# Arisaema Species Descriptions

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When I got enamoured with *Arisaema* many years ago, I tried to compile a descriptive list of the various species. To my chagrin, all I could find were botanical descriptions of most. Even a comprehensive list of the species was nowhere to be found. Thus the quest that led to the formation of AEG (Arisaema Enthusiasts Group), helping with Roy Herold's AEG web page, the AEG Seed Distribution, etc.

Now that Arisaema have become a "main stream" genus, there are lovely descriptions in many catalogs and articles. Here, I've compiled some of them and finally got a start on the list I was looking for so many years ago.

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## The Genus Arisaema

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The genus of the Araceae has a very wide natural spread. Arisaemas are found in eastern North America southwards to Mexico and Guatamala. Arisaema also occur across temperate and tropical Asia to the mountains of east and central Africa, Yemen and Arabia. They range from Russia down to Japan, Korea and Formosa, across the Himalaya with the most southerly species in Tanzania. The most northerly occurence appears to be on the Russian island of Sakhalin.

Their greatest diversity seems to be in China, especially in Yunnan and Szechwan provinces. Many of the Chinese and Japanese species still have yet to be introduced to cultivation.

In general most can be grown out of doors, in light or dappled shade. Woodland edges or peat gardens are ideal.

Recently a wide range of Indian and Himalayan species have been introduced and are being grown by enthusiasts. More recently still a number of Formosan species have become available. It is nice to be able to report that almost all have settled well in captivity and shown a remarkable tolerance to a wide range of conditions.

Naming in the genus is complex and plants are more often misnamed than not. This is all complicated by a lack of field and herbarium studies and the slack and haphazard naming of many of the plants grown in nurseries.

# The Species Descriptions

Arisaema Species Descriptions

#### A. amurense (robustum)

One of the smaller species, seldom over 8 in. tall, with deep green, five-part foliage, a green spathe striped with white and with purple in f. robustum. It blooms in April-May and orange berries follow in the autumn.

Plant it in moist peaty soil where it will increase rapidly by the production of 5-8 mm "pups". These will flower in three years. It's habitat is N.E. Asia and it is the most northerly species known. It is apparently an octoploid species, 2n = 112.

#### A. angustatum

#### A. angustatum ssp. peninsulae

Three scale-like leaves clasp the stem below the two true leaves, each of which is divided into 5-14 leaflets. The spathe is green with vertical white stripes down the 2 in. tube, the blade of which is ovate with a narrow apex, and sticks out over the mouth of the tube. The greenish spadix is cylindrical and bends slightly forward at the apex. It comes from Japan, Korea and China and is adaptable to any soil, but moist, rich soil in partial shade is best.

#### A. auriculatum

The spathe is white at the base darkening along its length. The colour varies from light olive-green to green-yellow, with purple, knobbly cristate markings. It may sound horrible but it looks lovely. It sometimes has remarkable side lobes that stick out sideways from the spathe, much like the ear-flaps on an old-fashioned flying helmet. The tapering, narrow, deep-green-brown spadix winds its way to the sky. Out of cultivation for a very long time, but very deserving of a place in any collection. Tubers are naturally very small weighing barely 3gm when mature..

#### A. candidissimum

A late riser often not appearing until June, when all hope has passed. Then, suddenly, wide and waxy green leaves appear from a sharp "bamboo-shoot" that seems to appear overnight. As the leaves unfurl they reveal a tubular, white spathe, striped with cool lime-green and candy-pink. This is one of the few Arisaemas with anything like a pleasant scent. Some forms are delicately perfumed of roses or lily-of the valley according to your nose.

The original introductions were by Forrest from China where it has been re-found in recent years. The length of time that this plant has spent in cultivation means that some stocks have picked up infections. These stocks are sometimes characterised by reduced growth or appear chlorotic. It is not common but it does happen.

The species has two RHS accolades an AM in 1924, and an FCC in 1970. It is worth noting that the two awarded forms were very different. The AM form is white with green stripes and barely a touch of pink, the FCC form is (to my mind) the better form as the pink is richer and the whole plant has a faint but definite rose-like perfume.

In a genus of the oddly beautiful and strangely wonderful, is this most elegant of all, with pink and white striped spathes held above bold trifoliate and glossy foliage, forming large colonies in a relatively short period of time. As noted above, this species is a notorious late riser, often not in blossom for us until July. So note its place carefully in the semi-shaded garden..

