

# Native Woody Plants with Medicinal Histories

Before the advent of modern medicine, many ornamental trees and shrubs indigenous to North America were vital to human health and healing.

BY RITA PELCZAR

**N**ORTH AMERICA is home to an incredibly diverse assortment of trees and shrubs. Many are well appreciated for their landscape qualities, but perhaps less familiar are their fascinating historical contributions to remedying all sorts of ailments.

“My great-grandmother was a folk healer in Illinois and immersing myself in this world is my way of connecting to my roots,” says landscape architect Todd Lynch, principle of Ecotropy, LLC, in western Massachusetts. “There’s something powerful to me about how these plants have been helping people for millennia, and I love to share that lore,” adds Lynch, who guides his clients on how to use plants he installs in their landscapes to create teas, honeys, and tinctures.

This article will highlight just a few of the many trees and shrubs that have been—and in some cases, still are—used medicinally; it is not intended to provide instructions for using these plants for healing purposes. For similar coverage of perennial plants, see “Native Perennials with Pharmaceutical Past” in the July/August 2017 issue of this magazine.

## BAYBERRIES

California bayberry (*Morella californica*, syn. *Myrica californica*, USDA Hardiness Zones 7–10, AHS Heat Zones 10–7) is native to the coastal regions of California, Oregon, and Washington. It grows to 20 feet tall as a large shrub or small tree. The similarly sized Southern bayberry (*M. cerifera*, Zones 6–9, 9–6) is native to the Southeast. Both are evergreen. Northern bayberry (*M. pennsylvanica*, Zones 3–6, 6–1) is three to nine feet tall and wide and is semi-evergreen. All produce



The leaves of Yaupon holly were used by several Native American cultures to brew a sacred tea.



The root bark and leaves of northern bayberry, above, have emetic and purgative properties. The leaves of New Jersey tea, right, were at one time used to treat pulmonary disorders.

leaves with a delightful, spicy fragrance that is released when they’re crushed.

The small grayish berries, produced tightly along the twigs in late summer, are covered with wax that has long been used to make scented candles and soap. The berries are also a good fall and winter food source for birds. Historically, bayberry root bark served as a remedy for toothache and a poultice for wounds; a decoction from the bark and leaves was administered as an emetic, purgative, and gargle for sore throat.

Because bayberries are adapted to habitats along seashores and coastlines, they are “ideal for urbanized conditions where soils are poor and areas that get hit with road salt,” says Lynch. They make excellent clipped hedges or informal screens.

## NEW JERSEY TEA AND BUCKBRUSH

Native to eastern and central North



America, New Jersey tea (*Ceanothus americanus*, Zones 4–8, 8–1) was used by indigenous tribes and Colonial healers for its expectorant, astringent, and sedative properties. Teas from leaves and

roots were used to treat asthma, whooping cough, bronchitis, and dysentery. During the American Revolutionary War, its dried leaves were considered one of the more palatable substitutes for the boycotted imported tea.

“In the wild, it grows in open woodlands, but here [in Maine] it can grow in full sun,” says Heather McCargo, executive director of the Wild Seed Project in Portland, Maine, who adds that in warmer regions it benefits from part shade. It is deciduous, with a dense, compact habit, growing to about three feet tall and wide. From late spring to early summer, it bears clusters of fragrant white flowers that McCargo says are pollinator magnets. It’s a great choice for mixed shrub borders and dry slopes.

A cousin from the West Coast, buckbrush (*Ceanothus cuneatus*, Zones 7–10, 10–7), is a tough, six- to 10-foot-tall evergreen shrub that bears fragrant white flowers in spring. “It is extremely useful for hot, dry sites, especially south and west exposures. Grown closely together, it can make a beautiful informal hedge or screen,” says Bruce Reed, horticulturist at Santa Barbara Botanic Gardens. Medicinally, it has been used similarly to *C. americanus*.

## COFFEEBERRY AND CASCARA

Another favorite West Coast native for Reed is coffeeberry (*Rhamnus californica*, syn. *Frangula californica*, Zones 7–9, 9–7). “Though the yellow-green flowers are small, they bloom over a great portion of the winter, spring, and early summer,” he says. “They continuously provide nectar to bees and other beneficial insects and later fruit for birds.” This adaptable evergreen shrub, which grows five to 12 feet tall and wide in sun to part shade, had a number of medicinal applications from treating constipation to rheumatism to skin infections.

