

***Notheria diaphana* gen. nov., sp. nov. (Orchidaceae),  
a Gem from Sulawesi**

P. O'BYRNE

17 Jalan Layang Layang,  
Singapore 59843

AND

J. J. VERMEULEN

Singapore Botanic Gardens  
Singapore 259569

**Abstract**

*Notheria*, gen. nov. (Orchidaceae, Eriinae), is described, with *N. diaphana*, sp. nov., as type species. On account of similarity, it is assumed to be closely related to both *Eria* Lindl. and *Ceratostylis* Blume; however *Notheria* differs from both in having a footless column and a lip with a distinct spur. The genus is endemic to Sulawesi (Indonesia).

**Introduction**

In June 2000, an extremely showy miniature orchid flowered in the collection of the Singapore Botanic Gardens. Although the whole plant stands only 8 cm tall, it produces so many 2–3 cm large, white flowers at a time that it is hard to see the pseudobulbs beneath. The only drawback is that the flowers do not last very long. When not in flower, this species looks like an *Eria*, with clusters of small, green, swollen pseudobulbs. The old pseudobulbs even have the excavated scars (from old inflorescences) that are typical of many *Eria* species. The masquerade is revealed as soon as the plant blooms, and flowers are produced that resemble those of some large-flowered *Ceratostylis* species. Technically, the flowers display characters that make inclusion in either genus impossible. The plant is described here as the sole representative of the new genus *Notheria*, the 'false *Eria*'.

In the diagnosis below, the type specimen is cited with the abbreviation 'SBG-O', short for 'Singapore Botanic Gardens Orchid Collection', a number series introduced for the administration of the collection of living orchids in the Gardens.

***Notheria* O'Byrne and J.J. Verm., *gen. nov.***

*Notheria* O'Byrne and J.J. Verm., et *Eria* et *Ceratostylide* columna pede carenti, labello calcare distincto differt. – TYPUS: *Notheria diaphana* O'Byrne and J.J. Verm.

*Notes:* This new genus belongs in the subtribe Eriinae Benth., and shares a set of characters with both *Eria* Lindl. and *Ceratostylis* Blume. *Notheria* is assumed to be related to these genera on account of this similarity. Like all other Eriinae, *Sarcostoma* Blume excepted, *Notheria* has 8 pollinia that are not attached to a common caudicle. Like many *Eria* (and particularly like those in sect. *Hymeneria*, such as *E. rubifera* J.J.Sm.), *Notheria* has swollen pseudobulbs consisting of several internodes, each pseudobulb with several petiolate, leathery leaves with sheaths, and lateral inflorescences leaving deep cavities in the pseudobulb. Like many *Ceratostylis* (for instance, like *Ceratostylis retisquama* Rehb. f., better known as *Ceratostylis rubra* Ames), *Notheria* has the sepals and petals of similar shape, and a short inflated column with erect, obovate stelia.

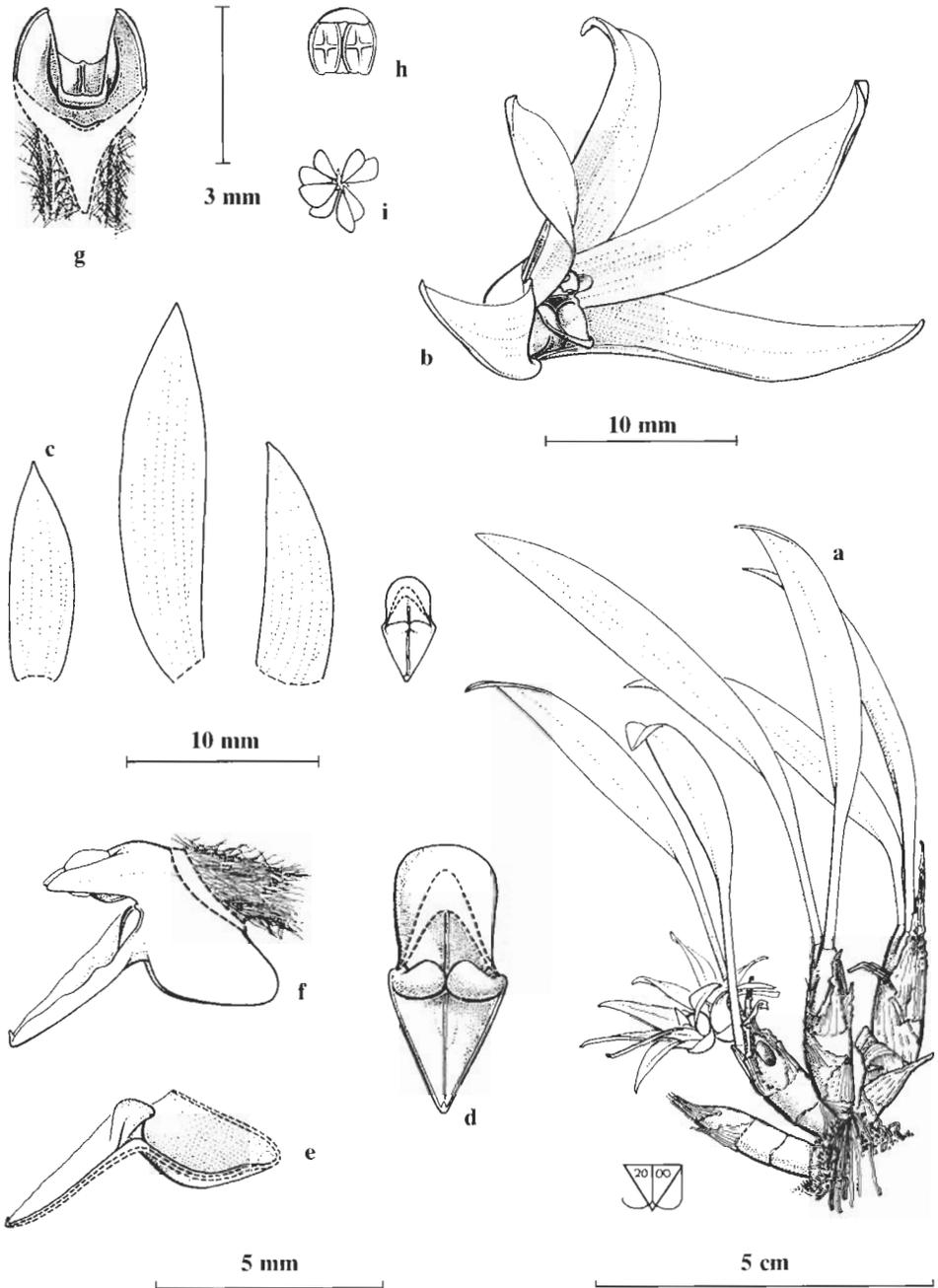
*Notheria* differs from both *Eria* and *Ceratostylis* in having a footless column and a lip with a distinct spur. Although more or less saccate lips occur in both genera, a truly spurred lip does not. In *Ceratostylis* the stelia may support the stigma, in *Notheria* they do not.