#### A. ciliatum

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This species has lovely radiate leaves and a large spathe of deep chocolate brown boldly striped in light fawn the contrast is excellent. The plant itself grows well and increases nicely by means of stolons. A vigorous species with rich red-brown spathes, striped with white inside. The mouth of the spathe is covered with tiny hairs, the ciliae from which the plant takes its name. Easy to grow, but scarce. Sichuan, 3,500m, June.

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#### A. concinnum

A North Indian species with short to medium tall stems which carry a circular umbrella of pale green leaflets more or less level with, the spathe. The edges of the leaflets are folded and crinkled as if they have been tightened with a draw-string. The spathe is usually light green, with a white base, and white stripes extending along its length, although pale brown may infuse the green on the exterior. The tip is extended slightly and the extension is usually horizontal. The tip of the green (rarely brownish) spadix is contained within the spathe and slightly bent over at the tip.

A. concinnum is later flowering than many of the other Indian species and is easily grown outside in a well drained leafy soil.

#### A. consanguineum

This species has tall snakeskin-mottled stems of 24 in., but which may reach as high as 40 in. The "parasol" is a classic radiatisect leaf but one with narrow, numerous, ruffled leaflets (typically 14 and never less than 11, and 31 max.). This is consistently more leaflets than *A.erubescens* with which this is sometimes equated. The leaflets usually terminate in thread-like tips up to 3 inches long.

The leaves are borne just above a large, elongated spathe which has a white ring at the base, with a diverging spathe tube of green, infused to some extent with light to dark-brown. The spathe extension (limb) is broad and upturned, and is green or brown, the whole striped with brown.

In other variations, the purplish striped spathe arises from the leaf petiole just under the foliage, with a short spadix and a pendulous spathe with a long, acuminate tip. There is a form in the garden of John Gwynne which has a long, narrow red-purple spathe, surrounding a short, rounded spadix.

In still other variations, the spadix is white at the base turning to green then usually to brown. It is thick and shaped like and indian club.

Seed heads are strongly conical and elongated and are held downwards-facing on a short stalk, they are not hanging, but are held stiffly upside down. A. consanguineum is readily grown outside in the garden and even a small clump is quite spectacular. It is a diploid, 2n = 28.

It's distribution in the wild is from the E. Himalays to the Western Hills above Kunming in Yunnan Province. The latter population has many divided leaflets with long drip-tips atop stems to 3', and in woodland sites, mature plants can rise to nearly 6' in height.

#### A. costatum

With large tubers and robust growth, this species has a slightly mottled stem and a large, trifoliate emerald-green, shiny, wax-like leaf, edged with a thin red band. The inflated spathe is deep-shiny reddish-brown, striped in translucent white. The light shines through the white areas superbly. The spathe tip is extended and with the long tapering spadix, hangs out from the spathe.

*A. costatum* is easily grown in a leafy shaded spot and, in time, will form nice clumps. It is not often available and often other species are mislabeled as *A. costatum*.

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An outside garden spot suits this Himalayan plant. The spathe is a soft jade-green with a brown base that infuses upwards into the white striped tube, that is held just above the leaf parasol. This parasol is nearly circular, typically of 11 leaflets but varying from 5 (rarely) to 12. The edges of the leaflets are ruffled, unlike

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### A. dilatatum

Stout spathes of translucent glistening, crystalline white are strongly striped with sharply contrasted deep purple-brown, the spadix is glossy, bright emerald green. It is thin at the very base, abruptly dilates to become very fat, then tapers and bends horizontally before turning upwards again to describe a perfect "S" shaped curve. It really needs to be seen to appreciate its beauty. This is an Arisaema that would catch the eye of any gardener. You might have gathered that I like it.

### A. dracontium

Other than A. triphyllum, this is the only other New World species with the possible exception of A. macrospathum a contested species from Mexico which has not proved hardy on the east coast. A. dracontium with leaf stem rising to 2' or 3', topped by a many-segmented leaf, with the flowering stem somewhat shorter, topped by a green spathe and an erect, somewhat longer spadix with long appendage. Grow it in partial shade and average to moist soil.

