

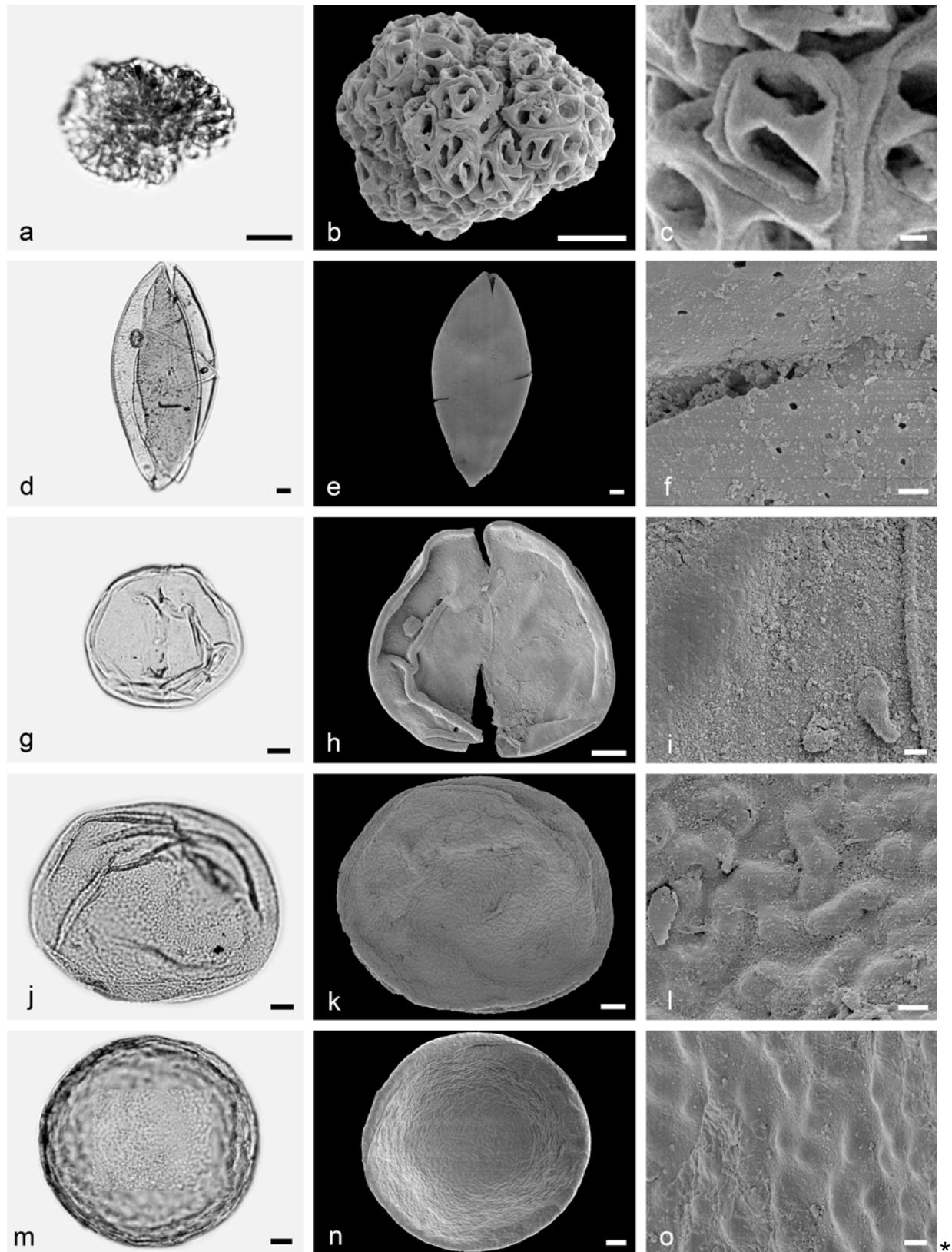


Fig. 1. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Botryococcaceae and Zygnemataceae. a–c *Botryococcus* cf. *B. braunii* (S153627). d–f *Spirogyra* sp. 2 / *Ovoidites microfoveolatus* (S153635). g–i *Spirogyra* sp. 3 / *Ovoidites spriggii* (S153623). j–o *Spirogyra* sp. 4 / *Cycloovoidites cyclus*, (S153623). Scale bars – 10 µm (a, b, d, e, g, h, j, k, m, n), 1 µm (c, f, i, l, o).

