



Native Perennials *with* Pharmaceutical Pasts

More than just pretty faces, many native herbaceous perennials grown in our gardens today have rich histories as important medicinal plants.

BY RITA PELCZAR

FOR CENTURIES, Native Americans used a wide variety of indigenous plants to treat whatever ailed them. Early European settlers followed suit, learning medicinal uses for the unfamiliar flora they encountered either by trial and error—a risky business—or from the locals. This herbal lore passed from generation to generation until the advent of modern medicine about a century ago.

Before then, many native plants were grown in home gardens more for their

medicinal usefulness than their ornamental qualities. Several of these species still grace gardens across the country today, though many people don't realize the significant role they played in health and healing before alternative pharmaceutical options existed.

Many common perennials grown today for their ornamental value, such as magenta-flowered beebalm and purple coneflower (foreground), have rich medicinal histories.

Certain ornamental North American trees and shrubs have medicinal uses, but this article will focus on herbaceous perennials. The following are some of the most garden-worthy, widely available, and historically interesting among them (see the chart on page 31 for additional selections). Please note that how to use them as herbal remedies and their medicinal efficacy are not the focus of this article; it is intended to be informational rather than instructional.

COMMERCIALLY MARKETED HERBAL NATIVES

Among the most well known and well researched medicinal native perennials are coneflowers (*Echinacea* spp.). Ethnobotanical studies have revealed that numerous Native American tribes used coneflowers in a variety of herbal remedies for hundreds of years. Today, millions of people around the world use echinacea-based products to bolster their immune system or to diminish the duration and severity of a cold.

The species most commonly used for these purposes are purple coneflower (*E. purpurea*, USDA Hardiness Zones 3–9, AHS Heat Zones 9–1), pale purple coneflower (*E. pallida*, Zones 3–10, 10–1), and



They reach between two and four feet tall, and bloom all summer long.

Goldenseal (*Hydrastis canadensis*, Zones 4–9, 8–4) is another widely used and well known medicinal native perennial. Historically it has been used for ailments involving mucus membranes. For example, Iroquois healers used a decoction of the root to treat whooping cough, diarrhea, stomach ailments, earache, and eye irritation. Its thick yellow rhizomes also have been used to make a dye. After early explorers exported the plant to Europe, it became popular there for medicinal purposes, too.

Because of overharvesting and habitat loss, the plant is now an endangered



MINT-FAMILY MEDICINALS

Many native plants with herbal properties belong to the mint family (Lamiaceae). They share traits such as square stems, opposite leaves that may be aromatic, and small two-lipped flowers arranged in whorls or clusters. Those that spread with rhizomes may need a firm hand to keep them within bounds.

The genus *Salvia* boasts quite a few North American species that are both medicinally significant and highly ornamental. From the West Coast, hummingbird or pitcher sage (*S. spathacea*, Zones 8–11, 10–7) inhabits the coastal hills of central and southern California.



Left to right: Purple coneflower, goldenseal, and hummingbird sage all produce intriguing flowers as well as compounds that combat diseases.

narrow-leaf coneflower (*E. angustifolia*, Zones 4–9, 9–1). Health products labeled with “echinacea” often contain extracts from at least two of these species. Studies have found that each of these plants produces various chemicals with antioxidant, antimicrobial, and immune-boosting properties.

Native across eastern and central North America, these coneflowers are easy to grow, drought-tolerant, and make lovely additions to sunny spaces. Their showy flower heads, composed of pink-purple rays surrounding distinctly raised cones, attract butterflies, bees, and seed-eating birds.

species across its native range from New Hampshire and Minnesota, south to Alabama and Georgia. Fortunately, many reputable nurseries now propagate and sell goldenseal for both home gardens and commercial production. It's one of my favorite plants for a woodland garden, forming a groundcover of large, palmately lobed leaves on short stems that reach six to 12 inches tall. Small, white, tufted flowers appear in spring, followed by a showy raspberry-like fruit that appears to sit atop the leaf. Best growth occurs in a moist, moderately shady spot with slightly acidic soil.

Indigenous peoples in that region used it to treat colds and sore throats, and scientific analysis has revealed that it contains antimicrobial compounds.

