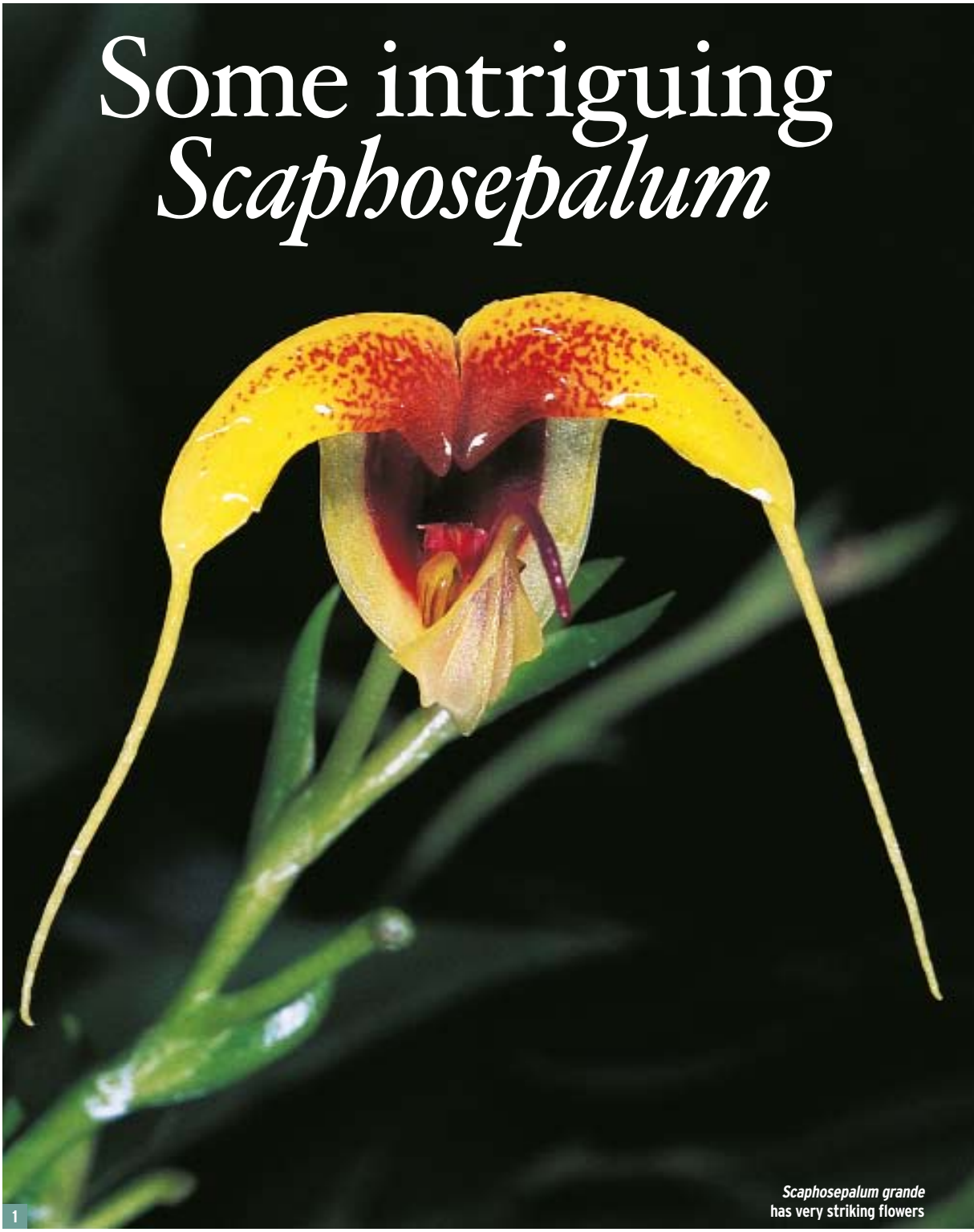
Some intriguing *Scaphosepalum*



1 *Scaphosepalum grande* has very striking flowers

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MANUEL AUBRON outlines this fascinating genus and recommends ten species with striking and comparatively large flowers to try in the glasshouse

