

Symplocarpus foetidus, skunk-cabbage

by Dick Fisher

Family: Caraceae

While not a staple in every garden, *Symplocarpus foetidus*, or skunk cabbage, is nevertheless a fascinating plant belonging to a family of interesting plants. It gets a bad rap from its common name, which is not entirely undeserved. The leaves and stems do emit an unusual odor when injured or handled roughly, but even this serves a useful purpose. It is native to Rhode Island and to roughly the northeast quarter of the US and into southern Canada. Being an obligate wetland plant that prefers shade, it might well fill an appropriate niche if not in a garden at least in a landscape planting. It does have a year-round presence in the landscape.



Figure 1

The Arum family, which it is a member of, is interesting because of its modified floral components. The most familiar fellow member of this family is *Arisaema triphyllum*, Jack-in-the-pulpit (see Cultivation Note No. 4). The flower stalk, spadix, and its covering spathe are similar in each. As the Jack-in-the-pulpit berry cluster matures, it turns a beautiful bright red. The other family members native to Rhode Island are *Orontium aquaticum*, golden-club; *Calla palustris*, wild calla or water arum; and *Peltandra virginica*, green arrow-arum. All have the recognizable spadix and spathe geometry and, except for *Arisaema*, are obligate wetland plants.

Symplocarpus foetidus is one of the first plants to bloom in late winter or early spring while still encased in snow and ice (figure 1). The large, textured leaves unfold after the blossom appears and remain throughout the summer. By late summer the large blossom stock, the spadix, is visible above ground and turns from green to black-brown (figure 2A & 2B). As the leaves fade, the spadix remains and is accompanied by a new bud stalk. The berry cluster then disintegrates, leaving numerous 10 to 15-millimeter

brown, oval seeds scattered on the ground (figure 3). The bud stock may remain through the winter and can be seen protruding through the snow until the time is right to begin again (figure 4). [The photos were taken of the same cluster of plants in water and just next to the water over a year. The plants on drier soil out of the water did not seem to have a persisting bud stalk over the winter.]

Symplocarpus arises from a fleshy, thick rhizome, which sends up a pointed 'bud' composing the spathe and spadix. Tucked inside the spathe, or hood-like sheath, the inflorescence is composed of multiple small yellow or purplish flowers covering a stalk, the spadix. Individual flowers are composed of four tepals, four stamens, and a single ovary. It has been reported that the developing bud inside its protecting hood generates enough heat to melt surrounding snow and ice to make way for its continued growth.

Pollination occurs by various insects attracted to the unusual odor the plant parts emit. Most notably is the syrphid carrion fly, *Allograpta obliqua*, but there are many others. The spadix stays at ground level and matures into a tight ovoid cluster of berries measuring about 4 by 10 centimeters. The leaves unfold in a cluster after the bloom appears and may reach up to 60 centimeters in length. They turn yellow-brown and wilt away by the end of summer leaving the mature berry cluster.

Ethnic uses

Some members of the Arum family contain calcium oxalate crystals, which are a mechanical irritant and may



Figure 2A

precipitate in the kidneys, causing renal failure. *Symplocarpus* is perhaps relatively safe as Native Americans used it for food and medicinal purposes. The new forming leaves and shoots were cooked, seasoned, and eaten as a vegetable dish. All parts of the plant were used medicinally, either as a poultice applied to reduce local pain or as a wound dressing externally, or taken internally for a variety of ailments.

Propagation

Seeds can be collected as the fruiting stalk begins to disintegrate in the fall. The seeds are imbedded in the spongy mass but are easily removed by digging through the soft surrounding material, or they might be found spread on the ground as in figure 3. There is no offensive smell by this time, and the task is not unpleasant. The seeds should be kept moist, perhaps soaked in water for a week, and planted outside in pots or in the ground in the fall. Roots and a small bud appear the first year and leaves develop the second.

It has been suggested that *Symplocarpus* can be propagated by division by removing a portion of the rhizome. Apparently this can be difficult because of the large size of the rhizome, the wet muck and water in which it grows, and the smell emitted when messing around with the rhizome and roots. Likewise, transplanting within your garden is difficult, and it seems best to plant it in a permanent location initially.

Summary

If skunk-cabbage just had another name it would have more garden appeal. It is fascinating to watch through the seasons and does have a place in the correct environment, be that a garden, a woodland wet area, or for restoration projects. Availability is limited from standard nurseries, but it is grown by Arche Wild Native Nurseries in Quakertown, Pa., and perhaps other specialty nurseries I have not yet found.

References

- Cullina, W. *Growing and Propagating Wildflowers of the United States and Canada*. Houghton Mifflin. Boston/New York. 2000.
- Gould, L.L., et al. *Vascular Flora of Rhode Island*. Rhode Island Natural History Survey. Kingston, RI. 1998.
- Elpel, T. *Botany in a Day: The Patterns Method of Plant Identification*. 5th ed. HOPS Press, Pony, MT. 2006.
- Moerman, D.E. *Native American Ethnobotany*. Timber Press, Portland, OR. 1998.
- WebSites:
- www.GoBotany.org New England Wildflower Society. Accessed February 2016.
- www.eFloras.org Flora of North America, vol. 22. Accessed March 2017.
- www.archewild.com Arche Wild Native Nurseries, Quakertown, Pa.



Figure 2B



Figure 3



Figure 4

Rhode Island Wild Plant Society

PO Box 888, N. Kingstown, RI 02852
401.789.7497 • office@riwps.org
www.RIWPS.org