



Groutiella and Schlotheimia.

A–I, *Groutiella tomentosa*. A, Branch leaf; B, Branch leaf with caducous tip; C, Habit of dry branch (H.Streimann 29398, CANB); D, Upper laminal cells; E, Leaf margin above base; F, Laminal cells at insertion, costa at right (D.Norris 43099, ALTA); G–I, T.S. of leaf from apex to base (A, B, D, E, G–I, D.Norris 43104, ALTA).

J–R, *Schlotheimia brownii*. J, K, Habit; L, Dwarf male plant; M, Calyptra; N, Capsule; O, Branch leaf (W.W.Watts 534, NSW); P, Perichaetial leaf (W.W. Watts 534, NSW); Q, Upper laminal cells; R, Basal laminal cells (J, K, M, N, W.Schofield 79059, NSW; L, Q, R, H.P.Ramsay s.n., NSW).

S–Y, *Schlotheimia funiformis*. S, Habit of dry branch; T, Branch leaf; U, Perichaetial leaf; V, Calyptra; W, Capsule; X, Upper laminal cells; Y, Basal laminal cells (S, U–W, H.Streimann 29105, CANB; T, X, Y, holotype).

Scale bars: 1 mm for habit and leaves; 100 μ m for cellular drawings. Drawn by D.Mackay. A, B, D–I, O–R, T, X, Y redrawn from D.H.Vitt & H.P.Ramsay, J. Hattori Bot. Lab. 59: 325–451 (1985) and D.H.Vitt, Bryologist 92: 282–298 (1989).