Scaphosepalum anchoriferum is variable in colour

THE GENUS *Scaphosepalum* is one of the oddest in subtribe *Pleurothallidinae*, with long, often warty inflorescences and graceful, nonresupinate flowers. The genus was established by E Pfitzer in 1888, with *Scaphosepalum verrucosum* as the type species. This was first described in 1850 by HG Reichenbach as *Masdevallia verrucosa*. Up to 1880, Reichenbach described, either in *Masdevallia* or *Pleurothallis*, seven other species now placed in *Scaphosepalum*. Pfitzer's new genus contained only five species but during the 20th century, many other species were described particularly by Carlyle Luer, a specialist in the *Pleurothallidinae*. Now, about 45 species are known, occurring from Mexico to Peru but with most from the Andes in Colombia and Ecuador. Several species are variable in both size and colour, including *S. breve*, *S. swertiifolium* and *S. gibberosum*.

Plant structure

Scaphosepalum has a lateral inflorescence, that is, it develops from near the base of a secondary stem (ramicaul) rather than from the top. Plants are small, with short secondary stems, one-leafed at the apex, often forming tufts but sometimes with a scandent rhizome. The roots are long and fine, usually white or green. The leaves are lanceolate or elliptic, glossy green, sometimes purplish when young. The inflorescences are usually erect at first, then become pendent. The scape is long (20–50cm) and in some species is verrucose (covered with little warts), making it feel granular to the touch; the flowers are borne one at a time, in succession. Plants are almost always in bloom – an inflorescence can go on flowering for as long as two years.

The sepals are the most prominent part of the flower. The lateral sepals lie at the top of the flower; they are joined either at the base or almost to ➤

the apex, forming a concave synsepal. The most distinctive feature of the genus is the 'cushion' or callus borne towards the apex of the lateral sepals, below the tails. The petals are smaller, often of a different colour, and enclose the lip, which is small and trilobed.

Most species of *Scaphosepalum* are pollinated by flies or midges. Luer (1988) revised the genus, dividing it into three sections.

Natural habitats

Unlike most other *Pleurothallidinae*, species of *Scaphosepalum* are not all confined to the mountains; some grow in the forests of the Andean foothills at altitudes around 500m. These species can be grown in an intermediate greenhouse. However, some species can grow as high as 3,000m. Most plants are epiphytic on trunks and lower branches of trees. The spreading root system anchors the plant on its branch and a bed of moss helps to keep it moist. In the wild, they rarely grow big because of the damage caused by slugs and caterpillars. They are often difficult to find when not in flower because the leaves are small and plants tend to be scattered. The long inflorescences hang in space and wave in the wind, the splash of colour looking like an insect in the undergrowth.

Glasshouse culture

Scaphosepalum plants are relatively easy to grow. If the young leaves are not eaten by slugs and snails, they produce suckers and grow quickly. Plants can be grown either in pots or mounted on bark or tree fern. The classic compost consists of 70 percent pine bark, 10 percent wood charcoal and 20 percent sphagnum, sometimes with added perlite. Plants can dry out between waterings without damage but they must not be forgotten for too long. Roots will quickly cover a mount. Like most pleurothallids, scaphosepalums can withstand occasional temperatures as low as 5°C and tolerate winter lows of 8°C, but the temperature in summer should never go above 35°C. When the temperature is very high, plants should be watered in early evening so that they will remain damp and cool through the night. I grow them successfully under lights, at a distance of 40–60cm from the fluorescent tubes.

Scaphosepalum plants are susceptible to red spider mite, so it is important to look out for these. Infested leaves turn grey and start to shrivel and eventually the plants will die. The same problem occurs with *Dracula* and some soft-leaved masdevallias.