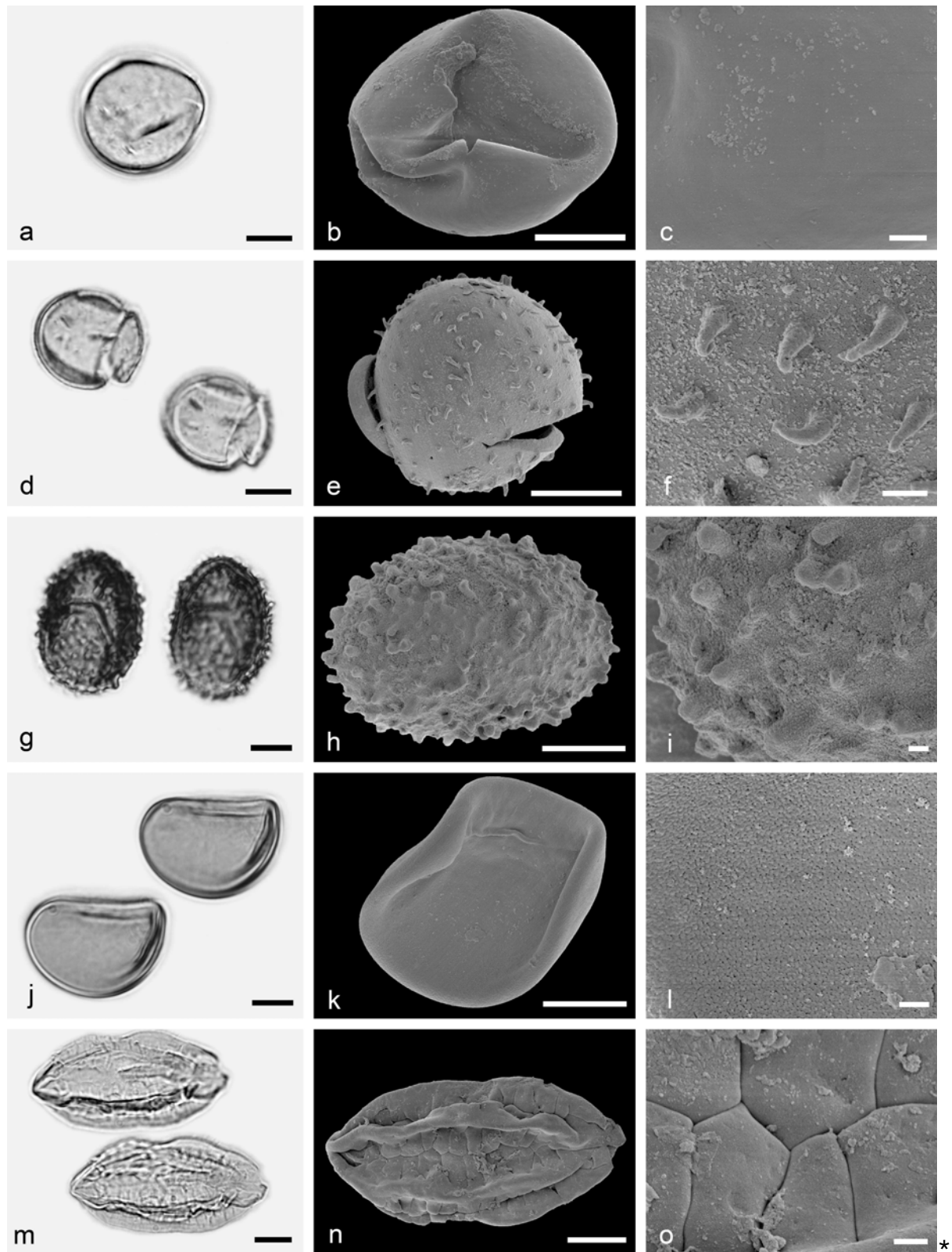


Fig. 2. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of algal cysts, Osmundaceae, spores of uncertain affinities, and pollen of Ephedraceae. a–c Algal cyst type 1 (S153622). d–f Algal cyst indet. 2 / *Sigmopollis pseudosetarius* (S153623). g–i *Osmunda* sp. / *Baculatisporites nanus*, PV. j–k Monolete spore fam. et gen. indet. / *Laevigatosporites haardti* (S153622), EV. m–o *Ephedra* sp. / *Ephedripites (Distachyapites) tertarius* (S153637), EV. Abrev.: polar view (PV), equatorial view (EV). Scale bars – 10 μm (a, b, d, e, g, h, j, k, m, n), 1 μm (c, f, i, l, o).

