John Clayton Chapter of the Virginia Native Plant Society

## MAY-APPLE

Podophyllum peltatum

By Helen Hamilton, *President of the John Clayton Chapter, VNPS* 

Long grown by southeast gardeners, this perennial has a long history, going back to Linnaeus (Swedish botanist responsible for our two-name system) who named it. Supposedly he saw resemblance between the leaf and a duck's foot and so called it "foot-leaf", podo being Greek for "foot" and phylum meaning "leaf". Imaginative American children have called them "green umbrellas".

May-apples do well in any good garden soil with added organic matter and filtered sunlight or partial shade. If properly planted in a friendly environment, may-apple is a superb groundcover, rapidly covering problem areas of bare earth, even slopes where erosion is a problem. Over a few seasons the plants will merge. Propagation is by seed and the rootstocks, which can be divided almost any time.

The large, deeply divided leaves are usually some nine inches across, sitting on top of a foothigh stem, with leaf overlapping neighboring leaf. The nodding white flowers are hidden beneath the leafy canopy, and bloom only on plants that have two leaflets. By mid-summer a fleshy, yellowish eggshaped fruit about two inches long appears, again hidden by the leaves.





The fruit is edible when ripe, but all other parts of the plant are toxic. The roots produce a toxic action on cell division and have been used in anticancer therapies. But when eaten with abandon the plant can lead to death. Amerindians made an insecticide from powdered roots.

Sometimes after periods of rainfall in midsummer, the may-apple leaf becomes spotted with orangeyellow spots, from a fungus. There is no treatment and the plants quickly recover.

May-apple is sometimes called hog-apple, mandrake or wild lemon. ❖

Photos: Mayapple (*Podophyllum peltatum*) from vnps.org For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

## WILD GINGER/HEARTLEAF GINGER

Asarum canadense/Hexastylis virginica

By Helen Hamilton, President of the John Clayton Chapter, VNPS

The kidney-shaped leaves of Wild Ginger (*Asarum canadense*) are deciduous. They are soft to the touch, densely short-hairy, evenly green, and grow in pairs. Since it spreads via long rhizomes, Wild Ginger sometimes grows in dense stands. The heart-shaped leaves of Heartleaf Ginger (*Hexastylis virginica*), in contrast, are leathery, lustrous, and evergreen. They are often mottled with silvery veining and can develop a purple tinge in winter. Each plant produces only one leaf each year, rather than a pair of leaves.

The rootstocks and sometimes the leaves (depending on rainfall) of both species have a ginger-like aroma and a hot spicy taste. The flowers of both are "little brown jugs", growing beneath the leaves and hugging the ground (often hidden beneath leaf litter). They are pollinated by gnats, beetles, and the flies of March and April.

Wild Ginger is widely distributed in the eastern and central U.S., but Heartleaf Ginger is restricted to the southeastern states, ranging from Virginia and North Carolina westward to eastern parts of Kentucky and Tennessee. Both gingers are widely distributed throughout Virginia, but they grow in markedly different soil types. Wild Ginger thrives in nutrient-rich soils, such as those found in calcareous ravines in the Coastal Plain; Heartleaf Ginger typically grows in acidic soils of moist to dry upland woods.

You can test the identity of a wild ginger by probing just below the ground with a finger and scratching the rhizome. A ginger-like smell on your finger will be proof. Early settlers thought these plants were related to the tropical gingers, but they are not. Native Americans used the rhizome to flavor foods much as real ginger is used. There are numerous accounts of

Native Americans using wild ginger to protect those who ate spoiled meat or food that might be poisoned. The plant has been shown to have certain antimicrobial properties, lending credence to early reports of its medicinal properties in the treatment of digestive disorders, to produce abortion, to reduce fever and for coughs and sore throats.

The genus "Hexastylis" is named from the Greek "hex" for six and "stylus" for style, referring to six distinct styles in a flower (in contrast to a single style with six lobes in Asarum.) For many years taxonomists have differed on whether the various species of evergreen gingers should be recognized as a separate genus (Hexastylis) or treated as species of the genus Asarum. That dispute continues today. Some recent data lends support to their separation into two genera, and both names will appear in the new Flora of Virginia.

To grow gingers in the home garden, provide a good, humus-rich soil in full or dappled shade. Propagation is by division in the spring, root-cuttings, and seed. Gingers are great ground covers under shrubbery or along woodland pathways, and they can withstand dry conditions. ••





**Photo:** Heartleaf Ginger (*Hexastylis virginica*) taken by Jan Newton For more information about native plants visit www.vnps.org.

