

Goldenseal

Hydrastis canadensis L.

Description1

The Goldenseal, also known as *Hydrastis canadensis* L., belongs to the family Ranunculaceae. The “golden” in the name refers to the rhizome that has a golden sap. This rhizome can grow to be ½ to ¾ inch thick with the plant itself growing to be 20-50 cm tall (USDA Forest Service, Eastern Region, 2003). The Goldenseal is a herbaceous perennial whose leaves have an alternating branching pattern, with two leaves at the top, which can be identified as a mix between serrate and lobed (USDA Forest Service, Eastern Region, 2003). These leaves can be around 4 inches across when the plant flowers, and up to 10 inches when it produces fruit (Minnesota Wildflowers, n.d.) As shown in Figure 1, when the Goldenseal blooms, typically within May, it will lose its three sepals and leave stamens that resemble a tiny, white flower (USDA Forest Service, Eastern Region, 2003). Around the month of July extending to September, the plants bear a fruit that resembles a tiny raspberry, where one could find anywhere from ten to thirty seeds (USDA Forest Service, Eastern Region, 2003).

Habitat Preferences

The Goldenseal has a geographic range across most of eastern North America, somewhat following the Appalachian Mountains, including states between Vermont and Georgia, with a few more western states (Kauffman, n.d.) Refer to Figure 2 for a visual aid on this geographic range. The plant’s habitat preferences include shady, nutrient-rich soil that can be found in deciduous forests. (Kauffman, n.d.)

Biological & Ecological Significance

Biologically, Goldenseal is important because it is able to reproduce both with a seed and also through vegetative spread (COSEWIC, 2019). While the plant is slow to reproduce, it has the ability to undergo clonal propagation where the roots of the plant form new buds that later become a new plant (Albrecht and McCarthy, 2006 as cited in United Plant Savers & Rural Action, 2020). This is a unique form of reproduction that can benefit things such as soil stability. Refer to Figure 3 for a labeled drawing that demonstrates the rhizomes used in reproduction. This dense collection of plants may also serve to attract more pollinators to an area.

“According to the USDA Forest Service, Eastern Region, 2003, many populations of Goldenseal are at risk due to the overconsumption and overharvesting of these plants (p.6).” Along with the potential to lose this species, there are other consequences such as soil erosion, loss of pollinators, and a disruption of food sources for birds and small mammals. Goldenseal may also, though not directly at fault, be harming the ecosystems around them due to the mass harvesting of the plant. Overvisitation due to forging and the act of habitat removal (Robbins, 2000 as cited

in United Plant Savers & Rural Action, 2020) has had negative effects on the ecosystems surrounding Goldenseals.

Cultural Importance

Goldenseal has been used by many for its medical properties. Goldenseal is used in contemporary medicine to treat many health issues. “According to The National Center for Complementary and Integrative Health, goldenseal is promoted as a dietary supplement for the common cold and other upper respiratory tract infections, hay fever, diarrhea, constipation, and other conditions,”(NCCIH, 2025). However, in order to have obtained this knowledge, it had to be passed down from indigenous cultures. In many Indigenous communities, Goldenseal was used for inflammation and to treat digestive issues. An Indigenous culture that used Goldenseal for similar purposes and also has important ties to this region is the Cherokee Nation (Foster 2000, Moerman 1999 as cited in Predny and Chamberlin, 2005). Another use of Goldenseal that may seem unordinary is the aiding of eye irritation. In many Native cultures, one would use parts of the root, which contains the compound Berberine, to soothe or wash out the eye’s irritation (University of Rochester Medical Center, n.d).

In Appalachian contemporary culture, Goldenseal has played a large role. A craft well-known throughout the Appalachian Mountains is the art of quilting. This art is known to use many bright colors and utilizes many different designs and styles. In doing so there is a reliance on dyes to create the multitude of colors seen on these quilts. Here, Goldenseal plays its role in contributing to the yellow dye used by many (Lloyd, 1898). The rhizome of this plant is yellow itself and has historically been use to extract the color for dyeing purposes. A personal connection to Goldenseal can be made through my grandparents, Marilyn and Jerry Daniels. Both remember, and dreaded, having to take “yellow root” for their sore throats. When talking to them, they said that their moms would boil the root and they would have to gargle the bitter water left behind. When recalling, my grandmother, said that her mother would make sure to collect enough yellow root before winter so that they could have medicine for when all of the children got sick. She recalls the yellow root being associated with bad memories, but was confident in its ability to “heal all.”

