Cultivation notes #4

Arisaema triphyllum (L.) Schott

Family **ARACEAE**

Jack-in-the-Pulpit

A RHODE ISLAND NATIVE PLANT by Gilbert George & Irene Stuckey

The native wild plant Jack-in-the-Pulpit makes an imposing plant in our spring gardens and woods, with its large green three-parted leaves and its interesting spathe and spadix. The spathe is a large bract, or modified leaf that encloses the flower head. Sometimes, as in Jack-in-the-Pulpit, the spathe is colorful and conspicuous, but it may also be papery as in members of the onion family. The spadix is a fleshy axis that bears clusters of stalkless flowers, and often in the arum family, which includes Jack-in-the-Pulpit, has a club-like apex. In Jack-in-the-Pulpit, male flowers are borne on the exposed upper end of the club-like spadix and the female flowers on the lower end that is completely enclosed by the spadix.

In Rhode Island our plants are *Arisaema triphyllum* ssp. *Triphyllum*, ssp. *Pusillum* (Peck) Huttleston, and ssp. *Stewardsonii* (Britt.) Huttleston. The tree subspecies may hybridize and are frequently difficult to identify accurately. The most conspicuous differences are as follows:

- (10 subspecies triphyllum: Plants are 12 to 36 inches tall, leaves usually pale on the lower surface, the two lateral leaflets strongly equal with the lower side striped, but rarely corrugated. Plants grow in moist to dry soil, in Rhode Island blooming from mid-May to early June. Common.
- (20 subspecies *pusillum*: Plants are smaller than (1), rarely more than 12 inches tall. Leaves green on both sides, lateral leaflets acute at base on both sides, tube of spathe not corrugated, purple or green, not striped above. Blooms in mid-May in Rhode Island, grows in moist but not wet soil. Uncommon.
- (10 subspecies stewardsonii: Plants midway in height between other subspecies, leaves green on both sides. Lateral leaflets have acute angles on both sides; tube of spathe strongly corrugated with white ribs, and in Rhode Island usually does not bloom until late May or June, and at times even in July. Less common than ssp. *Triphyllum* but more common than ssp. *Pusillum*.

The Jack-in-the-Pulpit usually can be found growing in wet to moist soil, often with skunk cabbage (*Symplocarpus foetidus*) and other wetland plants, under tall deciduous trees. The soil is acid and rich in humus. The trick to growing any of our native plants is to closely duplicate the conditions in which they are found growing naturally, in the wild. As with most native plants, this still leaves the gardener with plenty of latitude for growing Jacks. They are found growing under high shade, but will grow in the sun, although the whole plant will be paler. They cannot be grown in the shade of evergreens, since they need more sun for growth than is found under evergreen trees. The Jack-in-the-Pulpit is primarily a spring wild plant, but the red fruit is also interesting in late summer and fall, after all the leaves have fallen.

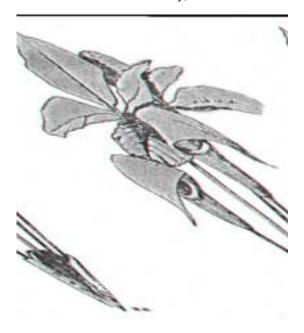


Illustration by RIWPS member Martha Marshall

CULTIVATION NOTES

Arisaema triphyllum (L.) SchottJack-in-the-Pulpit

Perennial Blooms late April-early July. Found in rich woods to wet swamps & bogs. Height 1-3ft.

Seed collection

Collect seeds when the fruit is bright red and has not fallen. Rub the pulp off the seeds, between paper or cloth. You can see if the seeds are viable by immersing them in water; inviable seeds will float to the top and should be discarded.

Propagation from Seed

Do not allow the seeds to dry out, but plant them immediately one-quarter inch deep in a flat of moistened soil. Cover with milled sphagnum moss, to prevent damp-off. Moisten the sphagnum with a mister and place the flat in a plastic bag, and place in the crisper of the refrigerator to stratify for three months. The seeds can also be planted outdoors immediately, or in a cold frame. Germination is much better, however, using the indoor techniques.

After stratification, place the flat on top of the refrigerator to germinate. When the true leaves form, pot each plant individually and grow them in a well-lit spot such as a window sill. The plants will develop a corm in the first season. The second year they should flower. They can be planted outdoors in a special bed or directly into the wildflower garden. In either case, add

compost or well-rotted leaves to amend the soil before planting. They will grow well with normal watering.

References

Fernald, M.L. *Gray's Manual of Botany, 8th. Ed.* American Book Company, NY. Pp. 382-383.

Kartesz, J.T. & R, Kartesz. 1980. A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland. Vol. II. The Biota of North America. UNC Press, Chapel Hill, NC. P.40

Palmatier, E.A, 1952. The Flora of Rhode Island. URI, Kingston, RI. P. 19.

Phillips, H.R. 1985. Growing and Propagating Wild Flowers. UNC Press, Chapel Hill, NC. Pp. 104-105.

Seymour, F.C. 1969. The Flora of New England. Charles E. Tuttle Co., Rutland, VT. Pp. 167-168.