*Notheria* includes a single species.

***Notheria diaphana* O'Byrne and J.J. Verm., *sp. nov.* – Fig. 1.**

*Notheria diaphana* O'Byrne and J.J. Verm. – TYPUS: Indonesia, Sulawesi Selatan, upper Mamasa valley, SBG-O 192 (SING, holo.)

Sympodial clump-forming epiphyte. *Rhizome* creeping, branched, 2–3 mm diam. *Pseudobulbs* clustered, erect, 2-leafed near the tip, ellipsoid or ovoid, 1.5–3 by 0.5–1 cm, with 3–5 evenly spaced nodes, near the tip with excavated inflorescence scars when old. *Leaf sheaths* present. *Petioles* 15–25 mm long. *Leaf blades* lanceolate, 4–6 by 0.6–0.8 cm, acute, rather thick, midrib prominent. *Inflorescences* 1–2 per pseudobulb, lateral, c. 3 cm long, 2(–3)-flowered. *Peduncle* 5–8 mm, hirsute, with 2 embracing bracts at its base. *Rhachis* c. 2 mm long, hirsute. *Floral bracts* obovate, 6–7 by c. 9 mm, rounded with mucronate tip, folded along the midvein, with scattered hairs. *Flowers* open simultaneously, wide. *Ovary* sessile, 4 mm long, densely hirsute. *Median sepal* elliptic, c. 19 by 4 mm, tip acute and minutely cuneate; very thin, glabrous. *Lateral sepals* not forming a mentum, free, slightly oblique, ovate-triangular, c. 23 by 5 mm, otherwise as the median sepal. *Petals* slightly oblique, c. 21 by 3.5 mm, otherwise as



**Figure 1.** *Notheria diaphana* O'Byrne and J.J. Verm.

a. Habit; b. Flower; c. Flower analysis, from left to right: median sepal, petal, lateral sepal, lip; d. Lip, adaxial side; e. Lip, longitudinal section; f. Column and lip, lateral view; g. Column, front view; h. Anther, adaxial side; i. Pollinia. All from *SBG-O 192*.

the median sepal. *Lip* spurred, thin, glabrous; blade somewhat concave, triangular, c. 3 by 2.2 mm, tip acute with a minute incurved hook; abaxially with two distinct, lateral, transverse calli near the base leaving between them only a tiny entrance to the spur, as well as with a thin median keel. *Spur* ovoid to subglobose, slightly dorsoventrally flattened, c. 3 by 2 mm, inside with the median keel on the lip blade continuing over its inner wall, and with short hairs on its upper wall. *Column* without a foot, c. 2 by 2 mm, stelidia obovate, c. 1 mm, obtuse. *Anther* 0.8 mm long, 2-celled. *Pollinia* 8, loosely associated into 2 groups of 4. *Colours*: rhizome and lower part of pseudobulbs covered with red-brown bracts; pseudobulbs green; leaves dark green, paler below; peduncle, rhachis, ovary and floral bracts pale green, basal bracts and hairs white. Flowers white, interior of spur flushed green on the dorsal side.

*Distribution and habitat*: Indonesia, Sulawesi Selatan only. Found as a canopy epiphyte in high riverine forest in a steep-sided valley, at 1400 m altitude. Flowering recorded June (in cultivation in Singapore); each flower lasts a few days.

*Notes*: The species name refers to the delicate, diaphanous texture of the flowers.