This plant grows about two feet tall and spreads to about three feet across. Its spikes of fruity-scented, magenta blooms begin appearing in winter in warmer regions, and continue through summer. As the common name implies, they attract hummingbirds. It prefers dappled shade, but also will adapt to full sun. Though quite drought-tolerant, a bit of irrigation helps extend the flowering season and keep the plant evergreen where winters are mild.

Another showy mint-family member that has long been used medicinally is pink skullcap (*Scutellaria suffrutescens*, Zones 6–9, 9–6). Certain Native American tribes used it to treat female reproductive conditions, and early settlers used it against nervous system disorders and inflammation. Studies conducted over the last decade or so have identified it and several other skullcap species as a source of anti-tumor compounds.

Pink skullcap is native to northern Mexico and possibly into Texas. “It’s a great

On the other end of the moisture spectrum, scarlet beebalm (*Monarda didyma*, Zones 4–10, 10–1) thrives in damp meadows and woodland edges throughout North America. Several Native American tribes—including the Oswego—enjoyed it as a tea, and used it to treat a variety of ailments from colds to stomachaches and insomnia. This mint family member is also known as Oswego tea because it was used as a substitute for imported tea in colonial America.

Scarlet beebalm reaches two to three feet tall and spreads to about two feet wide. It adapts to sun or light shade and produces whorls of deep pink or red flowers from mid- to late summer that are favorites of bees and hummingbirds.

HEALING HERBS FOR SHADE

Most of the plants discussed so far prefer a sunny location, but a number of North American perennials with medicinal uses have a proclivity for shade.

Resources

American Household Botany: A History of Useful Plants

1620–1900 by Judith Sumner. Timber Press, Portland, OR, 2004.

Growing and Marketing Ginseng, Goldenseal and Other Woodland Medicinals

by Jeanine Davis and W. Scott Persons. New Society Publishers, Gabriola Island, British Columbia, Canada, 2014.

Growing and Propagating Wildflowers of the United States and Canada

by William Cullina. Houghton Mifflin, Boston, MA, 2000.

Herb Society of America, www.herbsociety.org.

Sources

Crimson Sage Medicinal Plants Nursery, Orleans, CA. www.crimson-sage.com.

Las Pilitas Nursery, Santa Margarita, CA. www.laspilitas.com.

Mulberry Creek Herb Farm, Huron, OH. www.mulberrycreek.com.

Prairie Moon Nursery, Winona, MN. www.prairiemoon.com.

Sandy Mush Herb Nursery, Leicester, NC. www.sandymushherbs.com.

low-growing perennial,” says Angie Hanna, whose website, highplainsgardening.com, focuses on gardening in the Texas High Plains region. Hanna grows pink skullcap in xeric gardens at her home in Amarillo, Texas, and at the Amarillo Botanical Gardens where she volunteers. “It blooms continually from May through frost in November,” she says. Both heat- and drought-tolerant, it bears a profusion of small, cherry-pink flowers on plants that grow eight inches tall with a slightly greater spread.



Each tiny flower of pink skullcap resembles a type of hat worn in Medieval times. Together, they make a showy display on drought-tolerant plants that contain cancer-fighting chemicals.



Bloodroot’s white early-spring flowers light up woodlands from the East Coast to the Rockies. The plant’s name refers to the red sap in its roots that was used as a dye by Native Americans and also has many medicinal properties—although it can be toxic in large doses.

In woodlands across eastern North America and west to the Rockies, one of the first signs of spring are the pure white flowers of bloodroot (*Sanguinaria canadensis*, Zones 3–9, 9–1). Each three-inch bloom, with its narrow petals surrounding yellow stamens, lasts only a few days, but the glossy, lobed leaves are attractive as well, and persist into fall.

Certain Native American tribes prized it for its red sap that could be used as a diuretic, emetic, and antiseptic. A relative of poppies (*Papaver* spp.), bloodroot contains opiumlike alkaloids that inhibit the growth of certain bacteria. It also can be toxic to humans when ingested in large doses and caution is advised when handling the roots because the sap causes rashes on some people.