### A. du-bois-reymondiae

Yes this really is a plant name, and what a wonderful name, almost good enough to grow it for on its own. This superb species is thought never to have been in cultivation outside of its native China. Broad cloak shaped spathes of white, green and varying amounts of caramel, with a very "open" and wide mouth, inside which the spadix is clearly visible. This is slightly hairy at the base and it tapers towards the centre before fattening once more to a tip not unlike a cotton wool bud in shape.

### A. echinatum

A rare plant from India. It has a whorled parasol of narrow leaflets, a lovely lizard-green tubular spathe with the "lid" lifted and elongated into a wispy brown moustache. The protruding pale green spadix appendix has a paint-brush tip, not unlike a tiny green, long-haired pussy-willow. (not bristly or hedgehog-like as has been suggested). Very distinctive and attractive. Eastern Himalayas. Hardy.

A. echinatum is very easy to identify. Look at the apical part of the appendage which must be softly hairy (not toothed like in A. ciliatum). The pseudostem is so short that the peduncle is nearly at the ground level; the spadix is distinctly stipitate. Guy Gusman

### A. elephas (Wilsonii)

This wonderful plant is full of personality! It is impossible to look at it in flower without a smile. The wide, inflated spathes are boldly striped with green and mahogany-brown. From the centre emerges a thickened spadix that looks just like an elephant raising its trunk. There is a single large leaf divided into three. The whole grows from a remarkably small tuber. Readily grown in a well drained leaf soil. Fully hardy in the UK.

#### A. engleri

#### A. erubescens

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the smooth, and more numerous leaflets of A. consanguineum.

The two can be told apart even in leaf, but are very distinct when in flower, as A. erubescens lacks the broad overflowing "flag-lid" of A. consanguineum, has a narrow more closed spathe with a much less elongated tip - it is virtually parallel-sided. The spathe tip is extended into a short "tail". The tube is emerald-green, thinly striped with white, and at the base there is a subtle spackling of brown-purple and this is repeated, more densely, at the mouth where it forms a purple ring, broadly striped in white.

The spadix is white, toning to purple at the tip, where it is bent over into a characteristic thickened hook, rather like the head of a burnt match. This is quite different from the club-shaped spadix in A. consanguineum.

The seed heads are broadly oval-shaped and held stiffly on erect stems rather than being held downwards-facing as in A. consanguineum.

These differences are often overlooked as much Indian material is mis-identified. The name is currently under review, with various schools arguing that the plant does not exist, or that it is the same as A. concinnum, or that it is the real name for A. consanguineum. The plant has similarities to both but is clearly different than either.

#### A. exappendiculatum

A rare and superb Asian species with divided leaves on a 12 in. mottled stem with hooded spathe of white, lined with green and/or caramel, and a darker central spadix. Grow it in leaf enriched soil in light shade. It is trouble free, hardy and an excellent garden plant.

#### A. fargesii

An excellent garden species from China. This has broad glossy leaves, each divided into three leaflets, on a stout petiole. The spathes are thickly textured and boldly striped in rich red-brown and white. It increases well from offsets which are made regularly. It has been cultivated in the Czech Republic for over twenty years, and is both fully hardy and very attractive.

#### A. flavum

A readily grown hardy species that grows here in full sun or shade, and sets seed readily. A charming addition to the range of species in cultivation. The species is particularly widespread and breaks down into three subspecies. These have been elucidated by Dr.G.Gusman of Brussels. I gratefully acknowledge his synopsis which is repeated with slight amendments below.

Dr Gusman would like to trace plants of African or middle eastern origins for his research. If you have any material that you would be prepared to exchange sell or donate then please either contact Dr.Gusman or ourselves

#### A. flavum ssp. abbreviatum

A. flavum (Forsk.)Schott ssp. abbreviatum (Schott) Murata from W. and C. Himalaya (Oman to Nepal). This is the usual plant encountered today in the trade: it is generally smaller than ssp. flavum and very dwarf forms can be found. The inflorescence, one of the smallest in the genus, appears slightly later than the leaves and remains at their level. The blade is yellow inside and outside, only faint white lines can be seen. A dark purple blotch conspicuously decorates the throat of the spathe where it often looks like a flying bird. The number of female flowers approximately balance the male ones.

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A. flavum ssp. abbreviatum (Tall Form)

Distinct from the normal "dwarf" form, this has stems 45-55 cm tall, which carry their vivid yellow flower well clear of the ground. It is hard to believe the two are the same subspecies but it is so. Raised from seed ex Czech Republic, the wild origins are lost.

