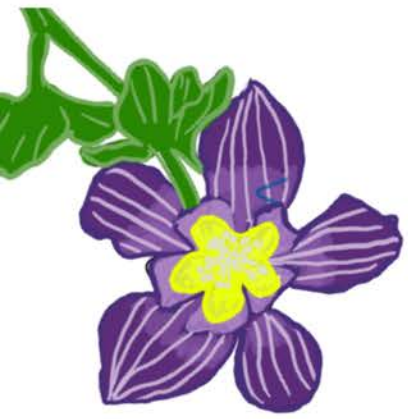


By Enkhkhuslen Bat-Erdene

# Seven Mongolian Medicinal Plants in Duke Gardens



# 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 caucusus; 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 arrythmia, decreasing blood pressure, reducing liver fever and fever of bile disorder.



## In Duke Gardens:

\* Name: Parsley Hawthorn

\* Scientific name: *Crataegus marshallii*

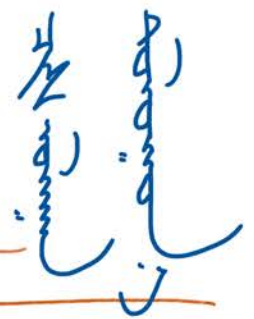
\* Location in the Duke Gardens: Blomquist Garden of Native Plants

\* Parsley hawthorn belongs to the same genus (*Crataegus*) as Redhaw Hawthorn.

\* Mongolian name:

(Cyrillic) ← *Уас Уаан Давооно*

(Mongolian traditional script)



# ADAMS RHODODENDRON

RHODODENDRON

ADAMSII

\* Mongolian name: *Агамсын тэрсүү*,  
*Тэрсүү* / *Давс*.

\* 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:  
Blomquist 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*

In Duke Gardens

\* Mongolian name:  
Cuᠣᠫᠤᠯᠤᠮᠢᠨ ᠶᠭᠪᠠᠨ



\* Native: Siberia,  
Mongolia, Kazakhstan, Xinjiang

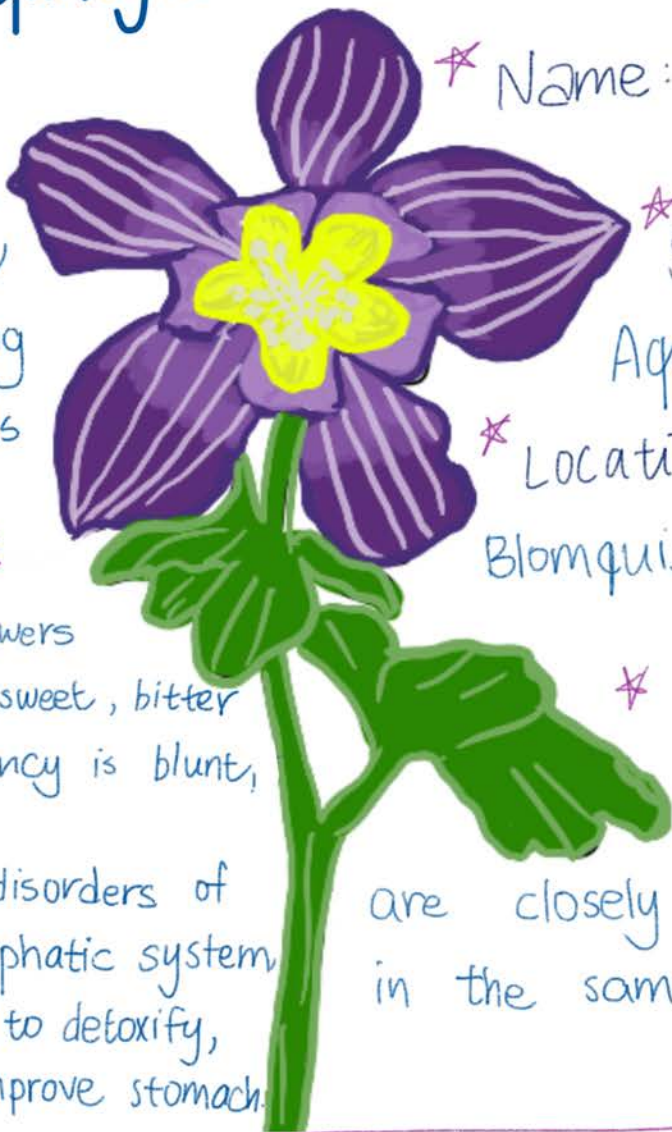
\* Habitat: Larch & birch forests  
in forest-steppe belt.