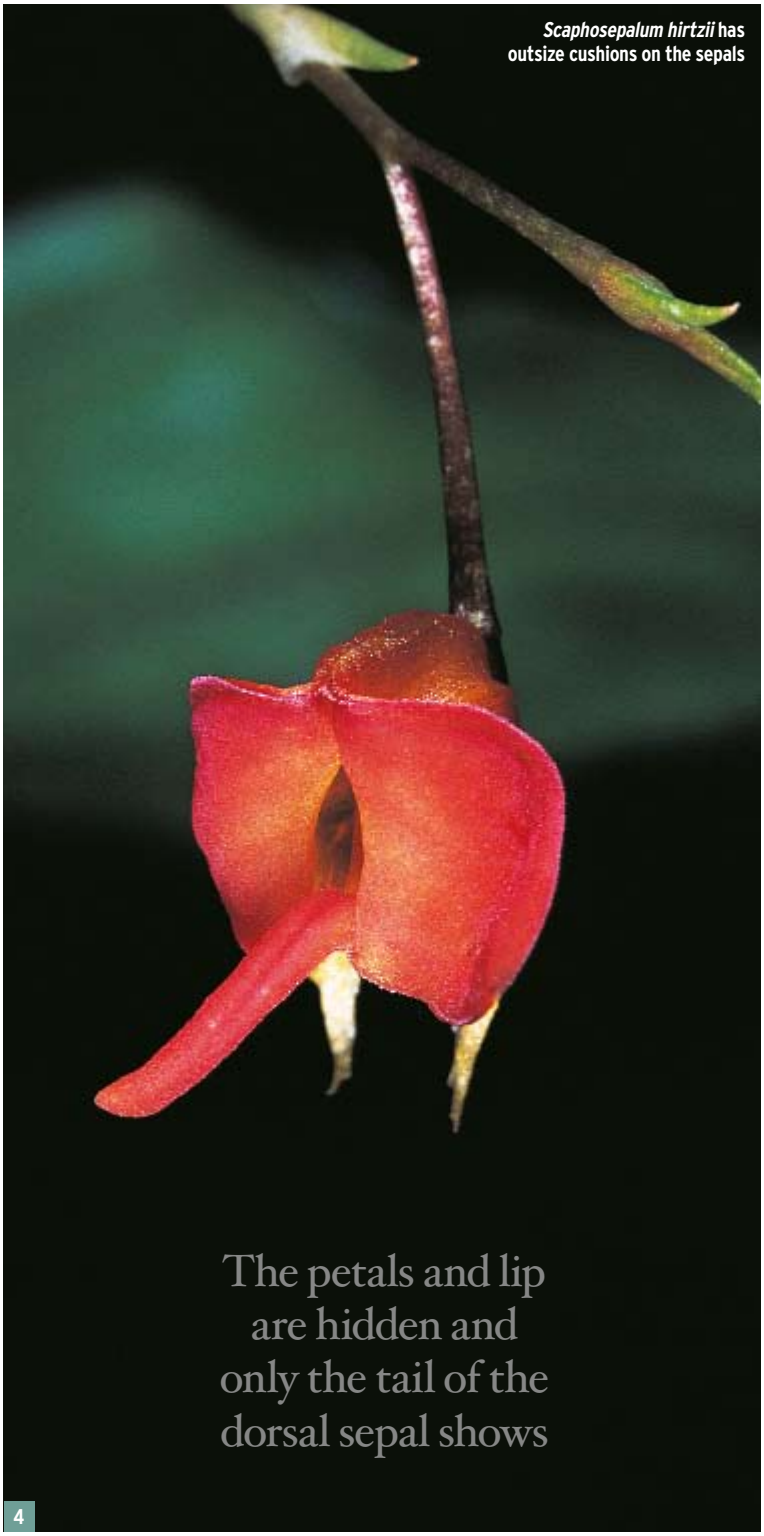
Scaphosepalums can be easily propagated by splitting a clump, or cutting the rhizome if it is a climbing species. The divisions can be potted or mounted. I have never seen keikis produced.

I can recommend the following 10 species which have large and striking flowers, and are well worth growing.

3 ***Scaphosepalum lima*** **is an easily grown species**

1 *Scaphosepalum grande*
Growers prize this species, named in 1922, for the colour of its flowers. The growth habit is somewhat scandent, with apple-green leaves 20–30cm long and 5cm wide, with a prominent mid-vein, and a petiole 5–10cm long. The inflorescence is erect, as long as the leaves, with a large bract protecting each bud. The flowers are 2cm tall and 4–5cm across with tails 1–1.5cm long. The cushions are bright, shiny yellow, either plain or with small red dots. The lateral sepals have a blood-red central band contrasting with the bright yellow of the rest of the flower. The dorsal sepal is narrow and concave with three prominent nerves on the outside and a purple tail in front of the flower. The petals are white with three purple rays. The lip is white, forming a right angle, with a rounded tip fringed with cilia. This species is fairly rare but is quite easily grown, although it only produces a few flowers in a year.

