian steppe. Mongolia has an extreme continental climate with long, cold winters and short summers, during which most precipitation falls.
Why Medicinal Plants?

Plants have been an extremely important part of Mongolian medicine for centuries. There is a strong culture of medicinal plant use that has been shaped by geography, tradition, customs, and religions. Many of these longstanding traditional knowledge and practices have still not been studied by scientists.
How to use this booklet

I included seven Mongolian medicinal plants that have relatives in Duke Gardens.

- On the left side, you can read their basic information and how Mongolians have used plants for medicine.
- On the right side, you can learn the counterparts in the Duke Gardens and where to find them.
- At the end of the booklet, there is a map of where to find the plants in the Duke Gardens, interactive games and quizzes you can do on the way, and resources for more learning.

Disclaimer: Ingestible medicine should only be prepared and administered by people with training and experience.

Please do not pick any parts of plants at Duke Gardens.
REDHAW HAWTHORN
CRATAEGUS ORIENTALIS SUBSP. ORIENTALIS

NATIVE RANGE: Southeastern Europe to Caucasus; Introduced to southern Siberia & Mongolia.

Habitat: Sandy terraces on western & eastern slopes of mountains, forest fringes.

TRADITIONAL MEDICINE

Part used: Fruit

Uses: The taste is sweet & sour, and the potency is cool and blunt. It is used for treating arrhythmia, decreasing blood pressure, reducing liver fever and fever of bile disorder.

In Duke Gardens:
* Name: Parsley Hawthorn
* Scientific name: Crataegus marshillii
* Location in the Duke Gardens: Blomquist Garden of Native Plants
* Parsley hawthorn belongs to the same genus (Crataegus) as Redhaw Hawthorn.

Mongolian name: ᠮᠠᠳᠤᠨᠥᠨ ᠵ᠟᠎ᠠᠯ᠎ᠠᠨ (Mongolian traditional script)
(cyrillic) ᠮᠠᠳᠤᠨᠥᠨ ᠵ᠋ᠠᠯ᠎ᠠᠨ
**Adams Rhododendron**

**Mongolian name:** *Agalsam tserem, Tserem Dan*

**Native Range:** Mongolia, southern Siberia, Far East Russia.

**Habitat:** Dense and damp larch and cedar-larch forests, mossy bogs, goltzy & screes.

**Parts Used:** Flowers & leaves

**Uses:** The taste is bitter & sour, and the potency is warm & light. It is used for treating wind, excess bile, phlegm & lung diseases, inflamed throat & coughing, enhancing energy & increasing appetite.

**Name:** Dwarf Azalea

**Scientific Name:** Rhododendron atlanticum

**Location in the Duke Gardens:** Bloquist Garden of Native Plants.

Both Dwarf Azalea & Adams Rhododendron have the same genus (Rhododendron). There are also other species of Rhododendron across Duke Gardens.
**Siberian Columbine**

Aquilegia sibirica

*Name: Eastern Red Columbine*

*Scientific name: Aquilegia canadensis*

*Location in the Duke Gardens: Blomquist Garden of Native plants.*

*Eastern red columbine & siberian columbine are closely related - they are in the same genus (Aquilegia).*

**Mongolian name:** Чүүпүүн Игбан

**Native:** Siberia, Mongolia, Kazakhstan, Xinjiang

**Habitat:** Larch & birch forests in forest-steppe belt.

**Traditional Medicine**

*Part used:* leaves, herbs & flowers

*Traditional use:* The taste is sweet, bitter & astringent and the potency is blunt, heavy & cooling.

It’s used for treating hot disorders of the lung, improving the lymphatic system and for polyuria. Also used to detoxify, treat fever, liver fever & improve stomach.
Potanin Iris

Mongolian name: Томорхүүн яагаадам
IRIS POTANINII

Native Range: Sibera, China, Mongolia
Habitat: Slopes & forest fringes in mountain steppe & forest-steppe belt.