## 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.



\* 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*).

# Potanin Iris

In Duke  
Gardens

\* Mongolian name:

Томаруун уасуугар.

\* Native Range:

siberia, china, Mongolia

\* Habitat: Slopes & forest

fringes in mountain steppe & forest-steppe belt.



IRIS

POTANINII

\* Name: Dwarf crested  
IRIS

\* Scientific name: IRIS CRISTATA

\* Location in the Duke Gardens  
Blomquist Garden of  
Native Plants

## 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.



\* 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

CHELIDONIUM

MAJUS

In Duke Gardens

\* Mongolian name:

ux Ууыгэвэрэ

\* 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

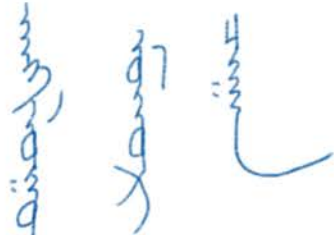
*Polygonatum*

*odoratum*

In Duke Gardens

\* Mongolian name:

Анхууныг  
Харууц



\* 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.

\* Name: Solomon's Seal

\* scientific name:

*Polygonatum odoratum*

\* Location in Duke Gardens:

Doris Duke Center Gardens

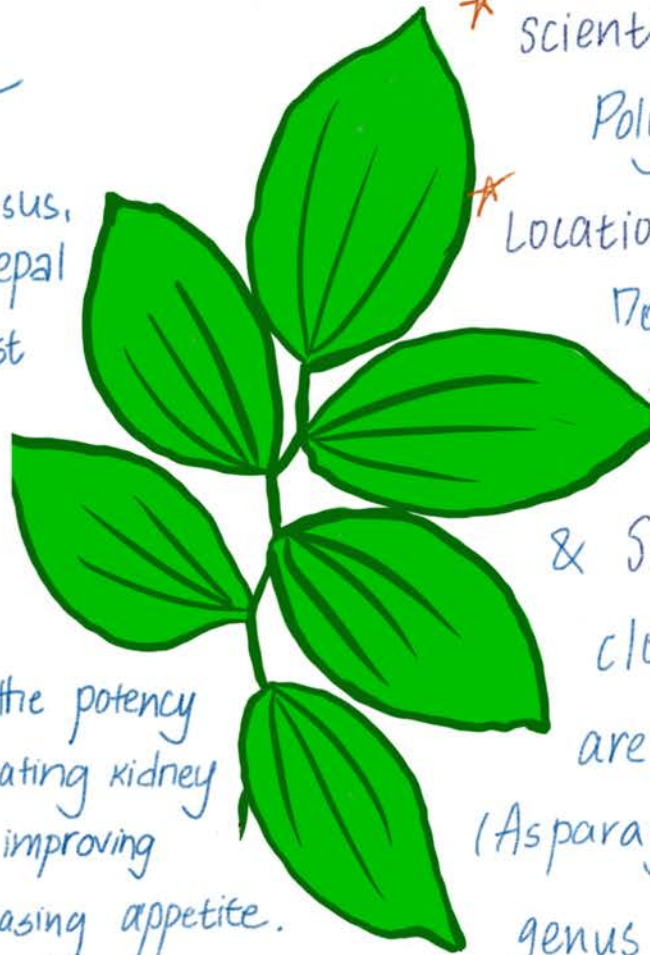
\* Fragrant Solomonseal

& Solomon's Seal are closely related - they

are in same family

(Asparagaceae) and same

genus (*Polygonatum*).



# URAL PEONY

PAEONIA

ANOMALA

In Duke Garden

\* Mongolian name:

ᠭᠠᠨᠠᠨ ᠤᠯᠤᠰᠤ,

\* 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



\* Name: Chinese Tree Peony

\* Scientific Name:

*Paenia x suffruticosa.*

\* Location in Duke Gardens:  
Culberson Asiatic Arboretum.

