

RAY MORGAN discusses a distinctive group of *Impatiens*, several of which are becoming more widely available and are attracting the attention of hybridisers

Impatiens jerdoniae is an epiphytic species native to the Western Ghats of India



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Parrot-billed *Impatiens*

THE GENUS *Impatiens* is one of the largest, with well over a thousand species described. No doubt there are a good deal more waiting to be discovered. Many have proved to be excellent subjects to grace our gardens, patios and glass-houses. The best known is, of course, the African busy Lizzie, *I. walleriana*, but there are more unusual species that have been gradually creeping into nursery lists.

This article concentrates on those that can be informally classified as parrot-billed *Impatiens*, a term inspired by the most familiar species, *I. niarniamensis*. They do not fall into a precise botanical grouping but have similar shaped, flattened flowers, often in contrasting colours and are

native to Africa and India. Some of the Indian species were mentioned briefly in a previous article by myself (Morgan 2004). However, there have been further introductions since then and enthusiastic breeders have started to select and hybridise them.

Impatiens niarniamensis

This species is a strong, upright growing plant with thick stems, reaching 1m or more in height, with a tendency to lose some of its lower leaves during dry periods. It displays its 3–4cm long flowers in fascicles of four to six, arranged around its growing tip, and often, too, from the bottom of its bare, leafless stem.

The small petals are yellowish- or whitish-green but there is much

variation in the colour of the large, lower, spurred sepal. It can be dark, almost blackish-purple, through many shades of red to the clearest yellow, and is often bicoloured. Indeed, it is a bicoloured variant that is most widely grown, under the cultivar name 'Congo Cockatoo'. As its name suggests, the red and yellow sepal resembles the beak of some flamboyant member of the parrot family. A variegated cultivar, 'Golden Cockatoo', arose as a sport of 'Congo Cockatoo' at a nursery in Essex about 20 years ago.

The species has a widespread distribution across central Africa, from Tanzania in the east to Cameroon in the west, and even as far as some of the offshore islands. In general, these plants are found growing at some elevation, where ambient temperatures are cooler, usually in damp shady forest, or at the sides of rivers and streams. Occasionally they can be found growing as epiphytes, living on moss-covered trees or old tree-stumps, under which conditions they may appear somewhat stunted but produce normal size flowers.

Ernest Friedrich Gilg, who named the species in 1909, took the name from the Azande people, then known as the Niam Niam, who live in the area where the species was collected. The same species, albeit one of its variants with dark purple and greenish white petals, was described as *I. bicolor* in 1863 by JD Hooker. Seeds had been sent to Royal Botanic Gardens, Kew, by collector Gustav Mann who had discovered the plants two years earlier, while collecting on the island of Fernando Po, off the coast of west Africa. However, the name *I. bicolor* had already been used for a Himalayan species so Gilg's name is the first valid one.

Impatiens clavicalcar

This species was described in 1997 and is native to the Democratic Republic of Congo. It has bright yellow sepals, of a similar size to the above species, but the petals are white and larger.

This beautiful plant has become quite rare and may already have become extinct in its native range. Fortunately it has been cultivated in the UK for a number of years. There are a few variants which have been offered by nurseries under names such as 'African King' (dark red flowers), 'Renata' (similar colour to *I. niarniamensis* 'Congo Cockatoo'



Photos: Horticultural

Impatiens niarniamensis 'Golden Cockatoo' is a variegated cultivar of a widely grown species

but with larger petals) and Hare's hybrid (red flowers and a striped dorsal petal).

Impatiens congolensis*, *I. epiphytica* and *I. irangiensis

Three other central African species closely related to *I. niarniamensis* are also cultivated. They differ in their usually epiphytic rather than terrestrial habit in the wild, but all are amenable to pot culture.

Impatiens congolensis has red or yellow sepals and white petals.

Impatiens epiphytica has the same colouring as *I. niarniamensis* but has smaller flowers with a shorter spur on a smaller plant. It is equated with *I. keilii* by Grey-Wilson (1980) but others disagree; it differs in leaf shape and spur morphology. *Impatiens irangiensis*, described in 1997, also has pale green flowers occasionally flushed with pale pink.

India too has a share of these parrot-billed species. All are found in the Western Ghats of southern India and all are epiphytic. Just like their African counterparts they produce flowers in great profusion.