Figure 1

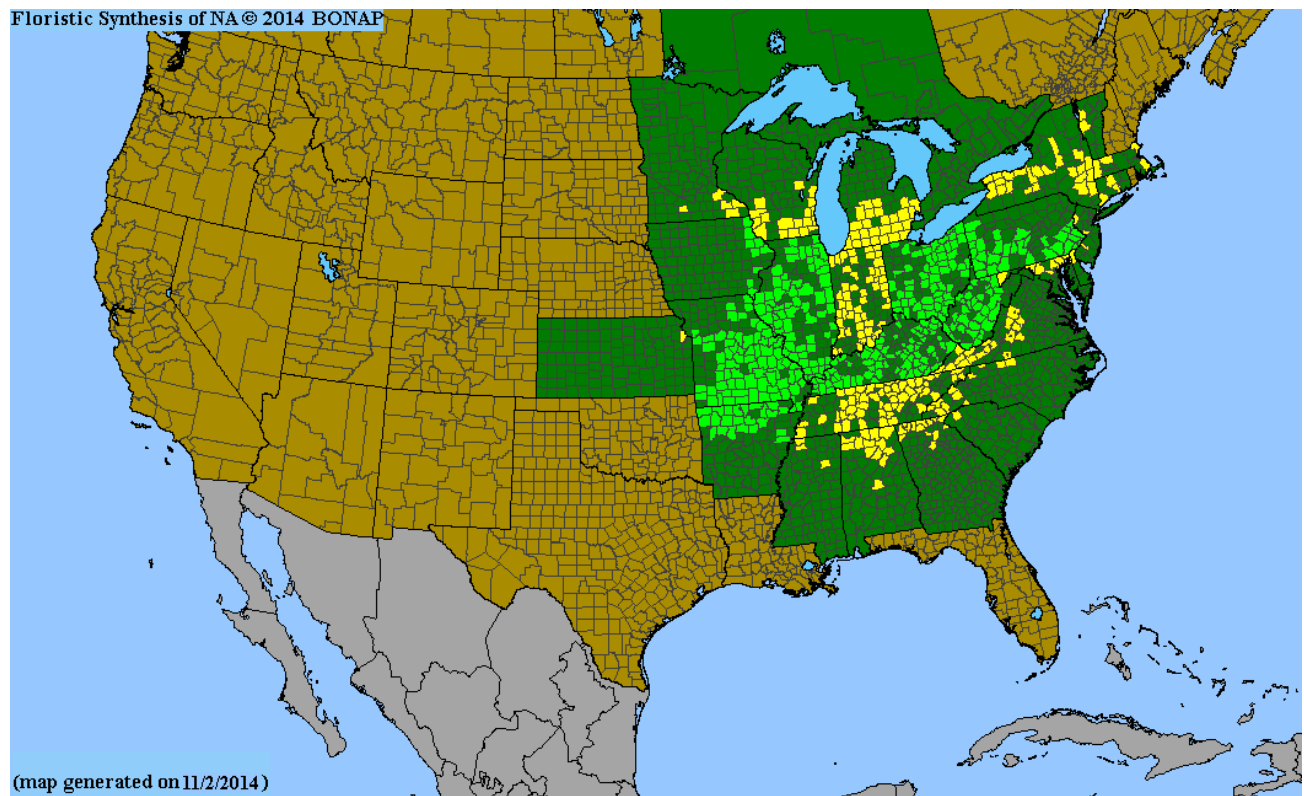
Goldenseal Plant



This is an image that shows both the leaves and the flowering component of a Goldenseal.