Its relative cascara (*Rhamnus purshiana*, syn. *Frangula purshiana*, Zones 3–9, 9–1) has a more northern native range along the West Coast from Northern California up into Canada. It grows 15 to 35 feet tall as a deciduous shrub or small tree in sun or part shade. Its insignificant greenish white spring flowers are followed by clusters of marble-sized fruit that morph from dark red to purple-black. Native Americans used a tea made from the bark as a laxative. Cascara bark is still widely used as an

ingredient in laxatives and for digestive problems.

## SUMACS

Various sumacs (*Rhus* spp.) are native to different parts of the continent. Indigenous peoples used the bark and fresh or dried fruit of their local species to make a tea used to treat colds, sore throat, fever, and diarrhea. Medicines made from the astringent leaves and young twigs were applied topically to staunch bleeding, reduce inflammation, and prevent infection of wounds. The fruits were chewed to relieve toothaches.

In the landscape, fast-growing sumacs can help stabilize soil along waterways. Linda Lehmusvirta, writer and producer of the PBS show *Central Texas Gardener*, grows fragrant sumac (*Rhus aromatica*, Zones 2–8, 8–1) in her multi-level hedgerow, where its deciduous, trifoliolate leaves and spreading habit provide shelter for small birds. Its native range includes much of North America. “Mine’s gone along with all that the Texas weather throws its way: extended drought, unusual freezes, and ‘frog-strangling’ rains,” she reports. Growing five to 12 feet tall and four to six feet wide, its leaves turn deep red or orange in fall. Female plants bear showy clusters of small red berries in summer.

The evergreen sumac (*R. virens*, Zones 7–11, 12–7) “sports glossy green leaves on a beautifully structural spreading form, though it can be pruned as a dense hedge,” says Lehmusvirta. This Southwest native grows eight to 12 feet tall and wide in sun or part shade, and adapts to most soils. “Females produce small white flowers in late summer to the delight of bees and other pollinators. Fuzzy, orange-red fruits sustain wildlife through winter—and we can eat them, too,” says Lehmusvirta.

## YAUPON HOLLY

“When gardeners ask me for a durable, evergreen small shrubby tree for screening and wildlife benefit, I always suggest Yaupon holly,” says Lehmusvirta. Native to the Southeast, *Ilex vomitoria* (Zones 7–11, 12–1) grows 12 to 25 feet tall. It thrives in moist soil but will withstand drought, and adapts to sun or light shade. As long as there is a male plant nearby, females bear an abundance of bright red fruit in fall that provide vital winter sustenance for birds.



Top: Female plants of fragrant sumac bear red summer berries that were once chewed to relieve toothaches. Above: Extracts of witch hazel bark are still widely used today in skin-care products.

## MORE NATIVE WOODY PLANTS WITH MEDICINAL PROPERTIES

Here are additional species native to North America that were historically used as sources of medicine. Some are still in use.

Name	Height/ Spread (ft.)	Ornamental Characteristics, Medicinal Uses	Native Range	USDA Hardiness, AHS Heat Zones
<i>Arctostaphylos patula</i> (greenleaf manzanita)	3–6/3–6	Spreading evergreen shrub with exfoliating bark and pink to white spring flowers. Astringent, cathartic.	West of the Rockies	6–9, 9–6
<i>Aronia melanocarpa</i> (black chokeberry)	3–8/3–6	Deciduous shrub with white spring flowers and dark purple fruit. Anti-bacterial, anti-viral, anti-diabetic.	Eastern North America	3–8, 8–1
<i>Cephalanthus occidentalis</i> (buttonbush)	3–8/3–6	Deciduous shrub with spherical clusters of white flowers in late summer. Bark tea used for toothaches, eye wash, emetic, and fever.	Most of North America	5–10, 12–3
<i>Hydrangea arborescens</i> (smooth hydrangea)	2–5/3–10	Deciduous shrub with clusters of white flowers in summer. Topically as wound dressing. Bark tea used for urinary tract problems.	Eastern North America	3–9, 9–1
<i>Mahonia aquifolium</i> (Oregon grape)	1–4/2–4	Spreading evergreen shrub with yellow flowers in early spring, followed by dark blue fruit. Used to treat gastrointestinal maladies, yellow fever, tuberculosis, and eye irritations.	Western North America	6–9, 9–6
<i>Sambucus canadensis</i> (American elderberry)	5–10/3–8	Deciduous shrub with white flowers in early summer. Bark tea used as diuretic, laxative, and for headaches, colds, and other maladies.	Most of North America	4–9, 9–1
<i>Sassafras albidum</i> (sassafras)	30–60/12–25	Deciduous tree with three distinct leaf shapes, yellow-orange fall color. Used as a tonic, topically to destroy lice and treat insect bites.	Eastern North America	4–8, 8–3
<i>Thuja plicata</i> (western red cedar)	40–60/10–18	Conical evergreen tree with dark green needles. Used to treat colds, stomach pain, anti-bacterial.	Western North America	6–8, 8–6



*Arctostaphylos patula*



*Aronia melanocarpa*



*Thuja plicata*

Yaupon holly is the only native North American plant known to contain caffeine. Several indigenous cultures considered tea brewed from the leaves a sacred beverage.

