

The Herb Society of America's

Notable Native™ Herb 2023

Phytolacca americana L., Pokeweed



Phytolacca americana in bloom.
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Family: Phytolaccaceae (Pokeweed family)
Latin Name: *Phytolacca americana* L.; 2 species in North America
Common Names: Pokeweed, Pokeberry, Poke Sallet, Inkberry
Growth: Herbaceous perennial; ephemeral; reseeds generously
Hardiness: Native in all states except ND, SD, MT, ID, WY, NV, UT, CO
Light: Full sun to partial shade
Soil: Moderately moist to moderately dry
Water: Moderate rainfall, can tolerate some drought, though may drop a few leaves

CONSERVATION STATUS: SECURE

History

Native Americans used pokeweed as medicine, food, dye, and jewelry. Early European explorers to the U.S. took pokeweed back to Europe where they began to use the juice to color wine. Louis XVI and other monarchs tried to end this practice because the berries were toxic, but it continued to be used to color wines in some countries.

During the Civil War, soldiers used the berries as an ink to write letters. There was a story that the juice from pokeweed berries was used to make the ink to write the Declaration of Independence. However, this has proven to be not true. The ink used in the document was made from oak galls. But pokeweed juice was used to color the first California bear flag.



Pokeweed entered politics in the election of James K. Polk, eleventh president of the United States (1845-1849). His supporters wore sprigs of poke on their jackets during the campaign, with the idea that the two words “polk” and

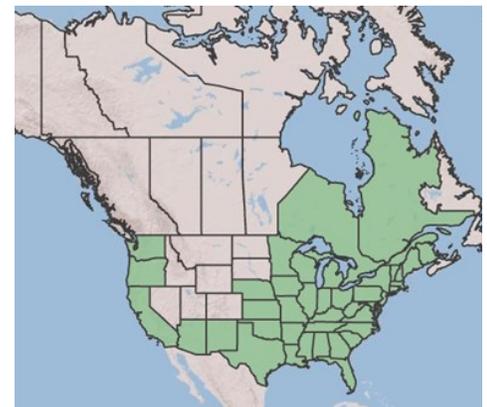
“poke” sounded the same.

During the 19th and 20th centuries, pokeweed was a common dinner green in parts of the South. The U.S. Department of Agriculture in the early 20th century encouraged farmers to grow poke as the roots and berries were listed in the U.S. Pharmacopoeia until 1916.

In 1968, a popular country song “Polk Salad Annie,” was written and performed by Tony Joe White and sung by many including Elvis Presley. Until the year 2000 canned pokeberry greens could be bought in the grocery store. Pokeweed is still celebrated today with festivals in some Southern communities, remembering the plant’s historical role in southern and mountain traditions.

Description

Pokeweed grows from 4’ to 10’ tall with a spread of 3’ or more. Alternate green leaves grow to as much as 4” wide and 10” long. It is in bloom from mid- to late-summer, with slender racemes up to 8” long. The flowers in bud start as a pale green, changing to pale magenta, and opening with white flowers with a bright green pistil in the center (see above). As the color change occurs, the stems also change from green to pale-to-deep magenta on the entire plant. The



Phytolacca americana.
USDA Plants Database.



Phytolacca americana var. *rigida*.
USDA Plants Database.

leaves turn yellow and red in Fall. This plant has a sturdy, tough taproot that descends about 12 inches, and can easily reach 4” in width.



Phytolacca americana in fruit. Public domain, from McClung Museum, Univ. TN, Knoxville.

Culture & Habitat

Pokeweed is widely distributed in central and eastern U.S. and Canada. Two varieties are listed in the USDA Plants Database, *Phytolacca americana* var. *americana* and *Phytolacca americana* var. *rigida*. The latter is restricted to the states of Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. There are some disjunct populations of *Phytolacca americana* var. *americana* in Washington, Oregon, California, New Mexico, and Arizona.

In *Wildflowers of the Northern States and Canada*, Arthur Quick gave a terse description of pokeweed's habitat preferences: "Any soil. Everywhere."

Pokeweed is an edge habitat species favoring moist woodland and meadow edges and forest clearings. It is an efficient colonizer of open and disturbed areas such as fencerows, vacant lots, plowed and old fields, drainage ditches, roadsides, and railroad and powerline rights-of-way. It is often called a weed in the garden. Wherever a bird flies you are likely to find pokeweed.

Pollinators

Pokeweed may flower year-round in southern states and May to October in northern states depending upon altitude and latitude. Bees are attracted to the pinkish racemes of small, white flowers. This plant also provides nectar and pollen for bees and many other types of pollinating insects. The delicate flowers also feed ruby-throated hummingbirds.