2 *Scaphosepalum anchoriferum*
HG Reichenbach described this species, known from Costa Rica and Panama, as *Masdevallia anchorifera* in 1884 and Robert Rolfe transferred it to *Scaphosepalum* in 1890. Plants are 5–15cm tall with soft green leaves. The inflorescence is erect, horizontal or pendent bearing about 15 flowers in succession. The flowers are 10mm tall and 5mm across and vary in colour and shape – the one pictured has recurved sepals which are particularly attractive. The sepals are purple, with orange-pink cushions. The petals are bright yellow and the lip is orange with a central callus. Sometimes the cushions on the sepals are bright yellow, contrasting well with the purple sepals. Try to buy a plant in flower, to choose the colour. This species is uncommon in cultivation, but is easy to grow, although it only produces about 10 flowers a year.



Scaphosepalum hirtzii **has outsize cushions on the sepals**

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Scaphosepalum swertiifolium is variable in colour, size and form

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3 *Scaphosepalum lima*

This species was first described in 1899 as a *Masdevallia* then transferred to *Scaphosepalum* in 1920. It comes from Colombia, where it grows on embankments in forested areas (or areas that had been forested). Plants are 10–15cm tall, with narrow, lanceolate, bright green leaves. The erect inflorescence is longer than the leaves, very verrucose, producing about 15 flowers in succession. The flowers may be white or pink; they are small, about 1cm tall and 1.5cm across, with the sepals joined up to the base of the tails. The cushions are like two thick, slightly downy eyebrows, white, spotted with pink, ending in two white tails hanging down at the sides. The dorsal sepal is narrow, concave at the base, with a long, deep pink tail that is erect in front of the flower. The lateral sepals are broad and concave, mottled with deep purple. The petals are green dotted with purple; the lip is small, shaped like a Coca-Cola bottle. *Scaphosepalum lima* is much sought by collectors but is still uncommon, although it is easily grown and increases rapidly.

4 *Scaphosepalum hirtzii*

Named by Luer in 1980, the outsize cushions distinguish this species from Ecuador. Plants are medium-sized, 10–20cm tall, with long-stemmed, soft green, lanceolate leaves. The inflorescence is erect, no longer than the leaves, producing about a dozen flowers in succession. The flowers are pink to pinkish-orange or yellow-brown. The middle sepal is joined at the base to the lateral sepals, forming a broad tube, and the apical part of the lateral sepals are covered by the large, orange-red or orange-brown cushions, which end in down-curved tails 3mm long and almost cover the entrance to the flower. The petals and lip are hidden and only the tail of the dorsal sepal shows. This species is rare in cultivation; it is not prolific and rarely has more than 10 leaves.