TRADITIONAL MEDICINE

PART USED: ROOT
USES: The taste is warm and the potency is cool. It is used for worm & poisoning diseases, wound healing, and when eyes become yellow, lymph disease, and stomach and large intestine fever.

In Duke Gardens

Name: Dwarf crested Iris
Scientific name: IRIS CRISTATA
Location in the Duke Gardens: Blomquist Garden of Native Plants

Both Potanin Iris and Dwarf crested Iris have same Iris (Iridaceae) family. Dwarf crested Iris is one Iris you might find here, but Duke Gardens has many different species of Iris.
**Greater Celandine**

**Cheilidonium Majus**  
*In Duke Gardens*

- **Mongolian name:**  
  *Ух Уулсэн*

- **Native Range:**  
  Europe, West Asia, Siberia

- **Habitat:** Larch & birch forests in forest-steppe belt.

**Traditional Medicine**

- **Part Used:** Herb

- **Uses:** The taste is bitter & the potency is cool. It is used for treating typhoid fever, xerostomia, bile disorder, burn wounds, alleviating fever & soothing pain.

- **Name:** Celandine Poppy

- **Scientific Name:** Stylophorum diphyllum

- **Location in Duke Gardens:** Blomquist Garden of Native Plants.

Although both flowers have "Celandine" in the name & look almost identical, they are more distantly related than they might seem. They are in the same family (Papaveraceae) but not genus.
Fragrant Solomonseal

* Polygonatum odoratum
* In Duke Gardens

**Mongolian name:** Аньхъына амхар яагаан

**Native:** Europe, China, The Caucasus, Mongolia, Siberia, Korea, Japan, Nepal

**Habitat:** Larch & pine forests, forest fringes, birch forest, shrubberies, rocky areas.

**Traditional Medicine**

**Part used:** Roots & Rhizome

**Traditional uses:** The taste is sweet, the potency is warm & light. It's used for treating kidney disease, preventing atherosclerosis, improving strength & kidney function, & increasing appetite.
URAL PEONY

PAEONIA ANOMALA

In Duke Garden

Name: Chinese Tree Peony
Scientific Name: Paenia x suffruticosa.
Location in Duke Gardens: Culperson Asiatic Arboretum.

Ural Peony & Chinese Tree Peony are both from the same genus (Paeonia).

This Chinese Tree Peony is a hybrid - a cross between two different species - which is why there is an x in its scientific name.

Mongolian name: Гаан-Улаан, Groan-Ulaan.
Native: Russia, Ural Mountains, Southern Siberia.

Habitat: Larch & mixed forests, their fringes; Birch Forest in forest-steppe belt.

Parts used: Roots & rhizome.

Uses: The taste is bitter & astringent & potency is warm; light. It is used as a diuretic, for strengthening the body, as a haemostatic, as a treatment for headache & stomachach.
1. Which country uses the seven plants as medicine?
2. Which plant has “Greater” in the name?
3. Which plant has the name of mountain “Ural” in its name?
4. Which part of Adams Rhododendron can you use for medicine other than its leaves?
5. Which part of Greater Celandine can you use for medicine?
6. What part of Redhaw Hawthorn is used for medicine?
7. Which Mongolian medicinal plant has a color in its name?
bitter, Blomquist, Columbine, Duke, Europe family, fever, forest, garden, genus, hawthorn, iris, larch, leaf, medicine, mountain, native, rhizome, rhododendron, root, Siberia, sweet, tree
Find relatives

There are many different species of rhododendron, iris and peonies in Duke Gardens. If you spot them on your way, write down their names or draw them.

Rhododendron  Iris  Peony
This map shows a suggested location where you can find each plant that grows in Duke Gardens.
Looking for more?

“Medicinal Plants in Mongolia” published by the World Health Organization (2013):


Seven Mongolian Medicinal Plants in Duke Gardens was created by Enkhkhuslen Bat-Erdene through Duke Gardens' Equity Through Stories Program. Enkhkhuslen is a dual-degree student at Duke Kunshan University & Duke University and will graduate in 2025. Scan the QR code to learn more about the program!