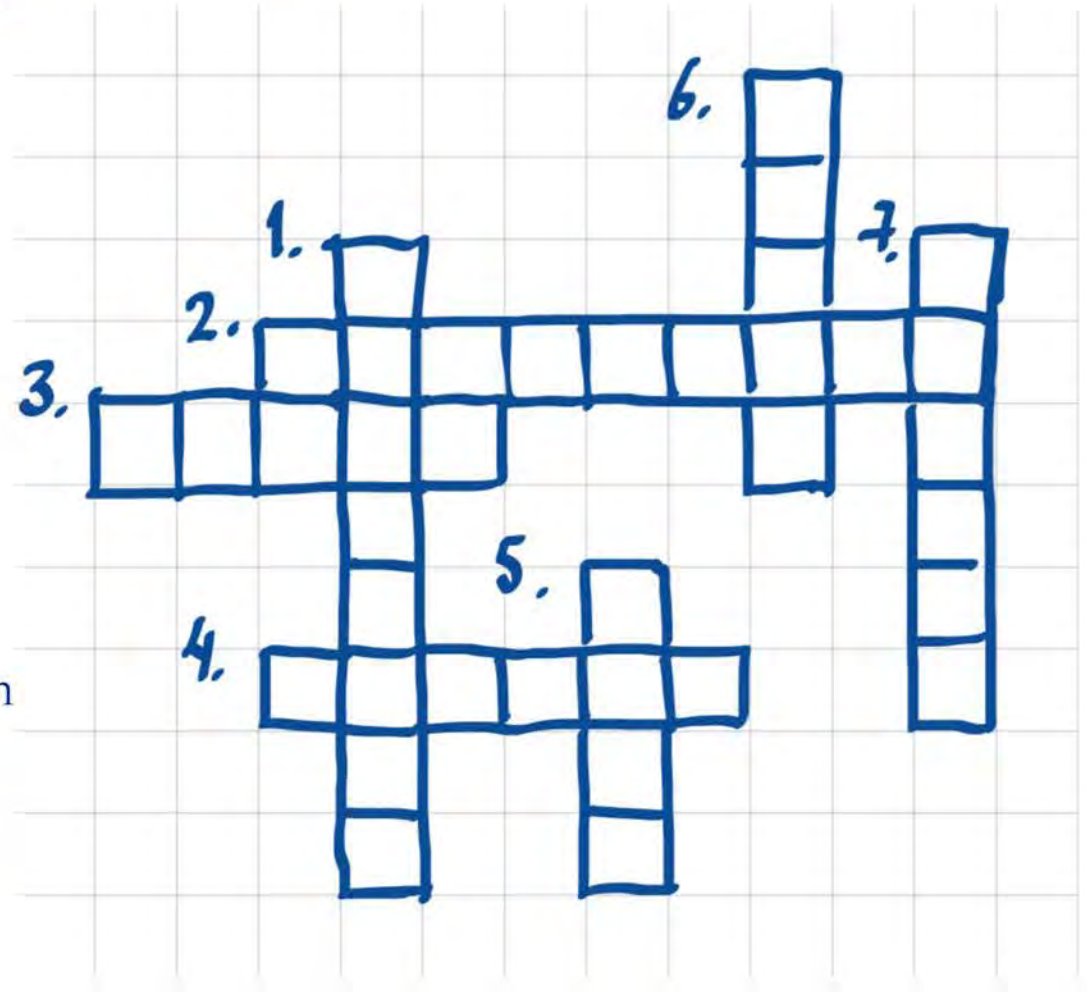
\* Ural Peony & Chinese Tree  
Peony are both from the  
same genus (Paeonia).