Scaphosepalum merinoi is a graceful species from Ecuador

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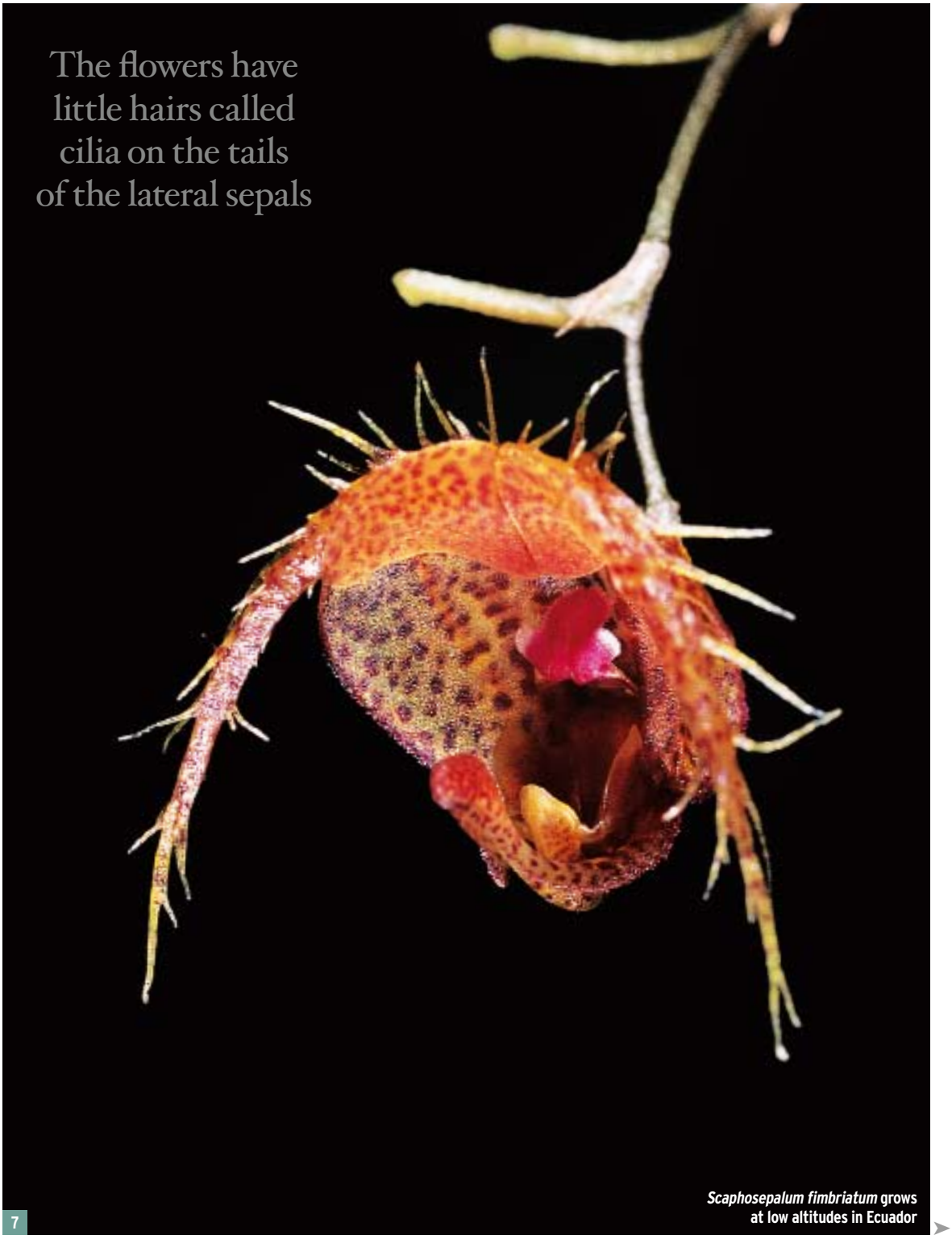
5 *Scaphosepalum swertiifolium*

First described by HG Reichenbach as a *Masdevallia*, it was transferred to *Scaphosepalum* by Robert Rolfe in 1890. This species has a disjunct distribution, occurring in Colombia and Ecuador, and is very variable in colour, size and form. Plants are 15–20cm tall, with dark green, oblanceolate leaves. The trailing inflorescence is 10–20cm long and floats in the air. The striking flowers are pink, tending to violet or purple – the one pictured is mainly rose-red. Flowers are only 12–16mm high but are 3–6cm across, because the tails can be as much as 4–5cm long. The flat, forward-facing cushions vary in colour; the lateral sepals are yellow, sometimes plain, sometimes streaked or spotted with red, pink, purple or maroon; the tails are horizontal or downcurved. The dorsal sepal is concave at the base, with an erect tail speckled with fine dots the same colour as the cushions. The triangular petals are yellow. The lip forms a right angle, ribbed in the centre and with a fan-shaped tip. It is worth trying

The flowers have little hairs called cilia on the tails of the lateral sepals



Scaphosepalum fimbriatum **grows at low altitudes in Ecuador**

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Scaphosepalum gibberosum is a spectacular species from Colombia

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Scaphosepalum decorum is a rare species from Colombia

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10 *Scaphosepalum* species

to collect several colour forms of this species as there is such a wide range. *Scaphosepalum swertiifolium* grows rapidly and is very easy to grow.

