

# A key to most of the African species of *Racomitrium*

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**De Sloover (1977)** published a key which covered three African species. **Magill (1981)** described an additional two species. **O'Shea (1995)** lists 7 species, two of which, viz. *R. lepervanchei* and *R. membranaceum*, appear to be confined to the Mascarenes.

What follows is an attempt to combine the keys and descriptions of De Sloover and Magill. It therefore includes *R. lepervanchei*, which De Sloover describes and illustrates. Not having access to either a description or illustration of *R. membranaceum*, it has been omitted. The description of *R. crispulum* has been taken from **Sharp, Crum and Eckel (1994)**.

1	Plants with no hair points, or hair points rare	2
1*	Plants with obvious hair points	3
2	Plant with well developed auricles, made up of inflated smooth walled cells which are, at first hyaline & later brown. Leaf margin bistratose through most of its length. Lower marginal cells sinuate. Upper leaf cells 1 - 2 (3) times as long as wide. Leaf apex obtuse. Spores 23-32m diameter	<i>R. lamprocarpum</i> ( <i>R. nigro-viride</i> )
2*	Plants large, in dense tufts, olive green to blackish green; saxicolous. Leaves appressed dry, recurved wet; ovate acuminate, 3-4mm long; apex acute, rarely with short hyaline hair point. Margins weakly recurved, entire. Lamina unistratose, or bistratose region restricted to marginal quarter of lamina. Lamina cells short-rectangular, incrassate, nodose. Alar cells not forming distinct group, reddish yellow. Lower marginal cells smooth walled, occasionally in several rows.	<i>R. crispulum</i>
3	Hair point strongly papillose, coarsely and irregularly toothed, and with the apical hyaline margin decurrent down the side of the leaf	<i>R. lanuginosum</i>
3*	Not as above	4
4	Hair point round; dentate. Hair point not, or scarcely, twisted when dry. Leaf margin frequently sinuose and denticulate towards the top. Leaves without hair points rare; leaf tip acute and denticulate. Leaves scarcely decurrent; auricles almost absent, generally not noticeable. Capsule 1.5 - 2.5 times longer than wide. Spores 14 - 25m diameter. Internal perichaetial leaves much shorter than vegetative leaves; very obtuse. Upper leaf cells 2-8 times as long as wide, except sometimes at the margin	<i>R. lepervanchei</i>
4*	Hair points flat	4
5	Plants yellowish green, blackish and dull when older. Stems sometimes short, relatively soft and supple & with few branches; more frequently long (10cm +), stiff and fairly brittle, with sometimes numerous short lateral branches giving an almost pinnate appearance. Leaves (2.8) 3 - 4 (4.5) x 0.6 - 0.7 (0.9)mm, narrowly lanceolate at the base & progressively narrower higher up; keeled; frequently secund. Margin multistratose only in places; revolute on one side. Upper leaves generally having a flat hair point, with an entire to denticulate margin, which is often twisted when dry. Leaves without hair point frequent, with an entire rounded tip. Leaves often decurrent, with golden yellow - orange	<i>R. subsecundum</i> ( <i>R. alare</i> )

	auricles which are sometimes well marked. Perichaetial leaves large, very sheathing, obtuse - acute. Upper leaf cells 2-8 times as long as wide, except sometimes at the margin	
5*	Plants yellow-brown, often hoary. Stems with an abundance of short tuftlike branches. Leaves erect when dry, erect-spreading when moist, about 3-3.5mm long (including hair points), lanceolate-acuminate, and ending in a long, crisped, smooth, hyaline hair point. [Sometimes this is considerably reduced]; margins unistratose, recurved on one or both sides; costa shortly excurrent into the hair point; cells linear and nodose throughout, smooth; basal marginal cells short in 1-5 rows. Seta about 7-10mm long; capsules about 2.5mm long, cylindric. Spores 9-12m, smooth	<i>R. crispipilum</i>

### References:

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