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

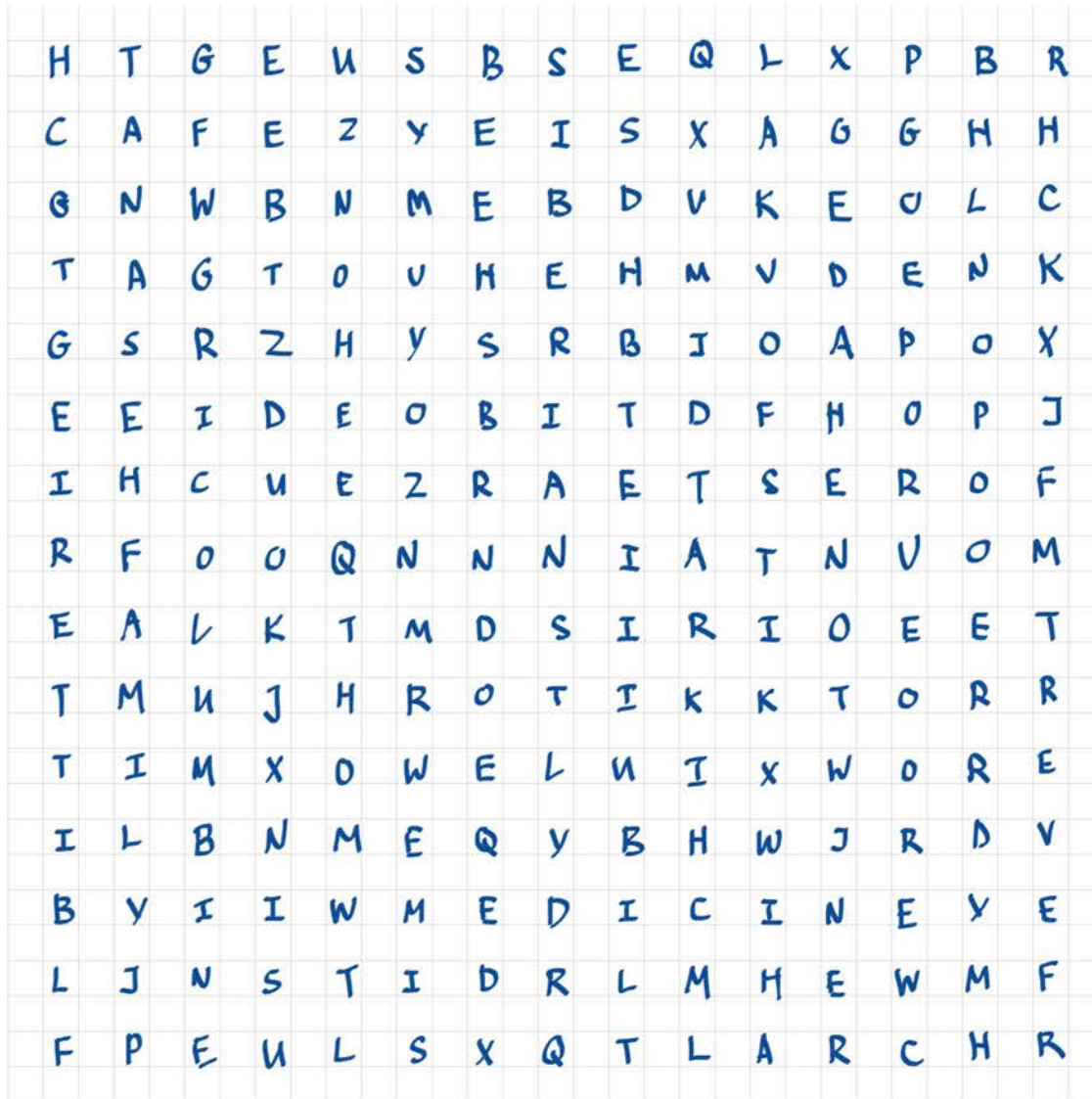
TRADITIONAL  
MEDICINE

# Crossword

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?



# Word Search Puzzle



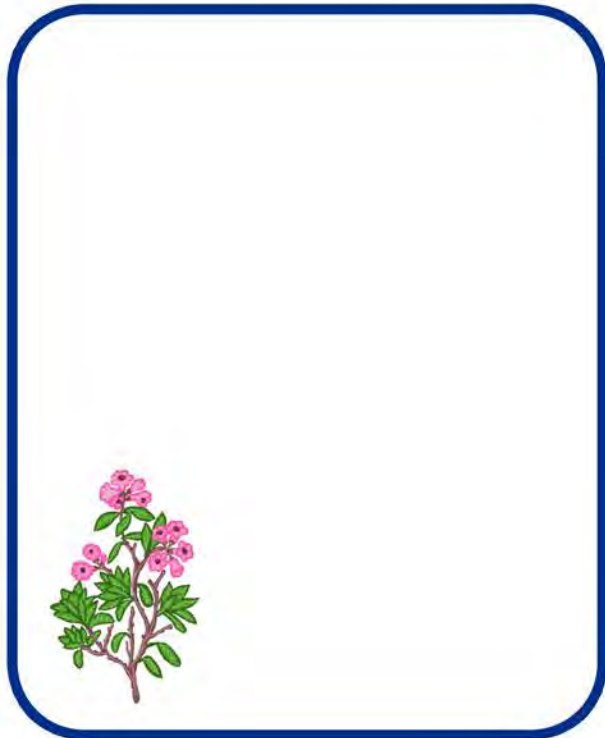
bitter, Blomquist.  
Columbine,  
Duke, Europe family,  
fever, forest,  
garden,  
genus, hawthorn, iris, larch,  
leaf, medicine,  
mountain, native, rhizome,  
rhododendron, root, Siberia,  
sweet, tree