The drooping clusters of green fruit ripen to glossy dark purple-black fruits that attract birds and small mammals. The fruit is eaten by songbirds such as robins, mourning

doves, and warblers and is an important food source for mockingbirds and northern cardinals. The fruit is also eaten by raccoons, opossums, foxes and black bears.

The role of many species of birds and mammals as seed dispersers has been extensively studied but little is known about the importance of reptiles as dispersers even though many turtles and lizards feed on fruit and ingest their seeds. In a study done at William and Mary College in VA, captive box turtles (*Terrapene carolina*) were fed wild fruits of common species to determine the effects of passage through their gut on seed germination. Seeds from five of the plants, one of which was *Phytolacca americana*, had higher germination percentages for ingested than non-ingested seeds. Passage through box turtle guts might positively affect seedling establishment by promoting germinability and by deposition of seeds away from the source plant.

Uses

Though this plant has long been used as a spring vegetable (leaves and shoots) and the fruits in pies, it has also long been known that all plant parts are toxic.

A study of plant use for well-being (food and medicinal uses) by enslaved Africans at Kings Bay Plantation in Georgia in the 18th century found that 75% of the 20,000 seeds recovered from privy pits (a source of information on consumed plants) were of pokeweed.

A 1999 study of plant use explored the cultural conservation of folk medicine plant use in fourteen communities across the Ozark Mountains of Arkansas and Missouri.



Variegated pokeweed maintained in a pot; getting ready to bloom. ©Elizabeth Kennel



Phytolacca americana 'Silberstein' A variegated form with mottled green and cream leaves. ©Karen O'Brien

Among the most frequently mentioned were jewelweed (*Impatiens capensis*), May-apple (*Podophyllum peltatum*), sassafras (*Sassafras albidum*), heal-all (*Prunella vulgaris*), wild black cherry (*Prunus serotina*), and pokeweed (*Phytolacca americana*).

Shoots must be blanched before using and the young, somewhat spinach-like leaves must be cooked in multiple changes of water.

There is a long history of medicinal uses for parts of the plants along with similar cautions against using the plant without supervision of a physician. They have appeared in traditional treatment of diseases related to a compromised immune system.

Studies continue to explore the efficacy of the anti-inflammatory agents, antiviral proteins, and substances that affect cell division known to be a part of pokeweed. The root has been used for tonsillitis, mumps, glandular fever, and other complaints involving swollen glands. Juice from the berries has been used in the treatment of cancer, hemorrhoids, and tremors.

The berries produce a red dye that has been used as a food and wine coloring, and as an ink.

Pokeberry fruits make a dark purple to magenta dye that fades quickly and washes off easily. Adding a mordant creates a longer lasting dye, but even with a mordant, the dye is not long lasting.

Our reminder: The Ohio Agricultural Research and Development Center staff scientists note that symptoms of poisoning include "a burning sensation in the mouth, salivation, gastrointestinal cramps, vomiting, and bloody diarrhea" and that depending upon the amount consumed, more severe symptoms can occur, including "anemia, altered heart rate and respiration, convulsions and death from respiratory failure." If only small quantities are ingested, people and animals recover within one to two days

Propagation

Six-inch root cuttings may be taken in spring and directly planted in garden soil.

To grow from seed, collect fruits in the summer, crush to expose seed, and soak in water for 2-3 days, stirring periodically. Remove any seed that has floated to the top, then strain out the remaining seed. Place the seeds on a paper towel and allow to dry. Wrap in a clean, dry paper towel, put into a plastic bag, seal and keep at about 40° for three months. Plant in spring in full sun.



This photo was found on Facebook. The author's name was not visible but the page title is Pokeweed Ink; the artist has several interesting ink-berry paintings on display.

<https://www.facebook.com/pokeweedink/>

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Pokeberry Ink

1 cup ripe pokeweed berries
½ tsp. salt
½ tsp. vinegar

Line a strainer or small colander with cheesecloth or a coffee filter. Place the strainer over an old pan or dish.

Drop in the berries and crush to release their juice using a pestle or a small rock, allowing the juice to drip into the pan or dish. Wear gloves to keep from staining your hands, and an old apron.

Lift the cheesecloth or filter and squeeze to make sure all of the juice has been released.

Discard the berry remains and cheesecloth/filter.

Add salt and vinegar to the berry juice and stir gently. Decant the juice into a small glass jar with a secure lid.

Your ink/paint is ready to use.

Produced by the HSA Native Herb Conservation Committee with the assistance of Susan Betz, Regina Cybulski, Elizabeth Kennel, Debra Knapke, Maryann Readal, and Kathy Schlosser

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