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#### A. flavum ssp. flavum

A. flavum ssp. flavum (Forsk.) Schott From the mountains on both sides of the Strait of Bab-el-Mandeb (Ethiopia, Yemen). Alas, Forskal's description is so imprecise that it is hardly possible to get a good idea of his discovery. The specimens depicted in the Botanical Magazine) (in colour), in Hooker's paper (1900), show a small inflorescence, guite dark inside and are said to have a "spathe short, green, or yellowish, purple within, streaked with green; [and a] tube globose striated and strellised". If, you also open Engler's PflanzenReich and look at the line drawings, you will see that the spathe-limb is indeed longitudinally dark striped inside and that no trace of a dark blotch appears at the throat, junction of the blade and the tube. Moreover, the area occupied by the female flowers is according to Engler - "three times less than the male flowers".

#### A. flavum ssp. tibeticum

A.flavum (Forsk.) Schott ssp. tibeticum J. Murata from E.Himalaya (Sichuan to Bhutan and Tibet). This subspecies is the tallest and has the largest inflorescence, much larger than those of its Himalayan relatives. It was described by Murata in 1990. Here, as in A. nepenthoides, the spathe appears before the leaves unfurl and eventually overtops them.

The bright large yellow spathe blade is erect and, inside, doesn't bear the conspicuous purple blotch at the throat; the upper part of the tube is hardly stained inside with a few horizontal purple dots. subsp. tibeticum is used in Tibetan medicine.

It is worth pointing out that the inflorescence of this subspecies has an agreeable odour, a rare distinctive feature that it shares with two other Chinese species A.candidissimum W.W. Smith and A. odoratum J. Murata and S.K. Wu.

In my opinion, this one is outstanding and by far the best of the flavums.

#### A. formosanum

Growing in the high mountains of Taiwan, it has tall marbled, purple stained stems 20-28 in. tall, carrying two leaves split into many narrow radiating leaflets, like some oriental parasol. The spathe is slender and shades from jade green to either pale green or pale ochre, all are green striped and lined white, and up to 6 in. long. It has a slender grace and delicate appearance but stands up well to nasty, windy weather.

#### A. franchetianum

A dramatic Chinese species infrequently found in literature, but commonly seen in Yunnan Province. Trifoliate leaves with mid-leaflet quite enormous, to 12" in length and 10" in width and it's foliage is very similar in appearance to A. candidissimum. In spring, a large inflorescence is produced with a striking purple and white striped spathe and elongated spadix.

#### A. franchetianum (purpureogaleatum)

Growing specimens of this "species" show that there is no botanical difference between A. franchetianum Engl. (in 1881) and A. purpureogaleatum Engl. (in 1920). In Bot. Mag. 154 (1928): Tab. 9212, Stapf wrote a paper on A. purpureogaleatum and in the abstract he noted: Syn.: A. franchetianum Engl.

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However there is a slight difference, of horticultural interest only, as one can go in a continuous way from the typical franchetianum to the extreme form with a long galeate limb which characterizes purpureogaleatum.

#### A. fraternum

Sometimes confused with A. consanguineum, A. fraternum has been much smaller in cultivation (10"-16"). It is nothing like A. consanguineum in color either, the spathe is a delicate straw-yellow with a translucent appearance to it and a tiny purple edge...

#### A. galeatum

This species has an elongated tubular spathe changes from warm orange-brown at the base to emerald green at the top, striped with white for the whole length. At the top the spathe turns over into a cobra-like hood. Spectacular. Springs from large, polished hemispherical green tubers, these are lovely just to handle BUT... this species is VERY prone to storage rots, it may take more than one attempt to establish it in your garden. Once it is growing it is okay, but getting it going can be a problem.

#### A. griffithii

This is one of the most spectacularly sinister species of the genus. Often listed in catalogues, but rarely supplied in the live state, as it seems to transport badly, it is a trifoliate species with deep corrugated leaves, often with a bizarrely beautiful green metallic sheen and often with heavy purple veining. The flowers are amongst the most amazingly animated of the genus, with a white and purple striped, cobrahead-like spathe near ground level completely hiding the spadix inside.

#### A. griffithii v. pradhanii

This scarce form has a very broad spathe folded right down over itself displaying its polished chestnut and

emerald netted exterior as well as the mottled interior either side of the white striped tube. It's difficult to adequately convey its sinister, snake-like beauty.

