Flowers!

There are a lot of flowers out there, and you need to make sure you plant the right ones. Keep in mind the following:

- **Location**
  - Your geographical area
  - Where you plan to plant the flowers
- **Color of the blooms**
  - Is there a color preference or style you are going for?
  - Do you plan to create a pattern with your flowers?
- **Usefulness**
  - Do you need flowers that have a purpose?
  - What is the purpose you need?
  - Are the plants edible?
- **Allergens**
  - Are you allergic to certain types?

Flower Name	Tastes Like	Other Comments
Angelica	Celery	May cause skin allergies
Basil	Lemon and Mint	Variety of flavors
Dandelion	Similar to mushrooms	Makes a potent wine
Nasturtium	Sweet peppery flavor	Often pickled

Broad-leaved Arrow-head

Sagittaria latifolia (S. variabilis)

Flowers--White, 1 to 1-1/2 in. wide, in 3-bracted whorls of 3, borne near the summit of a leafless scape 4 in. to 4 ft. tall. Calyx of 3 sepals; corolla of 3 rounded, spreading petals. Stamens and pistils numerous, the former yellow in upper flowers; usually absent or imperfect in lower pistillate flowers.

Leaves: Exceedingly variable; those under water usually long and grass-like; upper ones sharply arrow-shaped or blunt and broad, spongy or leathery, on long petioles.

Preferred Habitat--Shallow water and mud.

Flowering Season--July-September.

Distribution--From Mexico northward throughout our area to the circumpolar regions.

Wading into shallow water or standing on some muddy shore, like a heron, this striking plant, so often found in that bird's haunts, is quite as decorative in a picture, and, happily, far more approachable in life. Indeed, one of the comforts of botany as compared with bird study is that we may get close enough to the flowers to observe their last detail, whereas the bird we have followed laboriously over hill and dale, through briers and swamps, darts away beyond the range of field-glasses with tantalizing swiftness.

While no single plant is yet thoroughly known to scientists, in spite of the years of study devoted by specialists to separate groups, no plant remains wholly meaningless. When Keppler discovered the majestic order of movement of the heavenly bodies, he exclaimed, "O God, I think Thy thoughts after Thee!"--the expression of a discipleship every reverent soul must be conscious of in penetrating, be it ever so little a way, into the inner meaning of the humblest wayside weed.

Any plant which elects to grow in shallow water must be amphibious: it must be able to breathe beneath the surface as the fish do, and also be adapted to thrive without those parts that correspond to gills; for ponds and streams have an unpleasant way of drying up in summer, leaving it stranded on the shore. This accounts in part for the variable leaves on the arrow-head, those underneath the water being long and ribbon-like, to bring the greatest possible area into contact with the air with which the water is charged. Broad leaves would be torn to shreds by the current through which grass-like blades glide harmlessly; but when this plant grows on shore, having no longer use for its lower ribbons, it loses them, and expands only broad arrow-shaped surfaces to the sunny air, leaves to be supplied with carbonic acid to assimilate, and sunshine to turn off, the oxygen and store up the carbon into their system.

ARUM FAMILY (Araceae)

Jack-in-the-Pulpit[a]

Arisaema triphyllum

Flowers--Minute, greenish yellow, clustered on the lower part of a smooth, club-shaped, slender spadix within a green and maroon or whitish-striped spathe that curves in a broad-pointed flap above it.

Leaves: 3-foliate, usually overtopping the spathe, their slender petioles 9 to 30 in. high, or as tall as the scape that rises from an acrid corm.

Fruit: Smooth, shining red berries clustered on the thickened club.

Preferred Habitat--Moist woodland and thickets.

Flowering Season--April-June.

Distribution--Nova Scotia westward to Minnesota, and southward to the Gulf states.

A jolly-looking preacher is Jack, standing erect in his parti-colored pulpit with a sounding-board over his head; but he is a gay deceiver, a wolf in sheep's clothing, literally a "brother to dragons," an arrant upstart, an ingrate, a murderer of innocent benefactors! "Female botanizing classes pounce upon it as they would upon a pious young clergyman," complains Mr. Ellwanger. A poor relation of the stately calla lily one knows Jack to be at a glance, her lovely white robe corresponding to his striped pulpit, her bright yellow spadix to his sleek reverence. In the damp woodlands where his pulpit is erected beneath leafy cathedral arches, minute flies or gnats, recently emerged from maggots in mushrooms, toadstools, or decaying logs, form the main part of his congregation.

Now, to drop the clerical simile, let us peep within the sheathing spathe, or, better still, strip it off altogether. Doctor Torrey states that the dark-striped spathes are the fertile plants, those with green and whitish lines, sterile. Within are smooth, glossy columns, and near the base of each we shall find the true flowers, minute affairs, some staminate; others, on distinct plants, pistillate, the berry bearers; or rarely both male and female florets seated on the same club, as if Jack's elaborate plan to prevent self-fertilization were not yet complete. Plants may be detected in process of evolution toward their ideals just as nations and men are. Doubtless when Jack's mechanism is perfected, his guilt will disappear. A little way above the florets the club enlarges abruptly, forming a projecting ledge that effectually closes the avenue of escape for many a guileless victim. A fungous gnat, enticed perhaps by the striped house of refuge from cold spring winds, and with a prospect of food below, enters and slides down the inside walls or the slippery, colored column: in either case descent is very easy; it is the return that is made so difficult, if not impossible, for the tiny visitors. Squeezing past the projecting ledge, the gnat finds himself in a roomy apartment whose floor--the bottom of the pulpit--is dusted over with fine pollen; that is, if he is among staminate flowers already mature. To get some of that pollen, with which the gnat presently covers himself, transferred to the minute pistillate florets waiting for it in a distant chamber is, of course, Jack's whole aim in enticing visitors within his polished walls; but what means are provided for their escape? Their efforts to crawl upward over the slippery surface only land them weak and discouraged where they started. The projecting ledge overhead prevents them from using their wings; the passage between the ledge and the spathe is far too narrow to permit flight. Now, if a gnat be persevering, he will presently discover a gap in the flap where the spathe folds together in front, and through this tiny opening he makes his escape, only to

enter another pulpit, like the trusted, but too trusting, messenger he is, and leave some of the vitalizing pollen on the fertile florets awaiting his coming.

But suppose the fly, small as he is, is too large to work his way out through the flap, or too bewildered or stupid to find the opening, or too exhausted after his futile efforts to get out through the overhead route to persevere, or too weak with hunger in case of long detention in a pistillate trap where no pollen is, what then? Open a dozen of Jack's pulpits, and in several, at least, dead victims will be found--pathetic little corpses sacrificed to the imperfection of his executive system. Had the flies entered mature spathes, whose walls had spread outward and away from the polished column, flight through the overhead route might have been possible. However glad we may be to make every due allowance for this sacrifice of the higher life to the lower, as only a temporary imperfection of mechanism incidental to the plant's higher development, Jack's present cruelty shocks us no less.

In June and July the thick-set club, studded over with bright berries, becomes conspicuous, to attract hungry woodland rovers in the hope

[a] Also know as Indian turnip

Figure 1 Plants

that the seeds will be dropped far from the parent plant. The Indians used to boil the berries for food. The farinaceous root (corm) they likewise boiled or dried to extract the stinging, blistering juice, leaving an edible little "turnip," however insipid and starchy.

Flowers always make people better, happier, and more helpful; they are sunshine, food and medicine for the soul.

Luther Burbank