Unicorn Root, Aletris farinosa

by Abbie White 12/24/18

We learn Herbalism in many ways. I attribute this blog to listening to my waterproof mp3 player in a swimming pool. The genesis of my interest in Unicorn Root comes from John Gallagher's HerbMentor audio I heard a few weeks ago while swimming laps. The late great Herbalist, Cascade Anderson Geller, from Portland, Oregon, describes her intensive plant walks at the International Herbs Symposium. She mentions finding this "wonderful fertility herb" in the same setting as "tortoises laying their eggs." Her excitement at this encounter has stayed in my head and is now written here.

In the role of Endangered Medicinal Plant Watchdog, I feel fortunate to learn in depth and share with you. The name Unicorn Plant is exotic and intriguing. There is a long history of many common names. In 1811 in David Hosack's book, Hortus Elgimensis, the names Devil's Bit and Star Grass are used. Allan Pollock's 1873 book titled Medical Botany lists several more that include Star Root, Blazing Star, Mealy Starwort, True Unicorn Root, Bitter Grass, Aloe Root, Colic Root, Ague Grass, Black Root, and Crow-corn.

As a digression, I have always held Latin names in high esteem, until this study. This description is from Harper's Guide to Wild Flowers by Caroline Alathea Stickney Creevey in 1912. The meaning of this genus name is shocking and makes me wonder if political correctness will change it someday.

A special mealy look about the flowers has given this plant its name, *aletris*, meaning a slave grinding corn. Along road-sides, on the edges of dry woods, in sandy soil, this plant grows from New England to Florida and in the mountains of Virginia.

Until recently, Unicorn Root was thought to be extirpated in the state of Maine. A remarkable news story in the Boston Globe was published August 21, 2018 as follows: "A showy plant thought to have been long gone from Maine has been found this summer. Officials say the Unicorn Root was found this summer on private land in Bowdoin after having last been seen in the state 130 years ago." The news concludes with the statement, "The last known specimen in Maine was collected near Lewiston in 1887. This summer, about 300 flowering stems were found in Bowdoin."

Aletris farinosa is protected in New York and Rhode Island and endangered in Pennsylvania. United Plant Savers (UpS) assigns a high Overall At-Risk Score of 46. The UpS website links to the impressive work being done to conserve Unicorn Root in Canada. There is the Canadian Species At Risk Act (SARA) which became a law in 2002. Unicorn Root was recognized as a threatened plant in Canada in 1988. There is an excellent publication authored by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). This is an independent advisory panel to the Minister of Environment and Climate Change Canada. In all my research, I was most impressed with the efforts of COSEWIC to educate and act on preservation of Unicorn Root. The 2015 COSEWIC Assessment and Status Report is a comprehensive document with information that is not easily found anywhere else. This PDF with beautiful images is worth keeping as a reference.

https://www.sararegistry.gc.ca/virtual_sara/files/cosewic/sr_Colicroot_2015_e.pdf

Preservation in efforts in Canada contrast to exploitation of wild stands of plants in the United States. There is a long history of digging and selling roots for medicinal purposes that continues to this day.

In the late 19th Century this plant is described as common and widespread geographically. The 1890 book 'Garden and Forest, Volume 3' by Charles Sprague Sargent has a typical description of how easy this plant is to find and identify.

Aletris farinosa (Star Grass) has its leaves in a cluster close to the ground, from among which comes a long, slender, naked scape, two or three feet high, bearing a wand-like raceme of pretty white flowers. The spike or raceme is about three-fourths of an inch in diameter and five to eight inches long. It is useful for cutting. The plant is not rare, and may be easily grown in the sun or shade in a sandy soil.

There were many remedies that incorporate the root extract. From the 1889 book, 'The Medical Genius: A Guide to the Cure', by Stacy Jones, aletris is recommended for many health issues.

ALETRIS.

GENERAL INDICATIONS.—Constant drowsiness—tendency to faint—distress in the stomach—worse after eating.

MINUTE DOSE.—See Section 56, B.

Ordinary Dose.—

Adult, 1/2 to 1 drachm of the tincture; Aletris cordial, adult, 30 to 60 drops 3 or 4 times a day.

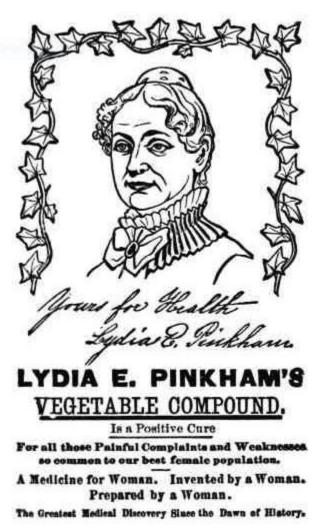
"During several years, I have used Aletris cordial for irregular and suppressed menses, and have yet to see one failure. It is alike indicated when the courses are painful, whether scanty or excessive. It cures Leucorrhwa—Falling and displacement of the womb—Sterility. If miscarriage is threatened, it should be taken until the dreaded period is passed some weeks.

"For malposition and version of the womb, this tonic is sufficient without supporters. Ladies broken down, and worn out with womb troubles, suffering with debility and loss of appetite, will find the Aletris a positive blessing, restoring to health and bloom." One drachm of Aletris, in 4 ounces of sherry wine, a teaspoonful 3 times a day, may answer in place of the cordial.