#### A. heterocephalum

This one has stems up to 8 in. tall that bear 2 leaves, each divided into 10-20 narrow leaflets, which can be 6" by 3/4". The scientific name means 'different headed' and refers to the fact that the male and female forms of the plant are quite different. The male has a green tube, some 3 1/4" long, which flares open towards the mouth where the ovate blade is bent over the narrow cylindrical spadix. The female has a smaller, very narrow, unflared spathe with a shorter spadix which tends to be club-shaped at the end. It is difficult to describe but easy to grow. Native to the Ryukyu Islands, Japan, it is the highest polyploid species known to date, a decaploid, 2n = 140.

#### A. heterophyllum Blume

This easily grown species has a purple and green striped, or green spathe with a long spadix which appears above the foliage on stems from 16 inches to three feet. The single compound leaf has over a dozen leaflets, typically 17. A very handsome species, blossoming (UK) in late June and (NC) late April. Many specimens can be traced to wild collections by Ferris Miller near Chollipo, South Korea. Grow this one in light shade.

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It looks like A. tortuosum with only one leaf instead of two, but blooms much earlier and has central leaflets shorter then the terminal leaflets. If you have A, tortuosum, you may want to pass on this one unless you can find a striped-spathe specimen.

#### A. inkiangense

G. R. Stilwell, Jr.

Tiger striped leaf stems in deep purple and green hold broad glossy 3-part leaves either side of a white and green spathe. This is darker green in the centre, toning to pale green at the base and top, and is stippled all over with tiny purple dots. The bright green "lid" covers a short, thick, green spadix which has a dark tip. Small, but budded, reselected tubers

#### A. intermedium

A. intermedium is a trisecta section species. The foliage is composed of one or two leaves each divided into three quite large leaflets. In leaf, it resembles a smaller form of A.griffithii or A.speciosum.

The spathe is large and slender for its size, and is pale-green very lightly (or not at all) marked with brown on the outside. Inside all have thin white lines. The spadix is very elongated. It wanders down and out of the flower structure, all around adjacent foliage, around itself, and down to the ground. Exceptional ones are 34" long when fully unwound. In the form *biflaggellatum* both the spadix and the tip of the spathe are extended and entangled in the same fashion.

A fascinating plant, very good in the garden and fully hardy with stout, dependable growth and flowering, and is unusual in having yellow tubers. It's habitat is the Himalayas.

#### A. intermedium v. biflagellatum

In this curious form the spathe tip and the spadix tip are long and drawn out and hang down and twine all around adjacent plants.

#### A. iyoanum

This one will grow in part sun to light shade. It is one of the most dramitic of the Japanese Arisaema with it's two foot black blotched stalk topped with 9 to 11 leaflets on it's single leaf. The spathe is usually nearly black with pink to green striping. The spadix is clublike, green, with black freckles. The species is highly variable, each seedling being guite different from it's siblings.

#### A. jacquemontii

This is a member of tenuipistillata, a section intermediate between tortuosa and sinarisaema with one or two leaves of dusty-green, each divided into five to seven leaflets. It usually has two leaves (when adult) in a radiate disposition

The inflorescence is pale jade-green, paler at the base and faintly striped white. The tip of the spathe is elongated, upturned and coiled. Although it appears short it can reach a considerable length when pulled straight. (but not as long as in A. intermedium).

A. jacquemontii is very hardy and quietly attractive. From the western end of the Himalayas, it is seen frequently in E. Nepal growing in dry, rocky conditions with its 5-7 leaflets atop a stem up to 30" tall a foil for the inflorescence that rises slightly above. The greenish-white spathe narrows and heads skyward, while the enclosed, shorter spadix gently curves forward. Interestingly, this is most closely allied with the American species, A. draconitum although it is often confused in the trade with A. tortuosum even though the two are quite unlike each other.

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Grow this one in full sun or partial shade. It is tolerant of drier soil than most.

#### A. kishidae

#### A. kiushianum

A wonderful dwarf species that will grow in part sun to light shade. The solitary leaf with 7-13 leaflets sits atop a 15" green stem. The 3" tall flower arises from the ground next to the stem in late April. The spathe limb folds over front of the dark-purple spathe hiding a dramatic T shaped white marking at the back of the throat. The whip-like spadix apendix extends out of the spathe and stands upright to 6". It's distribution is limited to Kyushu Island, Japan. It is a tetraploid, 2n = 56.