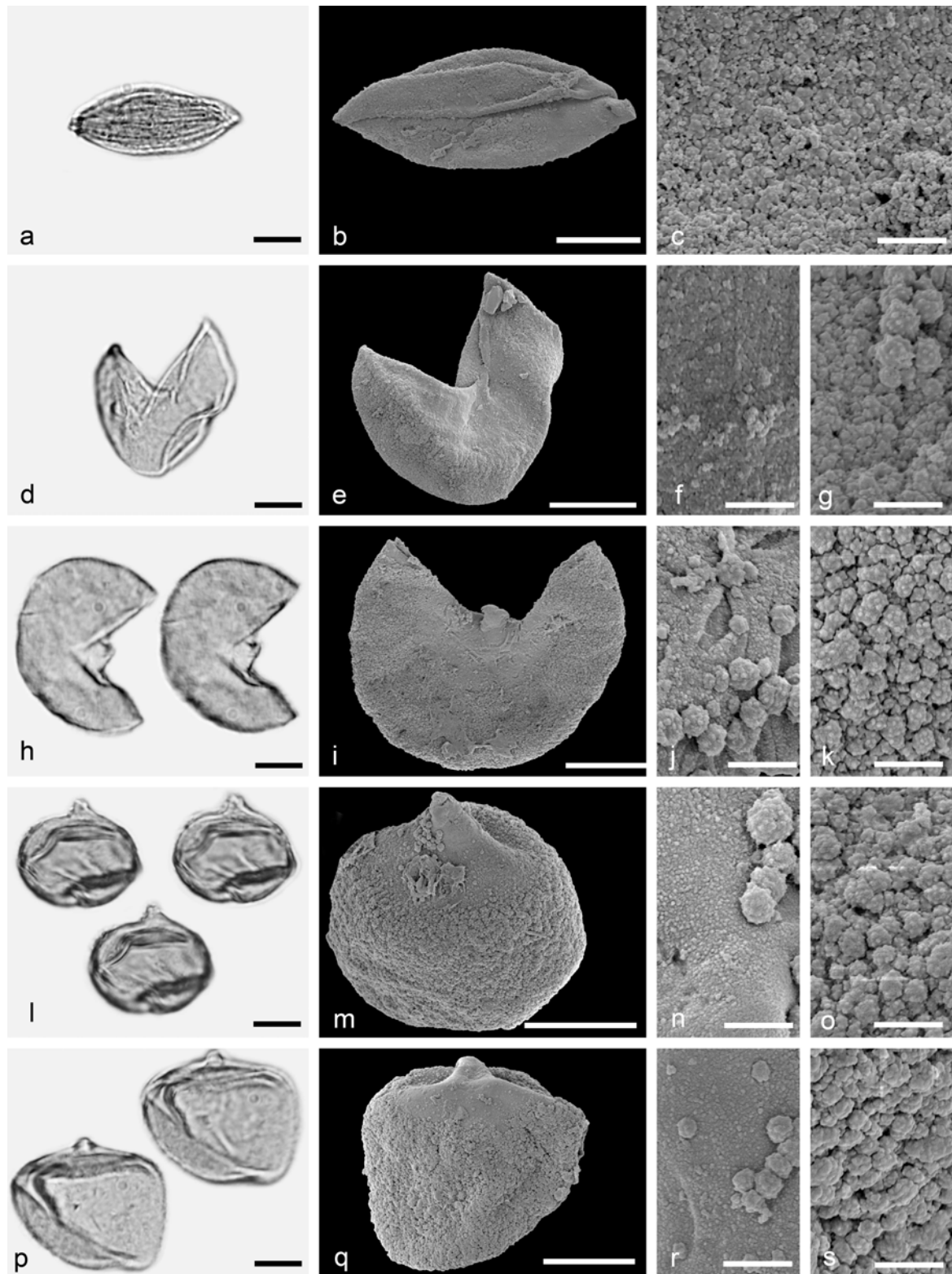


Fig. 3. LM overview (a, d, h, l, p), SEM overview (b, e, i, m, q), leptoma (f, j, n, r) and proximal pole (c, g, k, o, s) SEM detail micrographs of Cupressaceae pollen. a–c CNP1 / *Cupressacites bockwitzensis* (S153627). d–g CNP1 / *Inaperturopollenites dubius* (S153629), PV. h–k CP2 / *Inaperturopollenites concedipites* (S153631), PV. l–o CP3 / *Sequoiapollenites gracilis* (S153631). p–s CP3 / *Sequoiapollenites gracilis* (S153635). Abrev.: Cupressaceae gen. indet. 1 “non papillate” (CNP1), Cupressaceae gen. indet. “papillate” (CP), polar view (PV), equatorial view (EV), Scale bars – 10 µm (a, b, d, e, h, i, l, m, p, q), 1 µm (c, f, g, j, k, n, o, r, s).