#### John Clayton Chapter of the Virginia Native Plant Society

### WILD COMFREY

Cynoglossum virginianum

By Helen Hamilton, President of the John Clayton Chapter, VNPS

Wild comfrey is a rough, hairy perennial growing to 2 feet tall. The flower looks like a Forget-me-not, but it has large leaves which clasp the hairy stem. The leaves at the base are large and grow from the stem. The pale blue flowers have 5 corolla lobes and grow in clusters at the end of a stalk. This species is often abundant in moist woods in spring, following earlier blooming plants like the golden ragwort and violets.

This plant grows in upland woods from Connecticut to Oklahoma and south to Florida and Louisiana, and most of eastern United States and Canada. Wild comfrey blooms April-May in our area and its fruits (bristly nutlets) mature in the summer.

"Cynoglossum" was named from the Greek cynos, "of a dog", and glossa, "tongue", from the shape and texture of the leaves. Cherokee used the root tea for "bad memory", cancer, itching of genitals and milky urine. Later, the leaves have been used as tobacco. •



Photo from Wikipedia



**Photo:** Wild Comfrey (*Cynoglossum virginianum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

#### John Clayton Chapter of the Virginia Native Plant Society

### **BLUE-EYED GRASS**

Sisyrinchium spp.

By Helen Hamilton, President of the John Clayton Chapter, VNPS

Not a grass, but a member of the Iris Family, this little blue flower has a yellow eye; each of the six petal-like parts has a bristle tip. Leaves are narrow and grasslike, 6-18 inches tall. Flower color ranges from pale blue to deep blue-violet, the flower size from ¼" to ¾" wide. Small

round fruits appear in summer.

Blue-eyed grass does best in full sun to partial shade, preferring good, moist, well-drained soil. When massed, they are attractive in leaf but even more charming in bloom. The plants look great in a rock garden or along a border and can naturalize in the lawn. Propagation is by seed or division; they will self-seed, but not aggressively.

Five species are found in eastern Virginia, two of which grow in nearly every county. Blue-eyed Grass is found in meadows, ditches, grassy places, and damp woods over eastern U.S. and Canada. The genus name is taken from an old word for "a bulbous plant", which this is. ❖



**Photo:** Blue-eyed Grass (*Sisyrinchium sp.*) taken by Jan Newton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

### PINK LADY-SLIPPER

Cypripedium acaule

By Helen Hamilton, *President of the John Clayton Chapter, VNPS* 

No flower is more recognizable than the pink lady-slipper, with a distinctive inflated slipper-like lip petal, veined with red and with a crease down the front. This is our only lady-slipper without stem leaves. Surrounding the base of the flower-stem is a subopposite pair of wide, ribbed, and oval 8-inch leaves.

These perennial orchids are found in acid soil, from swamps and bogs to dry woods and sand-dunes. They do poorly in deep shade and are usually found in old forests with broken canopy or in young forests regenerating after logging or fire. Road cuts and other edge habitats are also good places to find them.

Lady-slippers are native to every county in Virginia, growing along the mountains and coastal plain to South Carolina and Alabama, and in most areas of eastern and central U.S. and Canada.

This species is very difficult to grow under garden conditions, and must have certain microscopic fungi which the tiny seeds require for development. They should never be moved from their natural habitat unless they are in imminent danger of destruction.

Orchids often have swollen, ball-shaped tubers, suggesting testicles; these roots are widely



regarded as aphrodisiacs. The "doctrine of signatures" refers to an ancient idea that if a plant part was shaped like a human organ or suggested a disease, then that plant was useful for that particular organ or ailment. A plant widely used in the 1800's as a sedative, the hairy stems have caused dermatitis. Both the pink and yellow lady-slipper were often harvested in the 19th century, contributing to scarcity in the current century (from *Medicinal Plants and Herbs*, Foster and Duke, 2000.)

The word "orchid" derives from the Greek for "testicle", which the genus name comes from Latin for Venus slipper. ❖

**Photo:** Pink lady-slipper (*Cypripedium acaule*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

#### John Clayton Chapter of the Virginia Native Plant Society

### WILD STRAWBERRY

Fragaria virginiana

By Helen Hamilton, *President of the John Clayton Chapter, VNPS* 

Wild Virginia Strawberry has red fruits, similar to the cultivated species, but smaller and much sweeter. The flowers are white, not yellow, and like other members of the Rose family, the centers are filled with a large number of yellow anthers. This plant is instantly recognizable as a strawberry with 3-parted, coarsely toothed

leaves, and a ground-hugging habit. The leaves are carried on six-inch long, hairy stalks, with the flowers no taller, a loose cluster appearing on short, hairy stalks.