#### A. nepenthoides

A Himalayan species from the lower warmer zones. However, it has over wintered nicely in England and it makes good growth and offsets there.

*A. nepenthoides* has a creamy, translucent, heavily caramel-mottled stem which gives rise to two divided leaves and a spathe with widely flared mouth having recurved edges, and a short spadix. The spathe color varies from pale translucent caramel to light yellowish-brown, all being marked with white and banded with zones of mottled lines. In *A. nepenthoides*, the spathe appears before the leaves unfurl fully and eventually overtops them.

Remarkably decorative, even to non-enthusiasts, in the wild it flowers after the melting snow. It is easy to grow in the garden and increases well. The distinctly polygonal flattened tubers make offsets at their apices.

#### A. omeiense

Paul Christian's photos of *A. omeiense* are nice and his description perfectly matches P.C. Kao's description and drawings of the leaves. No doubt about the ID of this species. The inflorescence looks correct. The leaflets have an entire or serrate margin, their number doesn't exceed 7.

On the other hand, *A. auriculatum* has an inflorescence similar to *A. omeiense* but has 13-19 leaflets, the margin is entire. It also has a conspicuous pseudostem.

#### A. ostiolatum

A species endemic to a small area in the eastern Himalayas. It is considered an alpine form of *A. propinquum* and is smaller in all its parts, the spathe is extremely narrow and only slightly open, (as with *A.exappendiculatum*). There seems to be a sliding transition from the tall Nepalese forms of *A. propinquum* to the smaller *A.propinquum* var. *sikkimense* and eventually to the alpine extreme of *A. ostiolatum*.

#### A. pangii

Superbly mottled and striped shoots, looking like snakeskin, give rise to a rich caramel spathe, broadly lined in white. The interior is brown and white striped, toning to pure white in the centre, around the white candle-wax spadix. The 3-fid leaves appear later and are deep shiny green. Described by one enthusiast as

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"one of the most outstandingly beautiful Arisaema that I have ever seen". Originally from 3,500 m, Wolong, Sichuan province where it flowers in June.

#### A. propinguum

One or rarely two, 3-fid glossy leaves and a stunning tubular flower spathe of purple, infused with green with strong white stripes along its length. At the edges of the spathe there is a pattern of netting, in white, on a purple background. The spathe is prolonged into a short, hawk-like "beak, whilst the purple spadix is elongated and hangs out of the mouth of the spathe, stopping short of the ground. Revels in woodland soils, under garden conditions and is fully hardy.

#### A. ringens

This is a very early flowering species with two trifoliate, tremendously glossy leaves and a spathe of mid to deep green (rarely also marked with purple), striped white, with a characteristic curved helmet-like extension covering the tube and folded over its mouth. Distinct and attractive, it has a reputation for lack of hardiness that probably rises from the fact that the early growth is often damaged in climates like the mid-atlantic states by late frosts. The plant survives, but does't flower. A remedy for this is to locate the plant where it is sheltered from winter sun. This delays the emergence by nearly 2 weeks.

In colder climates, it naturally arises later and does not seem to suffer this trauma. It is an easy and reliable species for partially shaded conditions with ample moisture and grows to 15" when fully mature. I have seen a specimen in a lath house that was nearly 3 feet tall one year.

#### A. ringens f. glaucescens

Similar to A. ringens except the spathe is covered with a white waxy coating. A rare species in United States gardens.

#### A. robustum

A curious name, as it is far from robust, rising only to 2', with five leaflets whorled atop the petiole and the flowers substantially lower on the stem, with a purple spathe and lighter spadix. Found growing in very dense shade and moist soil.

#### A. rhombiforme

Broad attractive 3-fid leaves and a powerfully striped treacle- brown and white spathe. This is broadly inflated but narrows abruptly to a parallel- sided tube, the base of which is infused with warm brown. The spadix is slate grey at the tip and brown at the base. Very attractive, with a superb contrast between the dark striped spathe & the translucent white 'window' stripes, that shine in bright light. Readily grown & flowered.