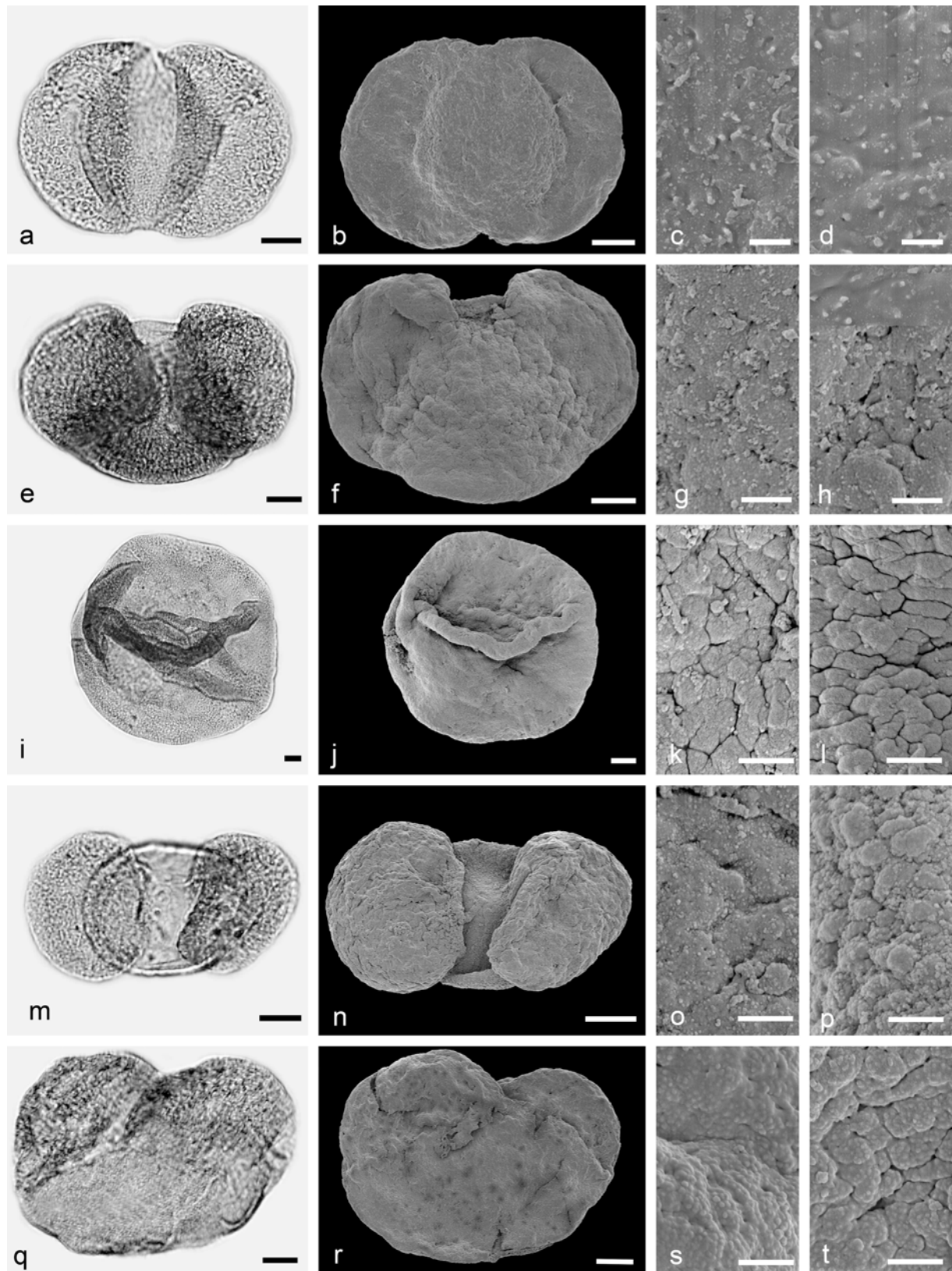


Fig. 4. LM overview (a, e, i, m, q), SEM overview (b, f, j, n, r), sacci (c, g, k, o, s) and corpus (d, h, l, p, t) SEM detail micrographs of Pinaceae. a–d *Cathaya* sp. (S153632), PV. e–h *Cedrus* sp. (S153623), PV. i–l *Picea* sp. (S153641), PV. m–p *Pinus* subgenus *Pinus* sp. (S153627), PV. q–t *Pinus* subgenus *Strobus* sp. (S153631), EV. Abrev.: polar view (PV), equatorial view (EV). Scale bars – 10 μ m (a, b, d, e, i, j, m, n, q, r), 1 μ m (c, d, g, h, k, l, o, p, s, t).

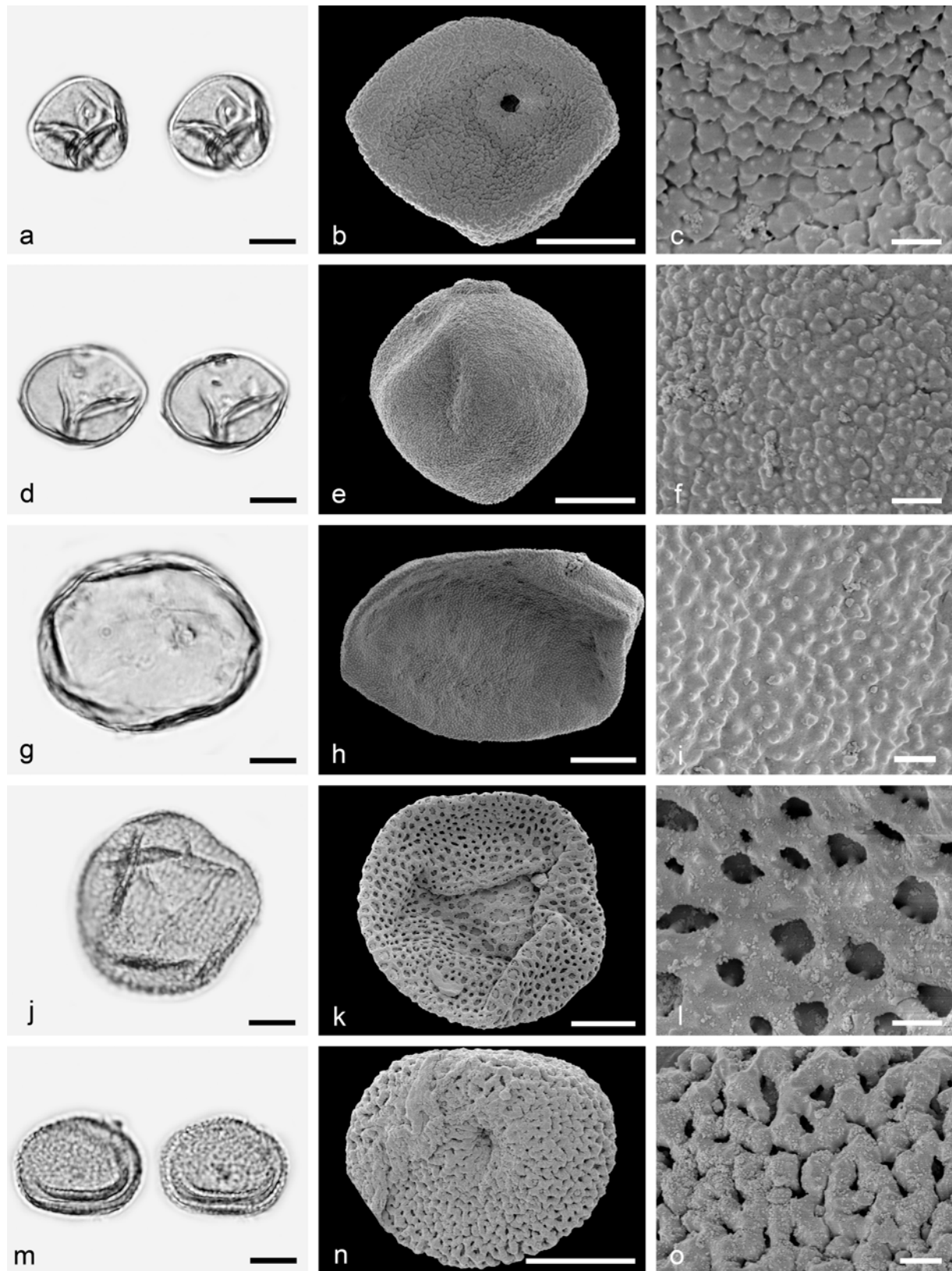


Fig. 5. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Poaceae and Typhaceae pollen. a–c Poaceae gen. indet. 2 (S153629), PV. d–f. Poaceae gen. indet. 1 (S153622), EV. g–i. Poaceae gen. indet. 3 (S153622), PV. j–l *Sparganium* sp. (S153623). m–o *Typha* sp. (S153623), DV. Abrev.: polar view (PV), equatorial view (EV), distal view (DV). Scale bars – 10 μm (a, b, d, e, g, h, j, k, m, n), 1 μm (c, f, i, l, o).

