



**Gemmabryum.**

**A–I, *G. eremaeum*.** A, Habit with sporophyte (dry specimen); B, Leaf; C, Cells at leaf apex; D, Gemmae (axillary bulbils), E, Stem base with tuber; F, Marginal cells in mid-leaf; G, Mid-laminal cells; H, Basal laminal cells; I, Peristome: endostome with high basal membrane with central cilia and segment (left); exostome tooth (right) (A–I, R.E.Grandison s.n., AD).

**J–P, *G. pachythemum*.** J, Leaf; K, Peristome: exostome tooth (left); endostome basal membrane with cilia on either side of segment (right); L, Gemma (axillary bulbil); M, Habit with sporophyte (dry specimen); N, Cells at leaf apex; O, Mid-laminal cells; P, Basal laminal cells (J–P, lectotype).

**Q–V, *G. austrosabulosum*.** Q, Habit with sporophyte (dry specimen); R, Leaf; S, Cells at leaf apex; T, Mid-laminal cells; U, Basal laminal cells; V, Peristome (Q–V, holotype).

**W–CC, *G. sullivanii*.** W, Cells at leaf apex; X, Mid-laminal cells; Y, Basal laminal cells; Z, Gemmae (axillary bulbils); AA, Leaf; BB, Habit with sporophyte (dry specimen); CC, Capsule with peristome (W–CC, W.A.Weymouth 27066, AD).

Scale bars: 1 mm for habit; 0.5 mm for leaves, 100 μm for cellular drawings. Drawn by L.Elkan