#### A. saxatile

Pure white to pale mint-cream with a greatly elongated, hanging spadix of yellow, the stunning appearance of this plant is not its only appeal, as it is also delightfully fragrant - a very rare feature in the genus. A. saxatile is a small plant and is wonderfully clump forming and readily propagated. Originally from an altitude of 1500m, near Shennongjia in the province of Hubei, flowering in May.

#### A. sazensoo

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Arisaema Species Descriptions

Closely allied to *A. sikokianum*, this species has two 5-leaflet leaves held above 12" stems. The inflorescense emerges on a stalk betwen the leaves and resembles that of *A. sikokianum* except for a narrower spadix and greatly elongated spathe tip that cascades over the front of the spathe.

#### A. serratum

This robust and easy to grow plant has been named about every name you could think of at one time or another. Like *A. triphyllum*, it is a very variable species. The plant stands 3' tall and the most interesting specimens have beautiful silver variegated leaves. The plants have leaf edges that look like they have been cut with pinking shears (serrate).

The spathe is level with, below, or above the leaves and varies from pale green to a rich and intense deep-purple sometimes further spotted with purple and striped with white. The tip of the spathe is whip-like and drapes over the front of the spathe hiding the short spadix. A well drained woodland site makes a good home for this one.

It's natural distribution is widespread, covering Japan, Korea, China, and Russia and it is as variable as this range would imply.

#### A. sikokianum

This Japanese species has two leaves, one divided into 3 leaflets, one divided into 5. The centre of each leaflet is often differently coloured to the rest of the leaf, in some cases this become a delightful variegation. These are borne below the purple-brown shiny spathe, which is strongly striped in white, with a prominent, stunningly white, pestle-shaped spadix in the centre.

This is truly a beautiful species which, without a doubt, bridges that wide gulf between an ornamental and a simple botanical curiosity. Very attractive and understandably sought after. Excellent in the garden with light shade in a leafy soil. Winning AM in 1938, this is the species that has turned many a gardener into an *Arisaema* enthusiast.

#### A. sikokianum x takedae

Don Jacobs' hybrid from his garden in Decatur, GA. These plants are magnificent, showing obvious hybrid vigor to 4', with digitate foliage (three of five original plants have striking pewter marbling) and inflorescences slightly below the foliage, with purplish-green marbled spathes and nobby white sikokiaceous spadices. Second generation seedlings are now becoming available and it will be very interested to observe the degree of variation that occurs.

#### A. speciosum

Here is a large stocky species with a mottled stem up to 1 m, single three-part, red-veined leaf and a rich purple spathe striped in white around a white spadix, which narrows to a purple thread, itself hanging to the ground. Once again a species that has been described as "needing a warm winter", it is hardy, totally unprotected when planted in a well-drained fertile leafy soil to a depth between 6" to 10".

#### A. speciosum v. mirabile

This has great fat thickened spadices with the tip drawn right out and curled up then down and out of the spathe. Very unusual in appearance and unmistakably different.

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Arisaema Species Descriptions

#### A. taiwanense

A magnificent species, with python-skinned stems rising to 36", topped with an enormous umbrella of 15 leaflets, each tipped by filaments up to 12" in length. With purple hooded spathe and long, pendant spadix it is a dramatic plant.

There are beautiful variants that possess a remarkable pewter overlay on the foliage, with the same dramatic stem and flowers of the species. It is, apparently, a naturally occurring deviation in wild populations of Taiwan. These are breathtaking foliage plants.

#### A. ternipartitum

This stoloniferous Japanese species emerges as a stout purple stalk with purple-hooded spathe with little auricles (ear like edges) and 2 glossy tri-partite leaves. A dramatic addition to the woodland garden since it spreads forming nice colonies.

#### A. thunbergii

An easy to grow plant with 2' stem and 9-17 leaflets on a horseshoe shaped leaf. The spathe is greenishpurple with arching limb. The spadix emerges from the spathe as a bizarre twisted thread 18" long. There are selected forms of A. thunbergii with silver markings on the black-green glossy foliage.

#### A. thunbergii ssp. urashima

A rare plant from Honshu, Shikoku and Kyushu in Japan, it is related to *A. urashima* which is actually *A. thunbergii* ssp. *urashima* v. *kashimense*. However, here the junction of the fertile spadix and spadix appendage is wrinkled and abruptly narrowed.