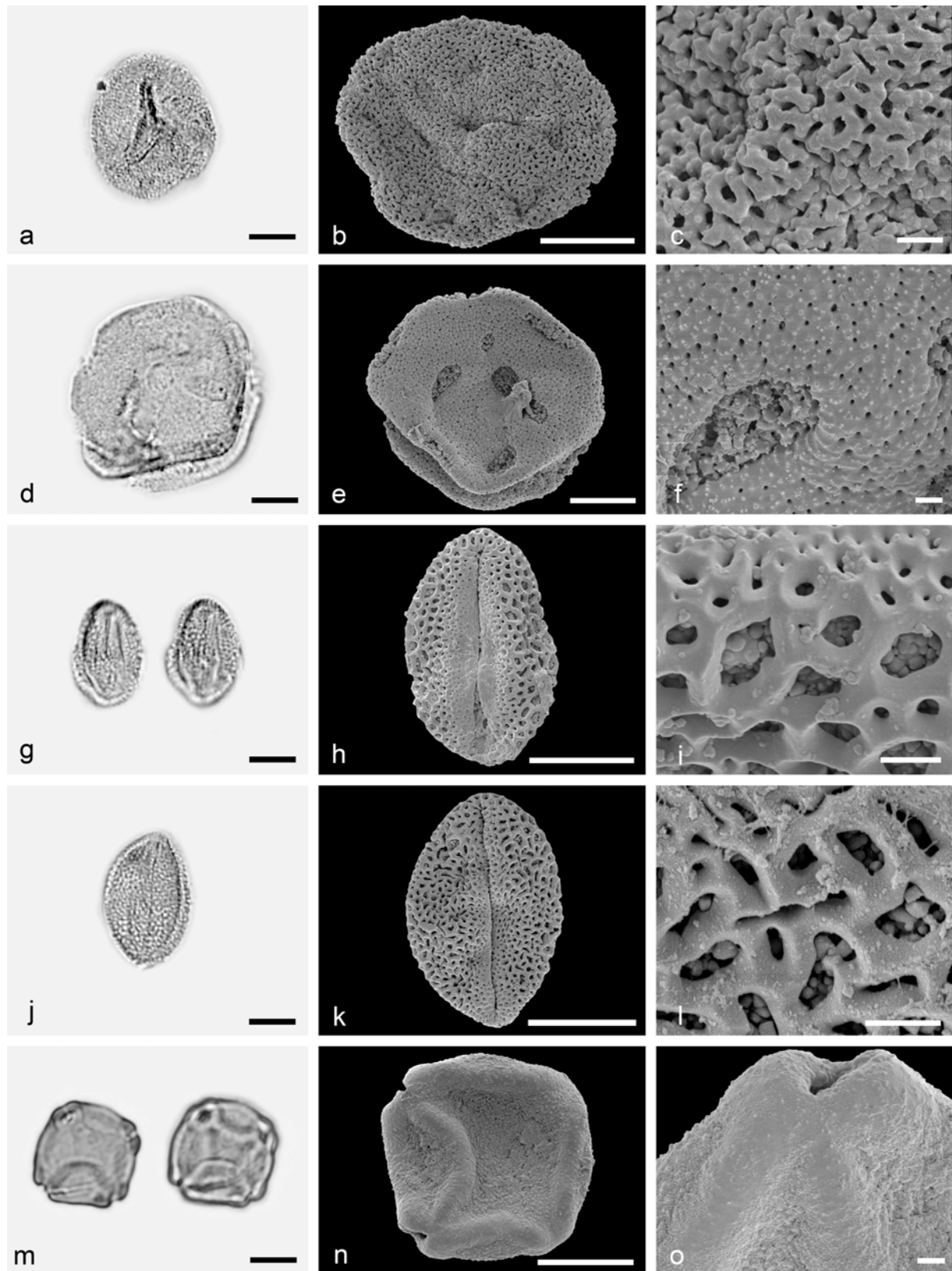


Fig. 6. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Buxaceae, Altingiaceae, Salicaceae, and Betulaceae pollen. a–c *Buxus* sp. (S153631). d–f *Liquidambar* (S153622). g–l *Salix* sp., (g–i) EV (S153623), (j–l) EV (S153637). m–o *Alnus* sp. / *Alnipollenites verus* (S153648), PV. Abrev.: polar view (PV), equatorial view (EV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