In the wild the flowering period is limited to 2–3 months, coinciding with the two main monsoon periods, broken by long periods of drought. During these dry periods the fleshy stems effectively close down, lose their leaves and narrow in diameter. With the onset of the rainy season the stems swell to their former size. This has the effect of causing the stems to look like a string of beads or small sausages, the sections varying in length depending on growing conditions. This growth pattern is known as moniliform and is a feature of all the Indian epiphytic species. However, in cultivation, without these climatic conditions, the stems remain uniform in diameter. ➤



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Impatiens clavicalcar (left) and *Impatiens irangiensis* (right) were both described from central Africa in 1997. The former is the parent of two new hybrids



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Impatiens parasitica (top left), *Impatiens psittacina* (top right), *Impatiens keilii* (above left), *Impatiens violacea* (above right)

Impatiens parasitica

The most common in the wild of the Indian parrot-billed species is *I. parasitica*. It is also the most floriferous. The sepals are usually red but can be magenta, orange or green and it has greenish yellow dorsal petals. In cultivation the flowering season can extend for many months. In the wild, a tree covered with these plants can be a most spectacular sight.

Impatiens jerdoniae

The flowers of this particularly attractive species are the largest of the Indian epiphytic balsams, up to 5cm long. The inflated, bright, orange-red lower sepals are distinctive, although the degree of inflation varies between clones. The dorsal petals are yellow.

Impatiens violacea

I. violacea is another lovely species, with violet-blue flowers and bright yellow dorsal petals. The plant has

become very rare, due to loss of habitat due to agriculture and logging and is in great danger of becoming extinct. It is said that fewer than 50 plants remain in the wild, in spite of efforts to re-introduce it back to former locations.

Impatiens psittacina

Recently there has been some controversy on the internet regarding an *Impatiens* picture published on certain websites, bearing a certain resemblance to a parrot in flight.



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The two new hybrids raised by the author, both with *Impatiens clavigalcar* in their parentage: *Impatiens* 'Pink Slippers' (left) and *Impatiens* 'Black Knight' (right)

Many people have suggested that the plant did not exist and the picture was a fake, computer-generated from parts of other pictures. It has been referred to as the parrot plant. The plant, however, does indeed exist, and is *Impatiens psittacina*, which can be found growing in northern Thailand, northern India and Myanmar (formerly Burma).

It was described by JD Hooker in 1901 and the specific epithet means parrot-like. The flowers, which do resemble a parrot in flight, are shades of pale lilac, reddish purple and white. It is not closely related to the parrot-billed species, but deserves a place in this story.

Breeding

Recently, a few nurseries in Europe have been hybridising these parrot-billed *Impatiens* with other species. They have been using the technique known as embryo rescue which is useful for crosses which can not be raised using conventional methods, particularly when hybrid seeds will not germinate successfully. The embryos are extracted just after fertilisation and grown on in the laboratory.

These breeders have been crossing *I. niarniamensis* with *I. walleriana* and also with *I. auricoma*. Unfortunately, the hybrids raised to date are not considered commercially viable.

I have made conventional crosses between various parrot-billed species and these have been very successful. Two in particular are being trialled by some nurseries. *Impatiens* 'Black Knight' (*I. clavigalcar* x *I. epiphytica*) has orange flowers with red spurs and dark green leaves that turn almost black when it flowers.

Impatiens 'Pink Slippers' (*I. clavigalcar* x *I. niarniamensis*) has pink and white flowers, exceeding in length those of its parents.

Cultivation

In general, parrot-billed *Impatiens* are easily cultivated as glasshouse subjects or houseplants, preferring temperatures between 10 and 25°C. They also benefit from a spell outside during the summer months. If the temperature is maintained at over 15°C in winter they can flower continuously.

Their only drawback is a tendency to drop lower leaves as the plants age. To counteract this, pinch out the growing tip when the plant is

about 12–14cm high, and then at regular intervals thereafter. This will result in a much bushier plant with considerably more flowers. You may even decide to grow it as a standard, by removing all side shoots until it has reached the desired height, and then treat it in the same way.

Conclusion

Few of the parrot-billed species have been cultivated to any great extent, but specialist nurseries are beginning to offer a greater range. Gardeners, and especially pot-plant enthusiasts, are always on the lookout for unusual or constant-flowering plants, so you will find these species and hybrids very rewarding. ■

RAY MORGAN holds a National Plant Collection of *Impatiens* and is the author of a forthcoming book on the genus (Timber Press, October 2007)

REFERENCE

- Grey-Wilson, C (1980) *Impatiens of Africa*. AA Balkema, Rotterdam
 Morgan, R (2004) Southern Indian balsams. *The Plantsman* n.s. 3(4): 216–222