Figure 2

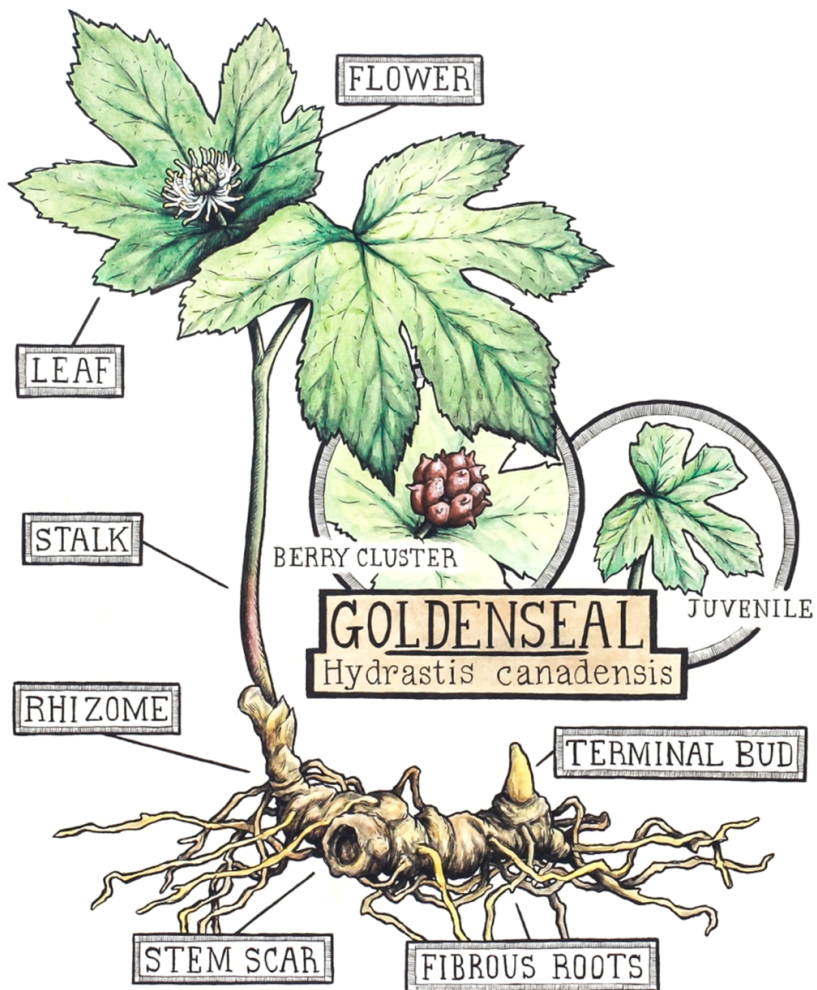
Geographic Range of Goldenseal



The image above shows the county-level distribution of Goldenseal and where it is most abundant.

Figure 3

Labeled Drawing of Goldenseal



The image above shows the individual parts of a Goldenseal and helps demonstrate where the rhizome is specifically.

References

Content - Health Encyclopedia - University of Rochester Medical Center. (2025). Rochester.edu.

<https://www.urmc.rochester.edu/encyclopedia/content?contenttypeid=19&contentid=Goldenseal>

Goldenseal. (n.d.). Wwww.fs.usda.gov.

https://www.fs.usda.gov/wildflowers/plant-of-the-week/hydrastis_canadensis.shtml

Goldenseal. (2021). Ohiodnr.gov.

<https://ohiodnr.gov/discover-and-learn/plants-trees/flowering-plants/goldenseal>

Goldenseal (*Hydrastis canadensis*). (2025). Auburn.edu.

<https://webhome.auburn.edu/~deancar/wfnotes/goldensl.htm>

Goldenseal – *Hydrastis canadensis* - United Plant Savers. (2019, August 2). United Plant

Savers. <https://unitedplantsavers.org/goldenseal-hydrastis-canadensis-2/>

Goldenseal Monograph — HerbRally. (2025). *HerbRally*. HerbRally.

<https://www.herbrally.com/monographs/goldenseal>

Hydrastis canadensis (Golden Seal) | North Carolina Extension Gardener Plant Toolbox. (n.d.).

Plants.ces.ncsu.edu. <https://plants.ces.ncsu.edu/plants/hydrastis-canadensis/>

Hydrastis canadensis (Golden Seal): Minnesota Wildflowers. (2020).

Minnesotawildflowers.info. <https://www.minnesotawildflowers.info/flower/golden-seal>

Kartesz, J.T., The Biota of North America Program (BONAP). 2015. North American Plant

Atlas. (<http://bonap.net/napa>). Chapel Hill, N.C. [maps generated from Kartesz, J.T.

2015. Floristic Synthesis of North America, Version 1.0. Biota of North America

Program (BONAP). (in press)].

Predny, M. L., & Chamberlin, J. L. (2005). *Goldenseal (Hydrastis Canadensis)*.

United Plant Saver Medicinal Plant Conservation. (n.d.). *Hydrastis canadensis*.

<https://unitedplantsavers.org/wp-content/uploads/2021/10/goldenseal.png>

USDA Forest Service, Eastern Region . (2003). *Conservation Assessment For Goldenseal*
(*Hydrastis canadensis*) L. 11.

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm91_054345.pdf

Young, S. M. (n.d.). *Hydrastis canadensis in flower*. <https://guides.nynhp.org/media/i9653.jpg>