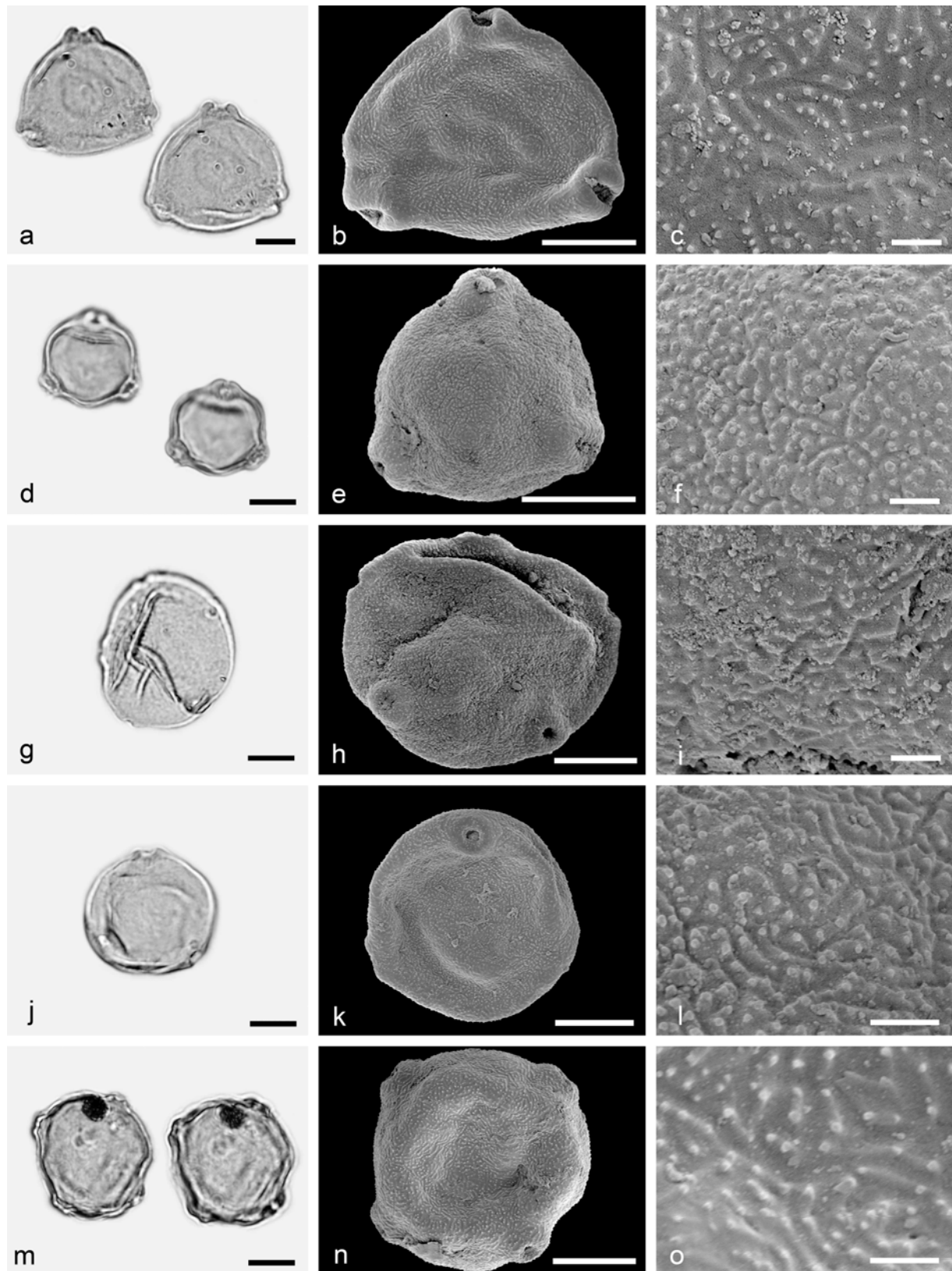


Fig. 7. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Betulaceae pollen. a–c. *Betula* sp. 1 (S153646), PV. d–f *Betula* sp. 2 (S153629), PV. g–i *Carpinus* sp. (S153626), PV. j–l *Corylus* sp. (S153631), PV. m–o *Ostrya* sp. (S153635), PV. Abrev.: polar view (PV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

