The Enticing, the Enchanting, the Arisaemas

by Rekha Morris

My fascination with arisaemas dates back to my childhood in the Indian Himalayas where *Arisaema tortuosum* growing to a statuesque 4 to 5 feet in height with its large spathe and long upward curving erect spadix resembling a cobra ready to strike, both captivated and alarmed me.

Growing up as I had with images of serpent deities in the service of Hindu gods, I would spend hours mesmerized by a plant whose name I didn't know and whose whereabouts I didn't disclose to parents, guardians or siblings, as I was sure the god Shiva dwelled inside, and one day I would accost him to wreak havoc on my foes and bestow largess on myself.

Over the years this memory lingered as a mystical symbol of an irrecoverable past only to be awakened by *A. triphyllum* when we moved to the Piedmont and found it growing in the woods.

The genus *Arisaema (Aracea)*, of which two species, *A. dracontium* and *A. triphyllum*, are native to eastern North America, comprises some 150 species native to temperate and tropical Asia from Arabia, across the Himalayas, into Burma, China, Japan, Taiwan and Malaysia. The genus was established by K.F. Martius in 1931 on the basis of three Himalayan species, *A. costatum*, *A. speciosum* and *A. nepenthoides*, although N. Wallich illustrated and described them in 1828 under the genus *Arum*. The name is from Greek "aron" (arum) and "aima" signifying blood-red from the red markings on the foliage and peducles of some of the species.

NATIVE ARISAEMAS

Neither in size nor in the shape of its foliage and spadix does *A. triphyllum* resemble the *A. tortuosum* of my childhood, but the basic form of its spathe and habitat, growing as it does in damp woodland conditions, stirred the mysterious hold this species had on me. Now both the green form and the purple striped form, 'Zebrinum', grow in my woodland garden.

Although *A. triphyllum* (commonly known as Jack-in-the-pulpit, Indian turnip or dragon root) as its name suggests, has relatively large double sets of trifoliate leaves and grows best in moist woodlands in dappled shade, with sufficient moisture, it will also do well in more exposed sunlit areas and is hardy up to Zone 4. The color of the spathe varies from being all green or purplish striped green to white, and the short erect spadix which does not emerge out of the spathe is green, purplish green or purplish black as in 'Zebrinum'. Along streams, *A. triphyllum* grows almost 2 to 3 feet high and is a familiar sight in the woods in May and June.

Arisaema dracontium (green dragon), which is also hardy as far north as zone 4, appears to be less commonly seen or grown but is equally striking and easy in its cultural requirements. Its pedate foliage (resembling Asian species whose leaves form an 'U' shaped curve), slender, green spathe and long, curving spadix make *A. dracontium* a curious and delicate woodland plant well worth cultivating.

ASIAN ARISAEMAS

While some arisaemas from the higher altitudes of the Himalayas are less tolerant of the heat and humidity of our Southeast summers and some are not cold hardy even in Zone 7 winters, many may still be grown with relative ease. Their cultural requirements are similar to our native species: moist woodland conditions in dappled shade.

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Although these Asian species may be planted in spring, as with other perennials and shrubs, fall planting is preferable as this allows the plants to settle in without being stressed by the sudden onslaught of our hot, humid summers. At planting time the soil should be amended with well rotted compost and topped with a thick layer of mulch to protect the roots from heaving out of the ground during the alternating warm and cold spells of our winters.

It is not the flowers of *arisaema* that are visually arresting, but the curious forms of the spathe which encircles the flowers borne at the lower end of a fleshy spadix. The basic form of the spathe is that of a tube flaring out to form a hood, often elongating to a filament-like terminal as in *A. taiwanensis*. However, there is enormous variation in the shapes and colors of the spathes. Although browns, green and purples are the predominant colors, amongst Asian arisaemas there are spathes which are white, yellow and pink. Some spathes have stripes on their exterior surfaces, while others have a uniform color on their exterior faces and stripes on the inner surface.

Arisaema sikokianum (Japan) which has recently become quite popular with arisaema fanciers in this country, has a brown-purple exterior, cream-white inner surface and a startling white, club-shaped spadix. Arisaema flavum with its yellow-green spathe, is unusual not only it its coloration but also because its habitat ranges from Arabia to the drier areas of the Himalayas and western China, and is therefore considered the most drought resistant species of arisaemas. Other species such as *A. tortuosum, A. consanguineum* and *A. heterophyllum* have such stature and presence in our Southeast gardens (where established plants may grow to form sizable clumps some 3 feet in height in four to five years) that to exclude them would be intolerable deprivation.