Common in patches in fields and dry, open places in sun or shade. Wild Strawberry is found in every county in Virginia, and throughout U.S. and Canada. It will tolerate moderately acid soil. Reproducing by runners, this low plant is a good groundcover over the summer, blooming April-June with spreading green leaves until frost.

Cultivated strawberries are hybrids developed

from this native species and a South American one.

The berries attract wildlife, and the plant is a larval host plant for the gray hairstreak butterfly, common in coastal Virginia.

American Indians and early settlers used leaf tea as a nerve tonic and for sore throats, among treatments for other ailments. Recognized for their protective qualities, the berries were eaten for scurvy and gout. An extract of fresh leaves is rich in vitamin C. ❖



**Photo:** Wild Strawberry (*Fragaria virginiana*) by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

### **BLUE TOADFLAX**

Nuttallanthus (Linaria) canadensis

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

While the flowers are small and the stems slender, Blue Toadflax grows in conspicuous profusion in early spring. It is easy to identify with its 2-lipped, spurred, light blue-violet flowers in an elongated cluster. The flowers are about 1/2" long; upper lip is 2-lobed, lower lip 3-lobed with 2 small white ridges. A long, thread-like spur at the base projects backward and downward. From a basal rosette of prostrate leafy stems, erect flowering stems grow to 2 feet tall. Stem leaves are long, thin and wispy, usually alternate. Many sandy roadsides have a haze of blue from Blue Toadflax colonies in bloom.

This perennial grows in full sun or partial shade in open, dry sites and abandoned fields, which are usually sandy. The plant is found in eastern and central counties of Virginia, and ranges from Massachusetts to Minnesota, south to Florida and Mexico and on the Pacific Coast. Blooms March-May.

The leaves resemble those of flax, which accounts for the common name. The older genus name is from the Latin *linum*, for "flax."



**Photo:** Blue Toadflax (*Nuttallanthus canadensis*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

### WILD PEPPERGRASS

Lepidium virginicum

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

This common lawn and roadside weed has tiny white 4-petaled flowers with 2-4 stamens arranged in elongated clusters at the ends of the stems. The distinctive seed capsules are flat, roundish, slightly notched and less than ¼ inch long. An annual, or sometimes biennial, Wild

Peppergrass grows 4-20 inches tall, with erect, highly branched stems. The basal leaves are stalked and deeply lobed, while the leaves on the stems are toothed and lance-shaped.

Blooming in April through June in dry soil with full sun in fields, roadsides, gardens and waste areas, Wild Peppergrass is found in all counties of Virginia and across the U.S. The introduced species Cow Cress (*L. campestre*) is also widespread across Virginia and the continent. The stems of Cow Cress are gray-green and densely covered with long, fine hairs, while the native

Wild Peppergrass has mostly smooth stems.

This prolific weed is one of the most common pepperweeds. Its seeds have a peppery taste and can be used to season soups and stews. A rich source of vitamin C, the young leaves are used in salads or cooked as greens. Folk medicine has found many uses for this plant - to treat scurvy, coughs, asthma, and rheumatic pain. The genus name is derived from the Greek for "little scale," referring to the fruit. �



**Photo:** Wild Peppergrass (*Lepidium virginicum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

## **DOGBANE**

Apocynum cannabinum

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

This shrub-like herbaceous perennial grows 3-5 feet tall with attractive purplish stems that branch near the top. The long, drooping leaves are opposite on the stem, attached with short stalks. Like milkweeds, which they superficially resemble, both stems and leaves produce a milky sap when broken. White, bell-like flowers appear in clusters at the ends of branches from May through July.

This plant is found in all counties of Virginia, and throughout the U.S. and Canada.

Easy to grow, with erect stems, Dogbane would fit at the back of a perennial border or at the edge of woodlands. It prefers full sun and somewhat moist soils but tolerates both flooding and drought. The Monarch butterfly uses Dogbane for nectar and as host plant for its caterpillars.

The common name, Dogbane, refers to the plant's toxic nature, which has been described as "poisonous to dogs." *Apocynum means* "away dog!" and *cannabinum* means "like hemp." The roots were commonly harvested in the 19th and early 20th centuries for a variety of folk and other medical purposes. Native Americans and colonists used the berries and root in weak teas for heart ailments and as a diuretic, with appropriate preparation, since all parts of the plant



are poisonous, containing glycosides affecting heart activity.

Also known as "Indian Hemp," Native American women made miles and miles of twine from the long fibers in the stems of this plant.