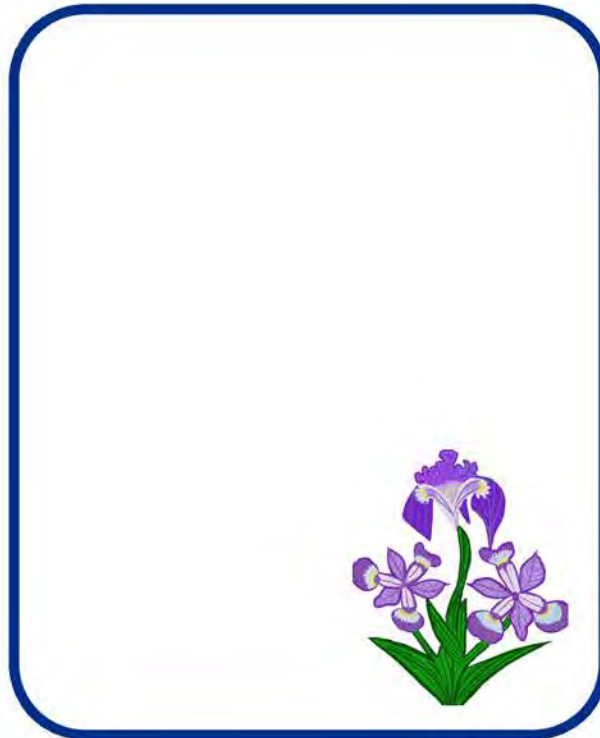
# Find relatives

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.

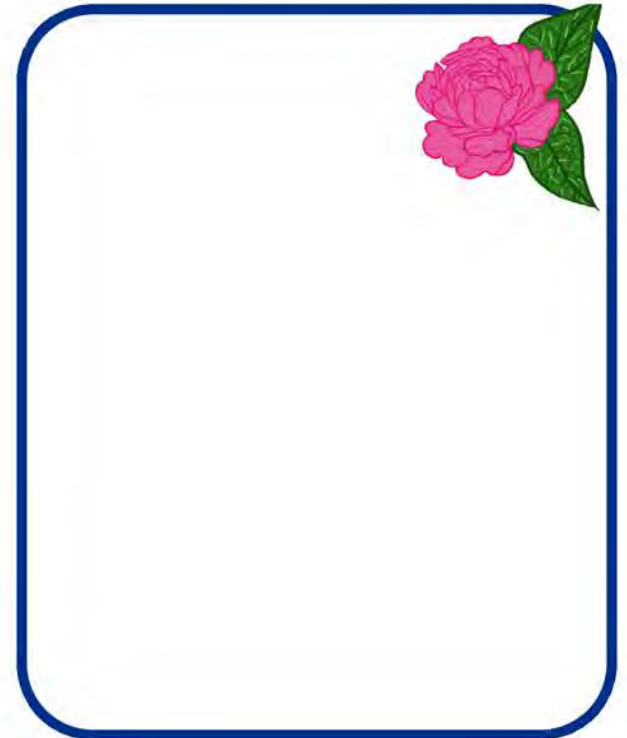
**Rhododendron**



**Iris**



**Peony**



# welcome to DUKE GARDENS



This map shows a suggested location where you can find each plant that grows in Duke Gardens.



Scale 1 inch:200 feet  
0 100 200



DUKE ADMISSIONS  
CAMPUS DRIVE GATE

Duke Gardens PayByPhone code 3109

PARKING LOT 1

Weekend overflow parking PayByPhone code 3121

GOthic GATE  
PARKING LOT 2

STAFF AREA

Solomon seal

Poppy Celandine

LEWIS STREET GATE

Sarah P. Duke Gardens creates and nurtures an environment in the heart of Duke University for learning, inspiration and enjoyment through excellence in horticulture and community engagement.

Daily overflow parking PayByPhone code 11119

YEARBY AVENUE

# Looking for more?

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



“Herbs in Mongolia”  
published in the International  
Journal of Biotechnology and  
Food Science (2018):



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!