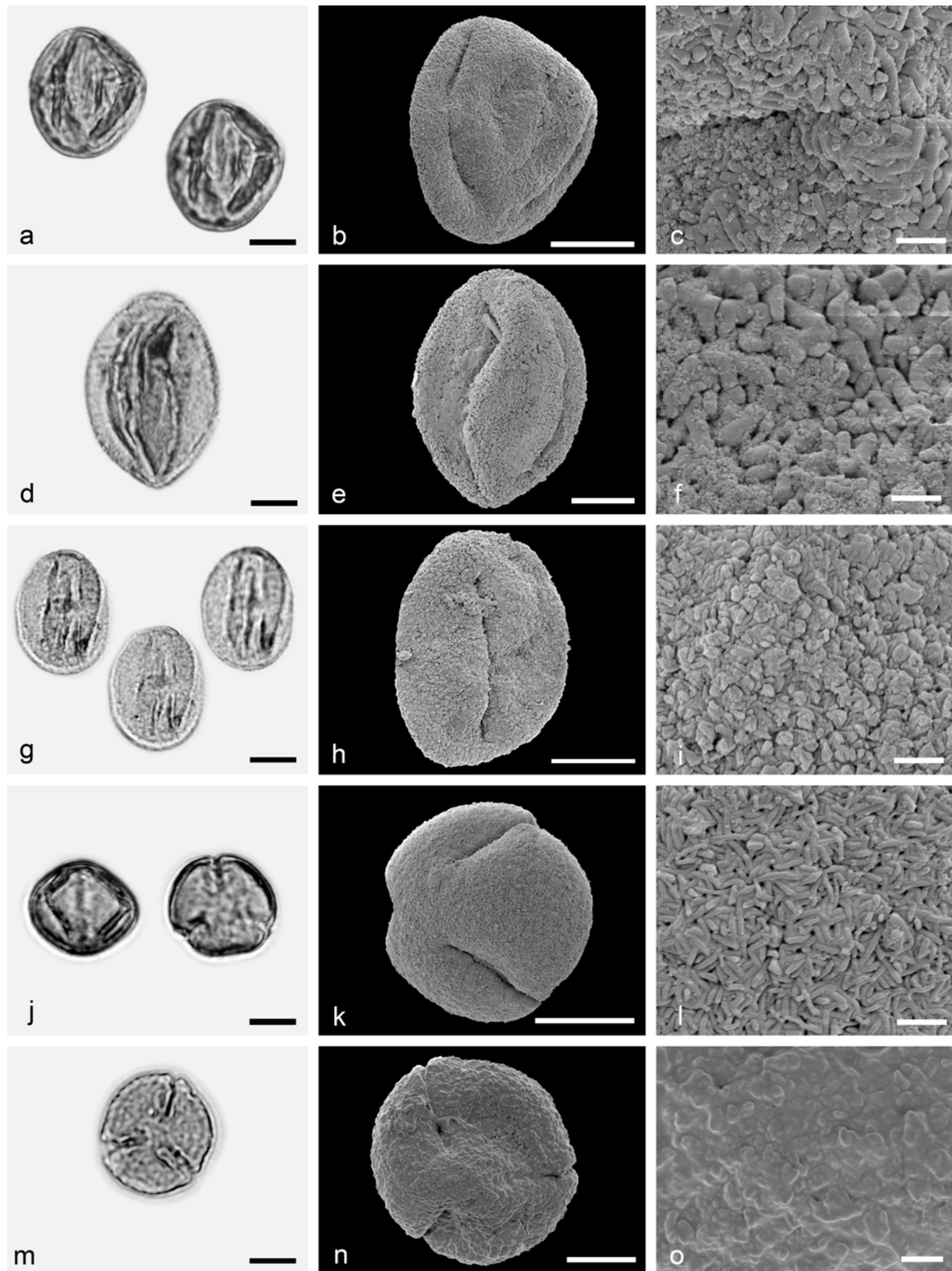


Fig. 8. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Fagaceae pollen. a–f. *Fagus* sp. (S153623), EV. g–i *Quercus* sp. 1 (*Quercus* sect. *Cerris*) (S153637), EV. j–l *Quercus* sp. 2 (*Quercus* sect. *Ilex*) (S153622), left EV, right PV. z–aa *Quercus* sp. 3 (*Quercus* sect. *Quercus*) (S153648), PV. Abrev.: polar view (PV), equatorial view (EV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