Another caveat for gardeners: Bloodroot may “suddenly start thinning out and in a few years can disappear,” says Extension specialist Jeanine Davis, who coordinates research on several native medicinal herbs for the Mountain Horticultural Crops Research Center in Mills River, North Carolina. This seems to occur most often when it’s grown in deep shade, so she advises planting it in

“moist but well-drained, slightly acidic soil in a partially shaded area.”

And while it can be grown west of the Rockies, “it is somewhat challenging,” says Tina Glaessner, owner of Crimson Sage Medicinal Plants Nursery in Orle-



Western wild ginger’s distinctive flowers can be hard to spot because they appear beneath the heart-shaped foliage.

ans, California. “It does not do well under firs, redwoods, or pines, but can do beautifully under maples, fruit trees, oaks, and other hardwoods,” she adds. In ideal conditions, bloodroot will slowly spread by rhizomes to form a tidy groundcover about one foot tall and about as wide.

Western wild ginger (*Asarum caudatum*, Zones 5–8, 8–5) also makes an attractive groundcover for shady gardens, and historically it has been used to treat infections and clean wounds. During the Voyage of Discovery, Meriwether Lewis wrote that when one of the expedition members suffered a swollen and inflamed leg wound, “We applied the pounded root and leaves of wild ginger [*A. caudatum*] & from which he found great relief.”

This woodland wildflower is found in redwood and pine forests from British Columbia to California and western Montana. It is distinguished by shiny, evergreen, heart-shaped leaves and purple-brown flowers with distinctly long tails that appear in late winter or early spring. All parts of the plant have a distinct ginger fragrance.

Its slightly taller counterpart, Canadian wild ginger (*A. canadense*, Zones 3–8,

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TOP: ALEXANDRA SZYWALA, BOTTOM: JOSEPH G. STRAUCH, JR.



False Solomon's seal's frothy white blooms appear in spring and are followed by clusters of green berries that turn red when mature.

8–1), reaches six to eight inches in height and thrives in rich woodlands from New Brunswick and Alberta south to Georgia and Louisiana. It has been used to treat respiratory and digestive issues. The plant does contain a number of antimicrobial compounds, but also produces a potentially carcinogenic chemical, so ingesting any part of it is not recommended.

However, this deciduous spreader does make a carefree groundcover in woodland gardens. For Jim Long, owner of Long Creek Herbs in Blue Eye, Missouri, it does well with “mayapples, goldenseal, and native ferns. It likes fairly moist soil and shade, although mine grows in a partly-sunny location beneath garden phlox,” he adds.

False Solomon's seal (*Maianthemum racemosum* syn. *Smilacina racemosa*, Zones

4–9, 9–1) also inhabits woodlands across North America. And it is a veritable panacea, according to data gathered by the Native Medicinal Plant Research Program at the University of Kansas in Lawrence. Out of 922 species of plants in the program's Prairie Ethnobotany Database, false Solomon's seal is among the 10 species with the largest number of medicinal uses, based on accounts from more than 250 Native American tribes. The list of ailments runs the gamut from constipation and coughs to rheumatism, stomachaches, and headaches.

Growing one to three feet tall, false Solomon's seal spreads by rhizomes into a sizeable clump. Its arching, zigzag stems are cloaked in light green leaves that turn yellow in fall. Clusters of tiny, fragrant, creamy white flowers appear at the ends

of stems from mid to late spring, followed by green berries that mature to bright red.

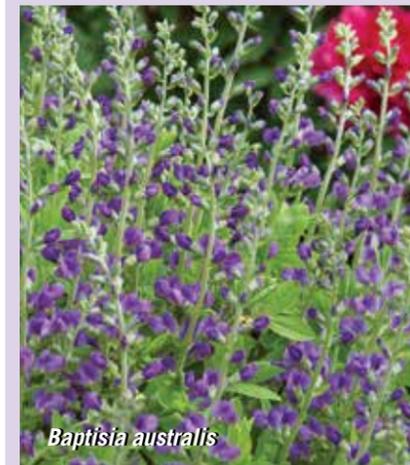
MORE THAN JUST PRETTY

This collection of plants illustrates that there's more to native perennials than meets the eye—even showy ones now popular in gardens around the world. Their long histories of medicinal uses by Native Americans and others add cultural seasoning to our gardens, along with their beauty. And while scientists may have barely scratched the surface of their pharmaceutical potential, for gardeners, these plants provide a sense of connection to all those who have nurtured the plants of this land.

