

The disappearance of *Maxillaria eburnea*

PASCAL SAUVÊTRE recounts the discovery of this South American species in 1839, and speculates on why it has never been found again

MAXILLARIA species in the Grandiflora alliance are among the finest in this complex genus. Most are big plants with large, beautiful, often scented flowers, and the majority were discovered and described in the 19th century. Unfortunately for us, the descriptions were usually brief, sometimes not accompanied by an illustration and, deliberately or not, often with no indication of their origin. Several of these spectacular species have never been rediscovered after the original collection and *Maxillaria eburnea* is one of these.

Lindley's description

John Lindley described this new species of *Maxillaria* in his magnificent work *Sertum Orchidacearum*, published in 1838. There is a good description of the plant along with a very fine lithograph (right and overleaf), depicting *Maxillaria eburnea* and *Diothonea (Epidendrum) imbricata*, growing on a section of branch. The text reads, 'The two plants which form the subject of the accompanying plate are represented from drawings brought home from Guayana by Mr Schomburgk'.

Lindley wrote, 'This plant is one of the most genuine species of a genus that seems to require reconsideration ... It must be a plant of considerable beauty, for its flowers are nearly five



Maxillaria eburnea, taken from Lindley's *Sertum Orchidacearum*

inches from tip to tip of the lower sepals, and of the purest white... The nearest relationship of the plant appears to be with *Maxillaria grandiflora*'.

This fine species, whose name refers to the colour of the flowers (*eburneum* means ivory-white in Latin), was therefore described on the basis of notes and drawings made by Robert Schomburgk. Apparently no herbarium material exists. The origin of *Maxillaria eburnea* is clearly indicated as British Guiana: but we are going to see that was not the case.

Circumstances of the discovery

On 20 September 1838, Schomburgk set off on a long journey by canoe and on foot from Fort San Joaquin on the Rio Branco, Brazil to the tepui (flat-topped mountain) of Roraima in Venezuela. Schomburgk, a naturalist and explorer of Prussian origin, was sent by the Geographical Society of London to determine the frontiers between Venezuela, Brazil and British Guiana. The return trip passed by the Parima Mountains in the heart of the Venezuelan Amazon. On 22 February ►

1839 he arrived in Esmeralda, a small market town on the Orinoco River, southwest of a massif of sacred mountains. They stayed for several days and prospected the sides of the small mountain chain. He wrote, 'We discovered the *Maxillaria* near Mount Maravaca... It grew in abundance on trunks and branches of trees at a height of about 5–6,000ft above the sea, where a humid atmosphere was prevailing. Maravaca is about 30 miles in a NNE direction from Esmeralda.'

Robert Schomburgk was the first to explore the base of the Cerro Marahuaca (Mount Maravaca), and probably collected *M. eburnea* in the forest around the northeast face, where the humidity was highest. His return journey followed the Rio Casiquiare, the Rio Negro (Brazil) and the Rio Branco, and he arrived at Fort San Joaquim on 22 April 1839. His journey ended when he reached Georgetown, the capital of British Guiana, on 20 June 1839.

On his second journey to Guiana, Schomburgk was once again brilliantly successful in his mission. He wrote about his trip in *The Journal of the Geographical Society of London* in 1840. What he accomplished on these expeditions made a great impression on European geographical societies. However, some doubts remain about the accuracy of his discoveries. Thus some lines in the *Bulletin de la Société de Géographie* in 1842 state (translated), 'From the brief analysis we have made of the voyages of M. Schomburgk, it seems that not only did he fulfil the intentions of the Geographical Society of London, but above all in his final excursions, he extended his research almost exclusively into Venezuela and the Brazilian Guyana, perhaps seeking to extend the limits of British Guiana a bit too far.' Did Schomburgk deliberately include Cerro Marahuaca in a hypothetically enlarged British Guiana?



Waterfalls tumble from flat-topped tepui Mount Roraima. Clouds conceal the forested lower slopes

The sacred mountain

Cerro Marahuaca (3°40'N / 65°24'W) is situated in the state of Amazonas in Venezuela, in the centre of the Duida-Marahuaca National Park. It is part of a small mountain range composed of Cerro Huachamacari (1,700m), Cerro Duida (2,400m) and Cerro Marahuaca (2,850m). The last of these is known as, Marahuaca Huha (sacred mountain), by the indigenous Yekuana, who had guided Schomburgk when he went there. Did he reach the summit? In any case, *Sertum Orchidacearum* indicates the high humidity and cool climate there, leading to a profusion of mosses and lichens. It states, not without humour, 'the thermometer stood frequently in the morning at 57°F, and this decrease of heat became sensible to our body, and communicated to the nose a reddish appearance.'

Schomburgk, Lindley and Hooker (1843) refer to Mount Maravaca, while Walpers (1861) calls it Mount Meracaevi.

Where is *Maxillaria eburnea*?

Maxillaria eburnea is close to *M. grandiflora* and many authors consider the two species synonymous. However, I regard it as a separate species. It is distinguished mainly by the unusual callus consisting of a pair of subsidiary keels flanking the main keel; this is found in only one other species (*M. melina*) in the Grandiflora alliance (Christenson 2002).

However, apart from the botanical debate, this magnificent find remains

mysterious. It has not been seen again since its discovery by Schomburgk, despite numerous scientific expeditions in the region (Huber & Wurdack 1984). It is astonishing that such an orchid 'growing in abundance' has not been rediscovered in a sparsely populated area where only subsistence agriculture is practicable. If this species still exists in the wild, it will be unique in the Grandiflora alliance in occurring outside the Andes. Cerro Marahuaca lies 1,000km east of the Andes – the two ranges are separated by the great stretch of the Amazon forest.

So the existence of this remarkable species is yet to be confirmed. ■

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Maxillaria eburnea and
Diothonea (Epidendrum)
imbricata, growing on
a section of branch

