

# A Key to the African species of *Leucophanes*

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Extracted from: Bryophytes des îles Mascareno-malgaches et Seychelles I et II. *Bull. Jard. Bot. Nat. Belg.* **46**:351-378 (1976)

Translated by C.R. Stevenson

Since this key was written, a revision of the *Leucophanes* of the world has been produced: **Salazar Allen, Noris. 1993**. A revision of the pantropical moss genus *Leucophanes* Brid. *Bryophytorum Bibliotheca* **46**:1-139. Two of Onreadt's species are now regarded as synonyms (see key). This revision also contains records for the East African islands for three other species: *L. glaucum*, *L. molleri* and *L. octoblepharoides*. There is also a west African species, *L. unguiculatum*. It is suggested that Noris Salazar's key be used if there is any doubt about a specimen's identification.

NB The terms hypercentric / centric / hypocentric are used by Onreadt to describe the position of the chlorocyst cells. My (CRS) interpretation is that hypercentric = exactly in mid leaf; centric = more - or - less in mid leaf; hypocentric = off centre.

1	Chlorocysts triangular, quadrangular, pentagonal in section. [Endemic to Madagascar]	<i>L. renauldii</i> [ <i>L. heterodictyon</i> ]
1	Chlorocysts all quadrangular in section	2
2	Plants spindly, sub-acaulous, not more than 1cm high. Leaves narrowly linear lanceolate, longly acuminate, 3 - 4.25mm x 0.25 - 0.3mm. Marginal stereomes entire. Basal leucocysts shortly rectangular, the rest subquadrate or hexagonal. Chlorocysts distinctly hypercentric, almost to the leaf tip, when they become hypocentric. [Endemic to Madagascar]	<i>L. renauldii</i>
2	Plants more vigorous	3
3	Stem short / very short; leaves very long & narrow, generally very sharply pointed; 5 - 8mm x 0.4 - 0.5mm. Marginal stereomes finely denticulate from mid-leaf, one more strongly than the other. Inferior leucocysts elongate-rectangular, those in mid-leaf a little irregularly oblong, the upper short, almost square. Basal & apical chlorocysts hypercentral, those on the greater part of the nerve central. [Endemic to Réunion]	<i>L. angustifolium</i>
3	Stems longer	4
4	Marginal stereomes toothless, except near the leaf tip. Leaves 5 - 6mm x 0.4 - 0.5mm. Median stereome with numerous robust teeth at leaf tip. Upper and lower leucocysts all elongate-rectangular, those in mid-leaf short, hexagonal. Basal chlorocysts hypercentric, those of the greater part of the nerve centric, the apical ones slightly hypocentric	<i>L. hildebrandtii</i>
4	Marginal stereomes, sometimes singly, sometimes both, more-or-less denticulate in the upper portion of the leaf	5
5	Leaves 4 - 5mm x 0.5 - 0.9mm. Median stereome more-or-less covered by the leucocysts of the dorsal layer, and often completely so. Leucocysts short, shortly	<i>L. rodriguezii</i>

	rectangular, square or hexagonal. Chlorocysts markedly hypercentric towards the base, hypercentric or subcentric throughout the greater part of the midrib. Sometimes a little hypocentric at the tip	
5	Leaves 6 -7mm x 0.4 - 0.6mm narrowly linear lanceolate & longly ligulate (thong / strap shaped) / acuminate, with wide wings, of 6 -10 series of cels. Median stereome emergent on the dorsal surface, generally dilated and denticulate or tuberculate towards the leaf tip. Leucocysts shortly rectangular or sub-hexagonal. Basal chlorocysts hypercentric, those in mid leaf centric, the apical ones hypocentric	<b><i>L. angustifolium</i></b> [ <i>L. mayottense</i> ]
5	5. Leaves 5 - 6mm x 0.5 - 0.75mm, generally acute. Median stereome emergent onto the dorsal surface, and sometimes onto the ventral surface too. Inferior leucocysts elongate, the others short, almost square. Chlorocysts hypocentric in mid-leaf. Pores in interior walls of leucocysts small, very distinct, and strongly bordered. [Endemic to Seychelles]	<b><i>L. seychellarum</i></b>