Rita Pelczar is a contributing editor for *The American Gardener*.

MORE NATIVE PERENNIALS WITH MEDICINAL HISTORIES

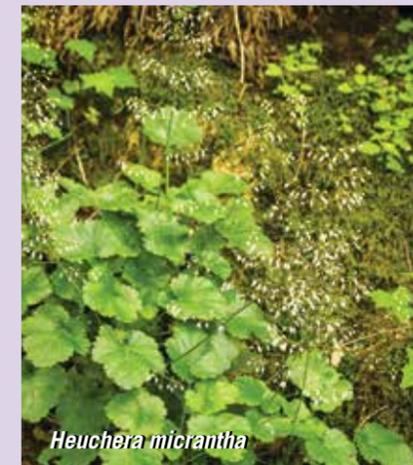
Name	Height/ Spread (ft.)	Ornamental Characteristics, Historical Medicinal Uses	Native Range	USDA Hardiness, AHS Heat Zones
<i>Actaea racemosa</i> , syn. <i>Cimicifuga racemosa</i> (black cohosh)	4–6/2–4	In shady, moist sites, it produces white flowers on terminal racemes above fernlike green foliage in late summer. Treatment for snakebites and lung inflammations.	Eastern North America	3–8, 12–1
<i>Agastache foeniculum</i> (anise hyssop)	3–4/2	Rosy-purple flowerheads attract pollinators from late summer through fall in sunny spots. Fragrant foliage makes pleasant tea. Used for colds, coughs, and fevers.	Most of North America	4–11, 12–5
<i>Baptisia australis</i> (false indigo)	3–4/3–4	In sun or part shade, spikes of blue pealike flowers appear in late spring above blue-green foliage. Anti-inflammatory.	East, central North America	3–9, 9–1
<i>Callirhoe involucrata</i> (wine cups, poppy mallow)	½/2–3	Sun-loving, drought-tolerant sprawler with cuplike, magenta blooms in summer. Pain-reliever.	Central, southern Great Plains	4–9, 9–4
<i>Eryngium yuccifolium</i> (rattlesnake master)	4–5/2–3	Basal rosette of sword-shaped leaves with bristly edges and one-inch, globular clusters of tiny, greenish-white flowers in summer. Treatment for snakebites.	Southeast, central U.S.	3–8, 8–1
<i>Eutrochium fistulosum</i> , syn. <i>Eupatorium fistulosum</i> (Joe-pye weed)	4–8/3–4	Sun-loving plant with upright stems topped in late summer with clusters of dusky-pink to red-purple flowers that attract pollinators. Treatment for typhoid fever.	Eastern North America	3–8, 8–2
<i>Heuchera micrantha</i> (alumroot)	1–3/1½	Shade-loving, mounding plant with early summer panicles of pink or white flowers on red stems. Used as astringent.	Western North America	3–8, 8–1
<i>Monardella villosa</i> (coyote mint)	2/2	A groundcover in sunny, dry sites with mint-scented leaves and lavender summer flowers that attract beneficial insects. Used for sore throats and stomachaches.	North, central California	8–10, 10–8
<i>Porteranthus stipulatus</i> (Indian physic)	2½–3/1½–2	Shade-loving plant with white, early-summer flowers on wiry stems, leaves turn bronze-red in fall. Emetic, expectorant, and laxative.	East, central North America	4–8, 8–1
<i>Satureja douglasii</i> (yerba buena)	1/1	Trailing, shade-loving, aromatic evergreen with tiny white flowers from spring until fall. Pain-reliever and treatment for colds, fevers, and indigestion.	Western North America	7–10, 10–7



Baptisia australis



Eutrochium fistulosum



Heuchera micrantha

NEIL SODERSTROM, AT MT. CUBA CENTER

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