Their homes were constructed of vertical and horizontal poles covered with bent saplings, all lashed together with Dogbane twine, which also furnished fishnets, baskets, mats and ropes. Such uses are thousands of years old – Dogbane remnants have been found in ancient archeological sites. ❖

**Photo:** Dogbane (*Apocynum cannabinum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

## WILD COLUMBINE

Aquilegia canadensis

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

This is one of our loveliness early spring flowers, with hanging red flowers that have long spurs and yellow centers. The nectar at the base of the spurs attracts long-tongued insects and hummingbirds. The flowers are mature when migrating hummingbirds appear in our area, and are important food for these little birds, and for early butterflies and bees as well. Insects seeking the nectar will brush against

the extended anthers, collecting pollen to transfer to a neighboring flower with receptive female parts.

Native to eastern U.S., Red Columbine is found in most counties of Virginia, growing wild in roadsides and forest edges. This early, long-blooming (March-May) spring plant forms small clumps about 2 feet tall. Once established, Red Columbine is easy to grow in a woodland garden with moist soil. This perennial has a light, airy appearance, but is very durable and tolerant of cold weather. The aboveground plant disappears in the fall, but returns each year from the

fibrous roots. As the plant self-seeds in early autumn, sprouts will appear the next year in other favorable garden locations, and seeds are easily collected for distribution in other areas. Red Columbine looks wonderful when planted with Golden Ragwort, Confederate (white) Violets, and Wild Blue Phlox.

Attractive, lacy blue-green leaves are compound, divided into round-lobed threes. After the flowers fade, leafminers will leave traces in the leaves but they do not damage the roots of this perennial. When the leaves become unsightly, they can be removed, with no harm to the plant. Deer will avoid Red Columbine as the foliage is toxic. ❖



**Photo:** Wild Columbine (*Aquilegia canadensis*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

# JAMESTOWN (ATAMASCO) LILY

Zephyranthes atamasca

By Helen Hamilton, Past-president of the John Clayton Chapter, VNPS

Jamestown lilies were among the first of many beautiful wildflowers to be noticed by the Jamestown colonists. A writer in 1629 reports: "The Indians in Virginia do call it *Attamusco*, some among us do call it *Lilionarcissus Virginianus*, because of the likeness of the flower to a Lilly (sic), and the leaves and root to a Daffodil." The Indian name refers to the location of the bulb under grass-like leaves. The genus name comes from the Greek, *zephyros*, meaning west wind, a reference to their origin in the Western Hemisphere from which they were first introduced to European gardeners in the 1800's.

Many species of *Zephyranthes* live in dry regions where they emerge from dormancy and quickly burst into bloom after infrequent heavy rainstorms. Hence, other common names are "rain lily", "fairy lily", and "zephyr lily". With a flower form like a trumpet, an alternative common name is "Easter lily", although it is not closely related to the Easter lily of florist shops. A



member of the Amaryllis Family, the Jamestown Lily is related to the familiar daffodils, amaryllis, and snowdrops.

The bulb may have been used medically by some southern Native American tribes for toothache but all parts of the plant are poisonous if eaten. Also called "stagger lily" because horses eating the leaves or bulbs succumb to a cerebrospinal disease. Bacon's Rebellion was put down when the settlers served a tea made from the leaves to the English soldiers, who seemed to be intoxicated for several days.

The fragrant flowers are white with a yellowish center, and the stems may be as tall as of 12-18 inches.. They grow well in shade to part shade to full sun, preferring a low, damp location. Rafts of these lovely white lilies announce the arrival of spring in moist open woodlands, meadows and along country roads throughout the southeastern U.S. from Virginia to Mississippi and the northern half of Florida. Another of its habitats is on low ground adjacent to brackish marshes, such as at Jamestown Island.

Jamestown lily is hardy in zones 7-10. To propagate, divide the small bulblets from the mother bulb. The seeds can be planted as soon as they ripen, and will germinate quickly, but it will be 2-3 years before seedling plants produce their first flowers. Jamestown lilies look best in masses. They can be grown right in the lawn where they will rise and flower in early spring before you have to begin mowing the grass, or in a woodland garden. ❖

**Photo:** Jamestown Lily (*Zephyranthes atamasca*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

### SASSAFRAS

Sassafras albidum

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

This tree is unique for its three distinctive leaf shapes: entire, mitten-shaped, and three-lobed, all on the same tree. In mid-April little bunches of yellow-green flower clusters are scattered profusely over the tree, drooping as the leaves emerge. The green twigs, bark and leaves carry aromatic oils – spicy-fragrant when crushed or rubbed. Round fruits appear in mid-summer, turning dark blue on scarlet stalks; the leaves have outstanding color in the fall.

Sassafras is a moderately fast growing, small to medium-sized tree, valued for fragrant spring flowers, horizontal branching pattern, and striking fall color. It requires little care and can be a single specimen tree or planted in masses.