6 *Scaphosepalum merinoi*
This graceful Ecuadorean species was named by Luer in 2002. It is 5–15cm tall with soft green, lanceolate leaves. The trailing inflorescence is 25–35cm long and produces flowers in succession over several years. The slender flowers are 1cm high and 6–8cm across, looking like a delta-wing aeroplane when they tremble in the breeze. The white cushions are shaped like straight eyebrows, finishing in tails 3–4cm long. The lateral sepals are pale yellow, striped with purple at the base; the dorsal sepal has an erect purple tail. The tiny petals are yellow. The lip forms a right angle and has a rounded apex. This species is common in cultivation and, apart from being very susceptible to red spider mite, is easily grown.

7 *Scaphosepalum fimbriatum*
This species was named in 1988 and is native to Ecuador, growing in wet forest at low altitudes of 500–750m. Plants are 10–15cm tall with bright green leaves. They should be mounted because of the trailing inflorescences, 10–20cm long. The flowers are astonishing because of the cilia or little hair-like outgrowths, that cover the tails of the lateral sepals. The flat cushions face the front and are pale yellow dotted with purple. The rest of the flower is brighter yellow with larger and darker blotches. The dorsal sepal is broad at the base, with a small tail. The purple petals surround the column and the deep purple lip, with a fringed, rounded apex, forms a right angle. This species is not very variable, although sometimes it is a paler yellow. It is easy to grow, but rare in cultivation.

8 *Scaphosepalum gibberosum*
With its long, slender tails, this Colombian species is one of the most spectacular in the genus. It was first described by HG Reichenbach, then transferred to *Scaphosepalum* by Robert Rolfe in 1890. Plants are 10–20cm tall, with lanceolate, dark green leaves. The verrucose inflorescence is more than 50cm long and produces flowers throughout the year. The flowers are large, with two long, pure white cushions, sometimes spotted with violet, forming a V, and white tails 2–4cm long. The dorsal sepal is narrow, concave at the base, ending in a maroon-purple tail 3–6cm long. The petals and lip are very small. This species is variable both in size and colour, sometimes purple-tinged and with more spots on the cushions. Most South American nurseries offer two or three forms, ranging from small to large, with the largest obviously being the most expensive. *Scaphosepalum gibberosum* is easily grown, but it is important not to cut the inflorescence even if it grows to over 1m long, as it will continue to flower for about five years.

9 *Scaphosepalum decorum*
Named in 1982, this Colombian species can vary in the colour of its cushions and the length of the tails. The leaves are bright green with a well-defined central vein, up to 20cm long, including a petiole to 6cm long. The erect inflorescence is up to 50cm long, with a large bract subtending each flower. The flowers are large, 2cm high with a spread of 5–7cm including the tails. The sepals are bright yellow spotted with purple, while the cushions are broad and flat, facing the front, bright, shiny yellow dotted with brown. The petals are yellow green with three purple veins; the lip is yellow flushed with purple, reflexed near the middle and fringed with fine hairs at the tip. This species is fairly rare and should be bought in flower. Each flower lasts for about 10 days and plants flower continuously throughout the year.

10 *Scaphosepalum* species
I bought this plant some years ago at a show but could not discover its country of origin. I was seduced by the unusual shape of the flower, but unfortunately could find nothing like it in the literature. The plant is 5–10cm tall, and produces many suckers, with small, rather broad leaves. The pendent inflorescence is 10–15cm long, producing about 15 flowers in succession throughout the year. The cushions are like a cap, slightly reflexed in front, white, scattered with purple dots, with horizontal tails. The flowers are 12–15mm long and 3cm wide. The base of the lateral sepals forms a deep cavity, pale yellow dotted and striped with purple. The dorsal sepal is concave, streaked with purple and with a slender, deep purple tail. The tiny petals are yellow; the lip forms a right angle. This floriferous plant doubles in size every year and grows best when mounted. If anyone can put a name to it, that would be very welcome. ■

Manuel Aubron is an amateur orchid grower with a particular interest in *Pleurothallidinae*

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