

## ULEOBRYUM

Helen M. Jolley<sup>1</sup> & Josephine Milne<sup>2</sup>

*Uleobryum* Broth., *Hedwigia* 45: 271 (1906); named for a German collector of South American plants, Ernst H.G. Ule (1854–1915), together with the Greek *bryon* (a moss).

Type: *U. peruvianum* Broth.

Monoicous. Plants minute, gregarious, growing on soil, with very short stems. Leaves contorted, incurved when dry, erect, spreading when moist, spatulate or obovate, concave with plane margins; apex rounded or somewhat pointed, cuspidate; costa percurrent to short-excurrent. Upper laminal cells hexagonal, papillose; basal cells larger, rectangular, thin-walled, hyaline; laminal KOH colour reaction yellow.

Seta very short. Capsules cleistocarpous, spherical, thin-walled, pale; stomata at the base of the capsule, phaneroporous. Spores globose, yellowish to pale brown, finely papillose.

*Uleobryum* is a genus of three species that occur in the West Indies, Mexico, Peru, Brazil, southern Africa, Japan and Australia. Two non-endemic taxa are known from Australia.

### References

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Leaves ovate-lanceolate; apex usually acute; abaxial cells of costa prorate .....**1. U. occultum**  
Leaves spatulate to obovate; apex usually obtuse; abaxial cells of costa  $\pm$ smooth .....**2. U. peruvianum**

**1. *Uleobryum occultum*** (Mull.Hal. ex G.Roth) R.H.Zander, *Bull. Buffalo Soc. Nat. Sci.* 32: 218 (1993)

*Aschisma occulta* Müll.Hal. ex G.Roth, *Aussereur. Laubm.* 172 (1911). T: Brazil; *n.v.*

*Uleobryum curtisii* I.G.Stone, *J. Bryol.* 13: 19 (1984). T: Three Moon Creek, Cania Gorge, near Monto, Qld, 5 Aug. 1983, *I.G.Stone 20990*, *A.G.Stone & H.S.Curtis*; holo: MEL.

Illustrations: I.G.Stone, *op. cit.* 20, fig. 1; 21, fig. 2, as *U. curtisii*; R.H.Zander, *op. cit.* 217, pl. 83 (1993).

Plants yellowish, 1.0–1.5 mm tall. Leaves ovate-lanceolate, 0.4–1.5 mm long, 0.2–0.5 mm wide; concave; apex usually acute; costa strong, subpercurrent with prorate abaxial cells; margins undulate, occasionally plane. Upper laminal cells papillose, quadrate-hexagonal, 10–12  $\mu$ m wide; basal cells larger, smooth, short-rectangular.

<sup>1</sup> Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra, Vic. 3141, Australia

<sup>2</sup> Royal Botanic Gardens Melbourne, Birdwood Avenue, South Yarra, Vic. 3141, Australia

Calyptra campanulate, c. 200–250 µm long. Seta very short, c. 20–40 µm long. Capsules cleistocarpous, globose, pale brown, 0.325–0.475 mm long; exothecial cells irregularly polygonal, the outer wall of each cell with a central lens shaped patch of translucent thickening on the inner surface. Spores c. 25 µm diam.

Rare in eastern Qld; on sandy and gritty soils in open habitats. Also in Mexico, Brazil and southern Africa.

Qld: Cania Gorge Natl Park, *I.G.Stone 22685* (MEL); Dawson Hwy, Dawson Ra., Moura, *I.G.Stone 21162* (MEL); Coomanglah, *I.G.Stone 21131* (MEL); opposite Coomanglah Forest, Monto to Biloela, *I.G.Stone 21119* (MEL); Coomanglah S.F., Monto to Biloela, *I.G.Stone 21090A* (MEL).

## **2. *Uleobryum peruvianum* Broth., *Hedwigia* 45: 271 (1906)**

T: auf Erdboden am Cumbasso, Rio Huallaga, Tarapoto, Peru; holo: H-BR *n.v.*

Illustrations: R.H.Zander, *op. cit.* 217, pl. 83 (1993); R.H.Zander, *op. cit.* 227, fig. 169 (1994).

Plants green above, brown below, 2–3 mm tall. Leaves spatulate to obovate, c. 1 mm long and 0.5 mm wide, contorted, incurved when dry, erect-spreading when moist; apex rounded, cuspidate; costa strong, percurrent or short-excurrent; margins plane. Upper laminal cells hexagonal to subquadrate, 11–13 µm wide; basal cells rectangular, hyaline, c. 30 µm long and 10 µm wide.

Calyptra conical-campanulate, c. 0.25–0.30 mm long, smooth. Seta 3–5 mm long, reddish, twisted to the right above. Capsules spherical, immersed, cleistocarpous, c. 0.35 mm long. Spores 25–30 µm diam.

Occurs in northern W.A and north-western Qld. Also in Mexico, Costa Rica, Venezuela, Peru and Paraguay.

W.A.: Blue Holes, Ord R., c. 4 km SE of the confluence of the Ord and Frank Rivers, SE Kimberley region, *S.J.Forbes 2652, 2653* (MEL). Qld: dry watercourse near camp, Lawn Hill Natl Park, *I.G.Stone 22181–22185, 22192* (MEL).