Found on virtually all soil types, Sassafras is native to every county in Virginia, its range extending from southern Maine to Michigan and Missouri, and south to Florida and east Texas. It is a pioneer species on abandoned fields, along fence rows, and on dry ridges and upper slopes, especially following fire, often forming thickets from underground runners of parent trees, but grows best in open woods on moist, well-drained, sandy loam soils.

The bark, twigs, and leaves of sassafras are important foods for wildlife in some areas. Deer and rabbits browse the twigs in the winter and the leaves and succulent growth during spring and summer. Fruits are eaten by songbirds.

The durable coarse lumber was once used for barrels, buckets, posts, and fuel. The greenish twigs and leafstalks have a pleasant, spicy, slightly gummy taste. Aromatic oils in the roots and bark of sassafras have been used in many medicinal and cosmetic products. Explorers and colonists thought the aromatic root bark was a panacea, or cure-all, for diseases and shipped quantities to Europe. Sassafras roots provided the original flavoring for root beer, and were used until 1960, when certain compounds in the roots were found to be carcinogenic. Root beer is now flavored artificially.

Sassafras apparently is the American Indian name used by the Spanish and French settlers in Florida in the middle of the 16th century. This is the northernmost New World representative of the laurel family, an important source of tropical timbers. ❖



**Photo:** Sassafras (*Sassafras albidum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

# SWEETLEAF/HORSESUGAR

Symplocos tinctoria

By Helen Hamilton, John Clayton Chapter, VNPS

Sweetleaf is an unusually attractive shrub or small tree in the spring, with clusters of small, fragrant, cream-colored flowers - the numerous stamens make the blooms particularly showy. The flowers have both male and female parts, but the tree is not self-fertile. Butterflies visit the flowers for nectar in early spring and help with pollination. The flowers are fragrant and are closely spaced on the branches of last season's growth, before the leaves emerge.

Sweetleaf forms a short trunk bearing an open crown of spreading branches. The leaves are long, over 5 inches,

narrow, and somewhat leathery with a yellow midvein. The leaves appear evergreen and they may be weakly so, or deciduous, depending upon the climate where the tree grows.

This plant is native chiefly on the Coastal Plain from Delaware and Virginia to Florida and eastern Texas, north in the Mississippi



Valley to Arkansas and Tennessee and inland to the mountains of the Carolinas. Sweetleaf is easily cultivated preferring moist sandy soils in part shade. It can be seen scattered in the understory of woodlands and along streambanks and bottomlands.

The common names Sweetleaf and Horsesugar refer to the sweet, slightly acid taste and odor of the leaves that are commonly eaten by livestock. The sweetness seems variable from plant to plant and is similar to that of green apples. Sweet or not,

the taste is distinctive and is useful when distinguishing this tree from other similar species.

Sweetleaf is also known as Yellowwood for the yellow dye that can be made from the bark and leaves. Early settlers used the bark, and others with aromatic properties, as a tonic. ❖

**Photo:** Sweetleaf (*Symplocos tinctoria*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

John Clayton Chapter of the Virginia Native Plant Society

### RED COLUMBINE

Aquilegia canadensis

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS* 

This is one of our loveliest early spring flowers, with hanging red flowers that have long spurs and yellow centers. The nectar at the base of the spurs attracts long-tongued insects and hummingbirds. The flowers are mature when migrating hummingbirds appear in our area, and are important food for these little birds, and for early butterflies and bees as well. Insects seeking the nectar will brush against the extended anthers, collecting pollen to transfer to a neighboring flower with receptive female parts.

Native to eastern U.S., Red Columbine is found in most counties of Virginia, growing wild in roadsides and forest edges. This early, long-blooming (March-May) spring plant forms small clumps about 2 feet tall. Once established, Red Columbine is easy to grow in a woodland garden with moist soil.

This perennial has a light, airy appearance, but is very durable and tolerant of cold weather. The aboveground plant disappears in the fall, but returns each year from the fibrous roots. As the plant self-seeds in early autumn, sprouts will appear the next year in other favorable garden locations, and seeds are easily collected for distribution in other areas. Red Columbine looks wonderful when planted with Golden



Ragwort, Confederate (white) Violets, and Wild Blue Phlox.

Attractive, lacy blue-green leaves are compound, divided into round-lobed threes. After the flowers fade, leafminers will leave traces in the leaves but they do not damage the roots of this perennial. When the leaves become unsightly, they can be removed, with no harm to the plant. Deer will avoid Red Columbine as the foliage is toxic. �

**Photo:** Red Columbine (*Aquilegia canadensis*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.