One of the most captivating of the Asians is *A. taiwanensis* from Taiwan. In mid-March, what looks like a succulent cylindrical shoot brushed with purple-brown wave-like ripples emerges and begins to grow rapidly. Soon the pedate foliage begins to unfurl from bracts referred to as cataphylls. As the leaves open and begin to grow larger and taller, they resemble a green parasol with 12 to 15 segments, each nearly a foot in length terminating in a fine filament several inches long. Beneath this canopy the brown spathe enlarges to form a hood, whose silky texture, air of dignity and slightly sinister form are evocative of cobras, thus the common generic name of "cobra lilies." By mid-May the inflorescence dies down, but the foliage grows taller and larger and remains green and graceful until fall.

Arisaema heterophyllum (China) grows into a 4-foot tall, majestic plant with an awe inspiring form. Its deep green, flared spathe curves upwards in the middle to form a smooth hump resembling the back of a dolphin and then narrows to form an elongated triangular point. The stiff, tubular spadix emerges from one side of the spathe and curves upwards in a perfect "S" shape some 20 inches long. Both spathe and spadix are encircled by the emphatic, sweeping curve of the leaf structure, as if designed to halo this startling, hooded form which presides in the woodlands with an indefinable air of mystery and magic.

From the Ulleong Islands in the Japan Sea, *A. angustatum* var *peninsulae* is quite unlike the primordial, chthonian *A. taiwanensis* in appearance. Resembling our native *A. triphyllum* in the form of its spathe, it differs from them in its coloration. The green and white striped spathe has a light charcoal wash on the spathe-blade or hood and along the edges of the auricles. The foliage of *A. angustatum* unlike that of *A. triphyllum*, is pedate and is distinguished by silver mottling along the central veining in the variegated form.

Another unusual form of arisaema is seen in *A. ringens* from Japan, China and Korea. The glossy green, trifoliate leaves are broad and seem to shelter the pale white and green striped spathe which curls inwards. The deep chocolate auricles flare outwards as if to enfold the spathe tip, and the rounded, soft, green tactile spathe looks much like the head of some shy, bashful creature attempting to hide from the world.

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Arisaema ringens tends to break dormancy in the Southeast during the warm days we invariably get in February and can be damaged by succeeding cold spells unless well protected with mounds of mulch or kept in a pot that can be brought indoors if it does break dormancy early.

Both *A. taiwanensis* and *A. angustatum* emerge in mid-March and these need to be carefully monitored. During the freezing conditions of mid-March in 1996, the emergent shoots in my garden were mounded with mulch and then covered in a plastic encased terra cotta pot which was lined with layers of newspapers. Both survived to grace the woodlands with their bizarre beauty.

RELATED BEAUTIES

There are two near cousins of Arisaema that do well in the same growing conditions One of these is *Arisarum proboscideum (Aracea)* from the Mediterranean, southwest Europe and the Atlantic island. This is a low growing plant with slightly lustrous sagitate leaves that all but conceal the part-white, part-chocolate spathes, which resemble plumb mice disappearing underground with their curling, tail-like tips visible from the back. While *Arisarum proboscideum* requires fairly damp and shady conditions to thrive, another Arisaema relative, *Pinelllia (Aracea)*, comprising six species from China and Japan, thrive alongside the various Arisaema in my woodland garden.

The spathe of all three pinellia which I grow, *P. tripartita, P. pedatisecta* and *P. ternata,* is smaller than that of most Arisaema. The spadix of *P. pedatisecta* and *P. tripartita* is long and slender resembling that of *A. dracontium. P. tripartita*'s spathe can vary from green to deep purple on the inside shading to white.

A cultivar of tripartita introduced by Don Jacobs, 'Eco Purple Dragon', has a rich garnet purple, spoonshaped spathe. Contrasting with the deep chocolate/purple/ spathe of the above is the pale, pink flushed spathe of *P*. X 'Polly Sprout', a spontaneous garden hybrid between *P. tripartita* and *P. pedatisecta* at We-Du Nursery. While pinellias are generally prolific self seeders or multiply rapidly from bulblets as *P. ternata* does, *P.* "Polly Spout' is sterile. Unlike arisaemas, which send up their inflorescence only once either in spring or summer, pinellias do this repeatedly through the summer.

GENDER BENDERS

Although it is the inflorescence, foliage and appearance in the late summer and fall of clusters of bright orange-red berries which make arisaemas an unusual and enchanting addition to woodland gardens, its various forms of reproduction are equally fascinating. Some species are dioecious and the male and female flowers on the spadix are in separate plants. Others, like *A. dracontium,,* are monoecious with the female flowers below the male on the same spadix.

To further complicate matters, research has indicated that in some species, the same plant has been known to change sex from one year to the next. It has been suggested that under fertile growing conditions the plant will be a female and larger, but when less than optimum conditions prevail, it will either not flower or be a male. Such freedom of choice is indeed enviable in an over-populated world. One wonders if Ursula K. Le Guin had studied arisaemas before creating the Bethenian, who develop; into either males of females for the duration of each of their sexual cycles in *The Left Hand of Darkness*.