

Common name: **Jack in the pulpit**

Genus Species: ***Arisaema triphyllum***



Photo credit: Hallie Schwab, mohonkpreserve.org

Description: Jack in the pulpit is an erect, perennial, herbaceous plant that grows 12 to 36 inches tall. Each mature plant produces a single "flower" (inflorescence) that contains many very tiny male or female flowers, or occasionally separate male and female flowers on the same plant. Flowers appear when the plant matures at about 3 years of age.

Habitats: Jack in the pulpit grows on fertile soils, in moist woodland and forest sites, bottomlands, swamps and bogs on sites with partial sun to shade.

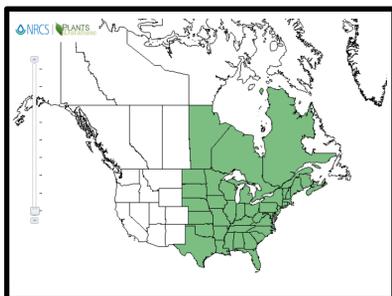
Phenology highlight: The pulpits vary in color from very pale to brilliant green with bold maroon stripes.

Species facts

- Jack in the pulpit flowers are pollinated by fungus gnats and the larvae of parasitic thrips, which are attracted to the flowers by the odor.
- The red berries are eaten by some woodland birds including wood thrush and wild turkey.
- The fleshy taproot (corm) was gathered by Native Americans and prepared as a vegetable.
- This species produces needle-like calcium oxalate crystals that are found in all plant tissues; eating this plant can cause severe pain if improperly prepared.



Photo credit: Rob Routledge, Sault College, Bugwood.org



Map credit: USDA, NRCS. 2014. The PLANTS Database <http://plants.usda.gov>, 20 January 2016). National Plant Data Team, Greensboro, NC 27401-4901 USA

Why observe this species? Jack in the pulpit is a USA-NPN regional plant species. Regional species are ecologically or economically important but are distributed more locally than calibration species. The NPN integrates these observations to understand plant responses within the different geographic regions of the nation.

Tips for observing this species: Please do not tear open or remove the pulpit (spathe), which contains the flowers. The flowers are small and easily damaged. Some individuals do not produce fruit every year.

For more information about phenology and the New York Phenology Project (NYPP), please visit the NYPP website (www.nyphenologyproject.org) and the USA-NPN website (www.usanpn.org).

Jack in the pulpit (*Arisaema triphyllum*)

Note: fruit phenophases are nested so you may need to record more than one phenophase in this group; for example, if you record **Y** for "ripe fruits" you should also record **Y** for "fruits."



Hallie Schwab
mohonkpreserve.org

Initial growth New growth of the plant is visible after a period of no growth (winter or drought) with new green shoots breaking through the soil. Growth is "initial" on each shoot until the first leaf has fully unfolded.



Geoff Griffiths
SUNY ESF

Leaves One or more live, unfolded leaves are visible. For seedlings, consider only true leaves and do not count the two small leaves (cotyledons) that are found almost immediately after the seedling germinates. Do not include fully dried or dead leaves.



Celia Cuomo
communitygreenways.org

Flowers or flower buds For jack in the pulpit, watch for the striped pulpit (spathe), which contains and hides the flowers. Do not tear open the pulpit to look for the individual flowers. Include developing spathes, but not wilted or dried ones.



Geoff Griffiths
SUNY ESF

Fruits One or more fruits are visible on the plant. For jack in the pulpit, individual fruits are berries that are clustered together and change from green to orange or bright red.



Celia Cuomo
communitygreenways.org

Ripe fruits One or more ripe fruits are visible on the plant. For jack in the pulpit, a fruit is considered ripe when it has turned orange or bright red.



Celia Cuomo
communitygreenways.org

Recent fruit or seed drop One or more mature fruits have dropped or been removed from the plant since your last visit. Do not include obviously immature fruits that drop before ripening.



Celia Cuomo
communitygreenways.org

Why is there no 'open flowers' phenophase? The tiny flowers are found on the cylindrical spadix and often partially or completely hidden from view. Removing the pulpit to find see whether the flowers are open may damage the plant.



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Cross-pollination Jack in the pulpit is not self-pollinating. Male flowers on a specific plant mature and die before female flowers on the same plant are mature. Female flowers need to be pollinated by pollen from male flowers of other plants.

All phenophases pictured here