The solitary leaf, divided into 9-16 leaflets, linear, sometimes 10" long x 4" broad in the terminal leaf, are on a stem up to 24" tall. The spathe is a uniform dark reddish-purple occasionally with a bronzed appearance. The blade arches strongly over the spadix and has a long tapering tip which flops down to the ground. The spadix is also elongated and hangs from the mouth of the spathe. Copious quantities of offshoots are produced from the mother tuber on these plants.

A very interesting and distinctive Japanese species with great variation, some from Kyushu have a digitate leaf, bearing very narrow leaflets and a purple hooded inflorescence from which the spadix arises skyward and then tumbles to the ground.

#### A. tortuosum

A very robust plant which has reached 45", the snakeskin mottled stems of green or brown/purple carry 2 or 3 leaves, each divided into many leaflets. The spathe is carried above the leaves, from June to October, and is lime-green with a long purple spadix, which curves out of the mouth of the tube and then upwards to a whiskery tip. It is fully hardy, an in my experience, nearly indestructable.

Like *A. candidissimum*, it is a late riser, but not nearly that late. In the wild it ranges throughout India, Bhutan, Burma and China. It is a diploid, 2n = 28.

#### A. tosaense

From southern Japan, this is one of the largest and most robust species. The stalk holds two large leaves, each with up to 12 leaflets. The 6" tall spathe is held above the leaves like a green flower.

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#### A. triphyllum

#### Commonly called "Jack-in-the-Pulpit", it is an easily grown species from the U.S. with tripartite leaves and a green or purple spathe, striped in white or green. The spadix may be green or purple. The height also varies from 6" to 30". It is a remarkably variable species with several well known subspecies and varieties.

Arisaema Species Descriptions

#### A. triphyllum ssp. stewardsonii

### A. urashima

Very frequently confused with the much rarer A. thunbergii ssp. urashima, this species has one (rarely two) leaves on a stem 12"-20" tall, each divided into 11-15 leaflets, the terminal leaf 4"-7" long by about 3/4"-1 1/2" wide. The bronze to red-purple spathe abruptly narrows to a long tail-like tip which arches over the spadix which is equally elongated and filiform, the upper half bent abruptly downwards. At the junction with the floriferous part there is a smooth transition to the spadix. It is a tetraploid, 2n = 56.

#### A. utile

#### A. verrucosum

Deep rich violet-brown spathes nicely marked with translucent white stripes, that glow like stained-glass windows in the sun. The mouth is expanded and downfolded. The spadix is elongated and thread-like and hangs down from the mouth. Can be compared to griffithii but is far more beautiful and the spathe borne on a taller stem is far more conspicuous.

#### A. wilsoni

Ithough considered to be the same species as A, elephas in the literature, these two plants look and behave very differently in the garden where wilsonii has a shorter, stouter spadix that folds downwards as it emerges. This is also red-brown in color. The two plants may belong to the same species, they are certainly close, but horticulturally they are distinct and recognisable.

#### A. yamatense

#### A. yamatense v. sugimotoi

Tall stems with snakeskin markings carry two multi-divided leaves, the leaflets of which have a paler central area. The spathe is the bright emerald green of tree-frogs with the "lid" shaded and veined brown. Inside the spadix is short and brown, with a very distinctive swollen brown tip that bends over like the head of a dead match. Grows well outside in the garden.

#### A. zanlanscianense

Arisaema zanlanscianense from Hubei (China) was described by Pampanini in Nuov. Giorn. Ital. 22: 262(1915) on the basis of one female inflorescence only, without any knowledge of the tuber, the foliage or a male inflorescence. The description says: spathe tube 6 cm L; limb shortly acuminate, 13-16 cm L, 8-10 cm wide; spadix appendage stipitate, erect, 14 cm L & 3,5 mm wide and, due to the aspect of the sterile flowers (neuters) reminding of A. clavatum.

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There is no drawing of this species whose inflorescence looks large. What one can notice is: presence of neuters, no indication of the colour of the spathe. In these conditions, it is difficult to say if your plant matches Pampanini's description.

H. Li, in FRPS, considers it as a "doubtful species". Indeed it is a species incompletely described, to say the least. The situation of *A. zanlanscianense* reminds me of other species such as *A. nangtciangense* Pamp (spatha... = unknown spathe) whose original descriptions are so poor that it is impossible to state that a plant, one has in hand, matches or doesn't match the species. To be honest, I'd prefer, once for all, to discard the names of "doubtfull incompletely described species".

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