Used as a stimulant in small quantities, it was thought to induce vomiting when consumed in very large doses, hence the species name. (In fact, vomiting was most likely caused by other substances that were

added to the tea.) During the Civil War, Confederate soldiers roasted leaves for use as a coffee substitute.

## WITCH HAZEL

Native to eastern North America, common witch hazel (*Hamamelis virginiana*, Zones 3–8, 8–1) unfurls its small, strap-like yellow flowers as leaves drop in autumn. Its bark and leaves have been used

for centuries to treat a variety of medical issues, including wounds and skin irritations; eye, mouth, and throat infections; hemorrhoids, and kidney problems.

“A distillation of the bark is highly astringent, but gentle, and has found its place in our medicinal history, as well as in today’s over-the-counter medicine use, as a soothing and anti-inflammatory remedy for skin concerns,” says Tammi

## Sources

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**Forestfarm**, Williams, OR. [www.forestfarm.com](http://www.forestfarm.com).

**Sooner Plant Farm**, Park Hill, OK. [www.soonerplantfarm.com](http://www.soonerplantfarm.com).

## Resources

### **American Household Botany:**

**A History of Useful Plants 1620–1900** by Judith Sumner. Timber Press, Portland, OR, 2004.

### **Medicinal & Other Uses of North**

**American Plants** by Charlotte Erichsen-Brown. Dover Publications, Mineola, NY, 1979.

**Peterson Field Guide to Medicinal Plants and Herbs of Eastern and Central North America** by Steven Foster and James A. Duke. Houghton Mifflin Harcourt, Boston, MA, 2014.

Hartung, author of *Cattail Moonshine & Milkweed Medicine* (Storey Publishing, 2016). Witch hazel extract is still widely used today in skin-care products and hemorrhoid treatments.

Witch hazel is typically multi-stemmed and vase-shaped, reaching eight to 20 feet tall. It thrives in full sun to part shade, and tolerates a wide range of soil conditions.

## JUNIPERS

Several species of juniper inhabit North America, including the red cedar (*Juniperus virginiana*, Zones 3–9, 9–1), native to the East, western juniper (*J. occidentalis*, Zones 5–8, 8–5) native to the Northwest, and common juniper (*J. communis*, Zones 2–6, 6–1), native to most of the cooler regions of the continent. All are rugged plants, mostly trees, but there are low-growing forms as well.

“Juniper berries have traditionally been used as a respiratory expectorant, assisting in a productive cough that can clear out phlegm and congestion from common colds,” says Hartung. The sticky sap of junipers and a few other conifers was once used as an antiseptic wound dressing. “If a skin gash needed to be pulled together to facilitate healing, the skin was held closed to the degree possible and then the sap was applied to the top. This would hold the wound closed, while pre-



The glaucous blue berries of red cedar were traditionally used as an expectorant.

venting dirt and other contaminants from getting into the wound, and foster healing,” explains Hartung.

## FLOWERING DOGWOOD

It is hard to match the flowering dogwood (*Cornus florida*, Zones 5–8, 8–3) for its year-round landscape interest. “The large showy white or pink bracts subtending the flowers are attractive both up close and from a distance, so this mid-sized tree is well used as a specimen or within a mixed border,” says Matthew Lobdell, curator of living collections at the Morton Arboretum in Lisle, Illinois.

Native to the woodlands of eastern North America, its green foliage turns red in autumn, and the crimson fruits are a favorite of birds. “Site selection is important for this species as it generally requires an acidic, moist but well-drained soil and is intolerant of many other soil conditions,” says Lobdell.

The Cherokee administered an infusion of dried bark and root to treat measles and

worms; a poultice was applied as an antiseptic for wounds; twigs were chewed to treat toothache and mouth sores. Both Native Americans and Colonial healers used the root bark to alleviate headaches, muscle pain, and fever, and in the South during the Civil War to treat malaria.

## CONNECTING TO THE PAST

These and many other North American native plants have so much to offer our landscapes, gardens, and ecosystems. Discovering their wide-ranging medicinal uses by earlier generations deepens our appreciation for them, even if we may now rely on modern medicine to cure what ails us. As Todd Lynch says, “There’s a magic in connecting with the practices of those who went before us, and a pride in stewardship of those places and plants.”

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