I have a hypothesis that the largest use of Unicorn Root was due to the incredible success of Lydia Pinkham's famous Vegetable Compound product. Lydia Pinkham founded a patent medicine company in Lynn, Massachusetts based on a formulation she made in her kitchen in 1875. The recipe for several decades was as follows: Unicorn root (Aletris farinosa) 8 oz., Life root (Senecio aureus) 6 oz., Black cohosh (Cimicifuga racemosa) 6 oz., Pleurisy root (Asclepias tuberosa) 6 oz., Fenugreek seed (Trigonella foenum-graecum) 12 oz., Alcohol (18%) to make 100 U.S. pints. The price was one dollar for a bottle.

Recommended dosing for various ailments was 1 tablespoon every 4 hours during the day. I attribute the commercial success of this remedy with harvest pressures on the plant.

Lydia Pinkham continues to be admired widely for her entrepreneurship, determination, and business savvy. Marketing and sales professionals continue to advocate for high advertising budgets based on her business model. Jargon such as Lydiametrics and the Pinkham method appear in marketing research studies. There are many fascinating and awe inspiring publications of her company and personal life. Sadly, I suspect that one victim of her business heroism was the Unicorn Root plant. I do not have hard data to prove my point. I have searched in vain to find root harvest numbers for the production Lydia Pinkham's Vegetable Compound. One can extrapolate from the sales numbers that hundreds of pounds of aletris were used. In 1907 the company revenue was about 1 million dollars with most of the sales attributed to the Vegetable Compound product. Sales peaked at 3 million in 1925. There are many eye catching advertising images on line. This ad from around 1882 persuades one to buy this product and support her business.



There can be a downside to capitalism. Often there is an environmental cost that is not taken into account. In economics the term used is a negative externality. In this case, Unicorn Root disappeared

from many locations. Thankfully, the present day formulation of Lydia Pinkhams's Vegetable Compound excludes roots of endangered herbs.

In 1907, root foragers seem to have been well compensated and had clear instructions from this book issued by the U.S. Government Printing Office. 'American Root Drugs' by Alice Henkel has this detail:

Aletris has a horizontal rootstock from one-half to 1½ inches in length, rough and scaly, and almost completely hidden by the fibrous roots and remains of the basal leaves. Upon close examination the scars of former leaf stems may be seen along the upper surface. The rootlets are from 2 to 10 inches in length, those of recent growth whitish and covered with several layers of epidermis which gradually peel off, and the older rootlets of the rootstock showing this epidermis already scaled off, leaving only the hard, brown, woody center. The rootstock in commerce almost invariably shows at one end a tuft of the remains of the basal leaves, which do not lose their green color. It is grayish brown outside, whitish within, and breaks with a mealy fracture. It has no odor, and a starchy taste, followed by some acridity, but no bitterness.

Collection, prices, and uses.—Aletris should be collected in autumn, and there is no reason why collectors should make the common mistake of confusing Aletris with Chamaelirium. By comparing the description of Aletris with that of Chamaelirium, it will be seen that there is scarcely any resemblance. Aletris ranges from 30 to 40 cents a pound.

Warner Webster Stockberger's Drug Plants Under Cultivation, issued by the U.S. Government Printing Office in 1935, continues to support wild harvesting. Aletris farnosa is described as "frequently occurring in the pine and oak barrens of Alabama and Tennessee and elsewhere in the south." Instructions are given for harvesting the second or third year. Pricing for clean roots averaged 31 cents per pound.

As I write this, Ridge Runner Trading Company in Boone, North Carolina, buys many medicinal herb roots and is offering \$40 per pound for Aletris farnosa. Another company seeking this herb from diggers is RootBuyer in Bloomington, Indiana.

To counter exploitation by wild harvesting, we can increase Unicorn Root populations by propagation from divisions and seed. This an attractive flowering plant in the lily family is a beauty in a garden setting. Strictly Medicinal Seeds sells 500 seeds for \$3.95. Red Root Native Nursery in Barnardsville, North Carolina has a website that states commitment to medicinal plant conservation. This business sells live Unicorn Root plants and offers many plants on United Plant Saver's "At Risk" or "To Watch" List.

In terms of medicine, I believe that we should be cautious with using wild crafted products containing Unicorn Root. Make sure that the source is sustainable instead of wild harvested. Notably, this herb is not listed for sale with Mountain Rose Herbs. In contrast, Penn Herb Ltd in Philadelphia offers herbal powder that is "wild harvested". Four ounces of powder costs \$71.25. An Amazon retailer sells a pound for \$291 without specifying the location and type of harvest. Overall, this herb has few retail sources, which seems to limit pressures on wild stands. There are many more common herbs that have similar actions that serve as substitutes. There is a long history of Unicorn Root being used as a digestive aid and a bitter. As we know, there are many non-endangered plants that work great as bitters. In terms of

helping woman during pregnancy, I am reluctant to suggest herbal substitutes. It is critically important for a pregnant woman to work directly with a midwife who is receptive to herbal use.

I am now a huge fan of Lydia Estes Pinkham who lived from February 9, 1819 until May 17, 1883. I will conclude with another advertising image courtesy of the Schlesinger Library archives.