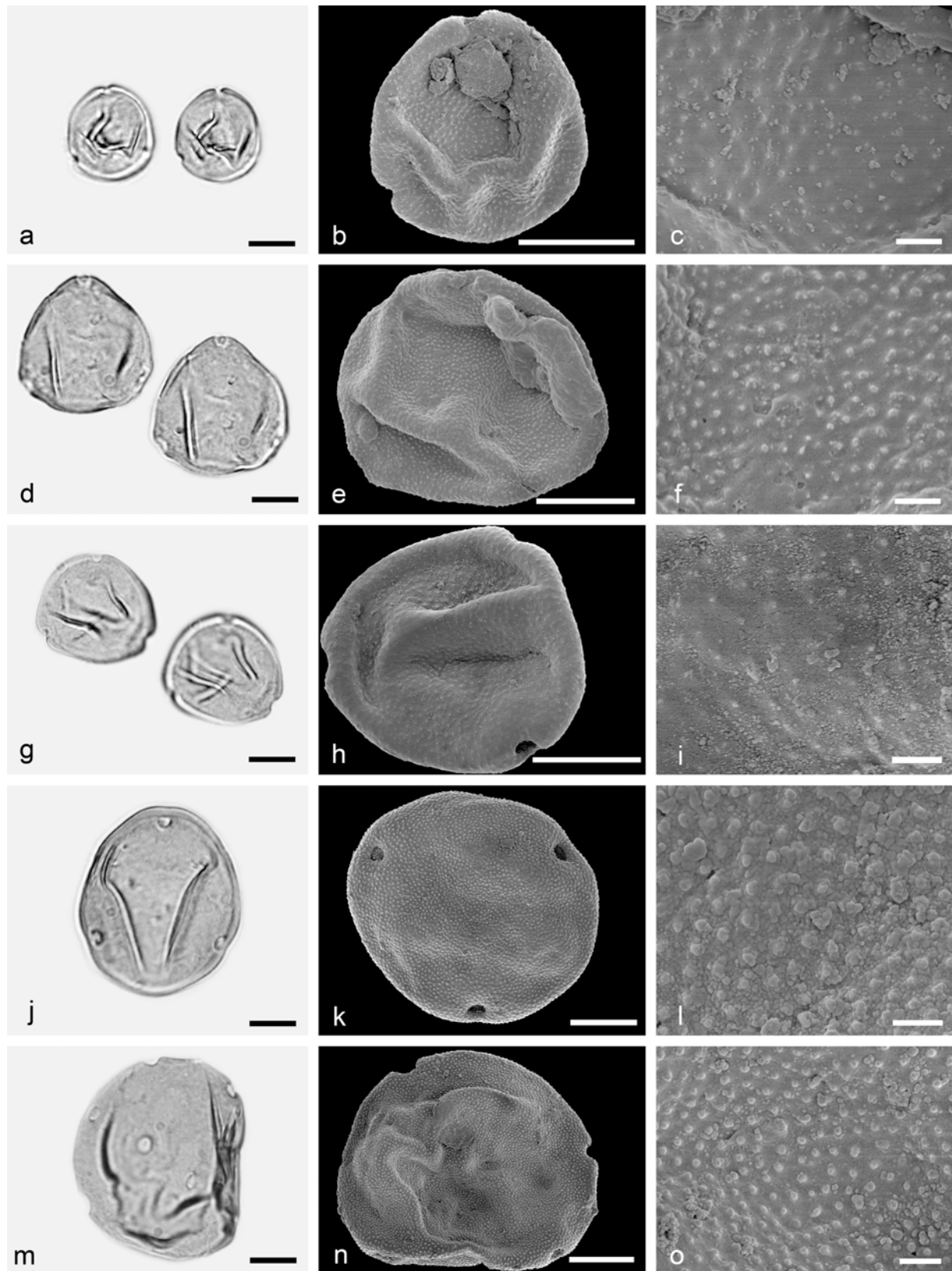


Fig. 9. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Juglandaceae pollen. a–c. Engelhardioideae gen. indet. 2 (S153622), PV. d–i Engelhardioideae gen. indet. 1, d–f (S153622) PV, g–i (S153627) with pseudocolpus-like folds. j–l *Carya* sp. / *Caryapollenites simplex* (S153627), PV. m–o *Juglans* sp. (S153629), PV. Abrev.: polar view (PV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

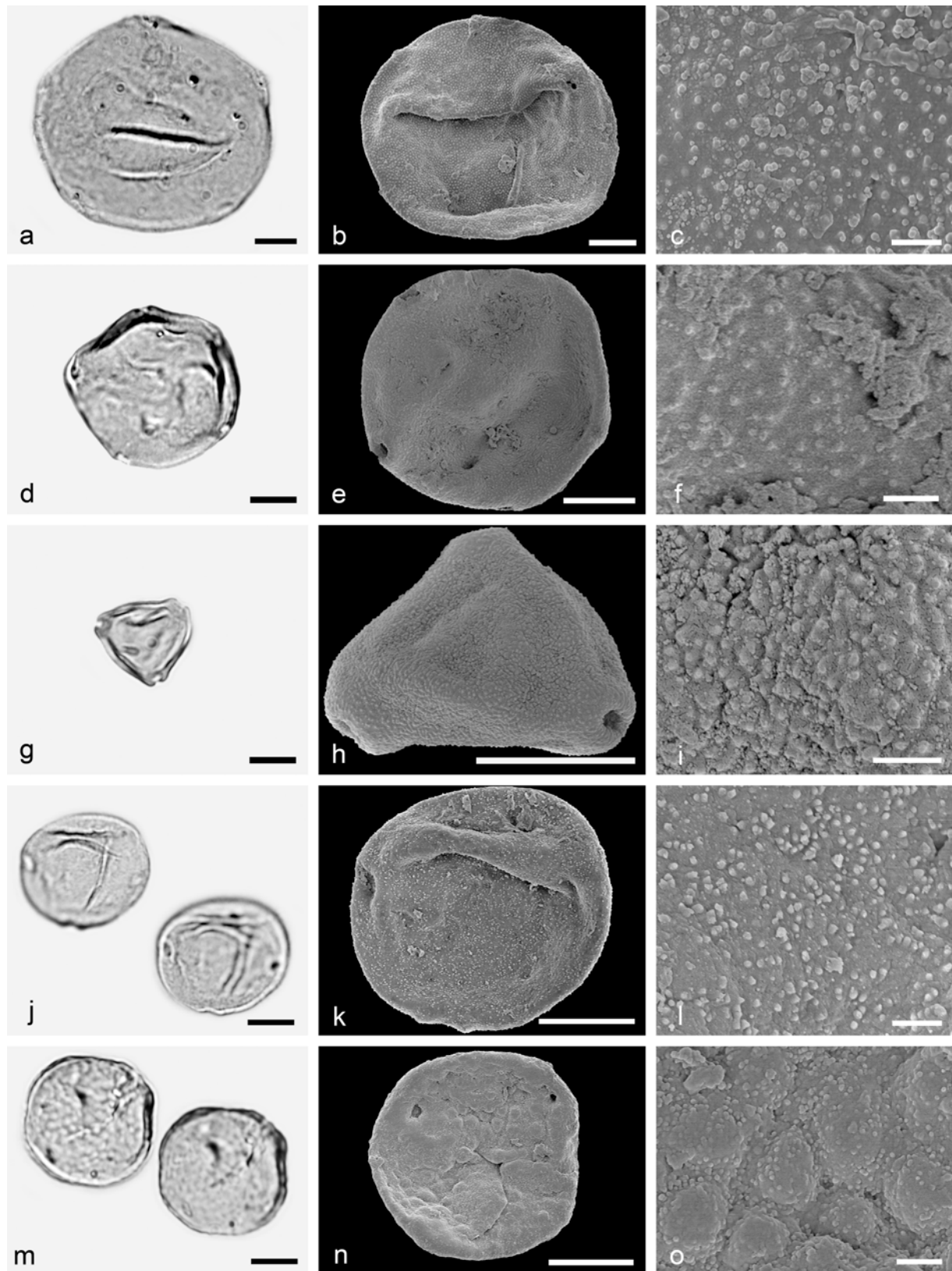


Fig. 10. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Juglandaceae, Myricaceae, Cannabaceae, Ulmaceae pollen. a–f *Cyclocarya* vel *Pterocarya* sp., (a–c) exceptionally large specimen, PV (S153646), (d–f) PV (S153629). g–i *Morella* vel *Myrica* sp. (S153637), PV. j–l *Celtis* vel *Pteroceltis* (S153632), PV. m–o *Cedrelospermum* sp. (S153635), PV. Abrev.: polar view (PV). Scale bars – 10 µm (a, b, d, e, g, h, j, k, m, n), 1 µm (c, f, i, l, o).

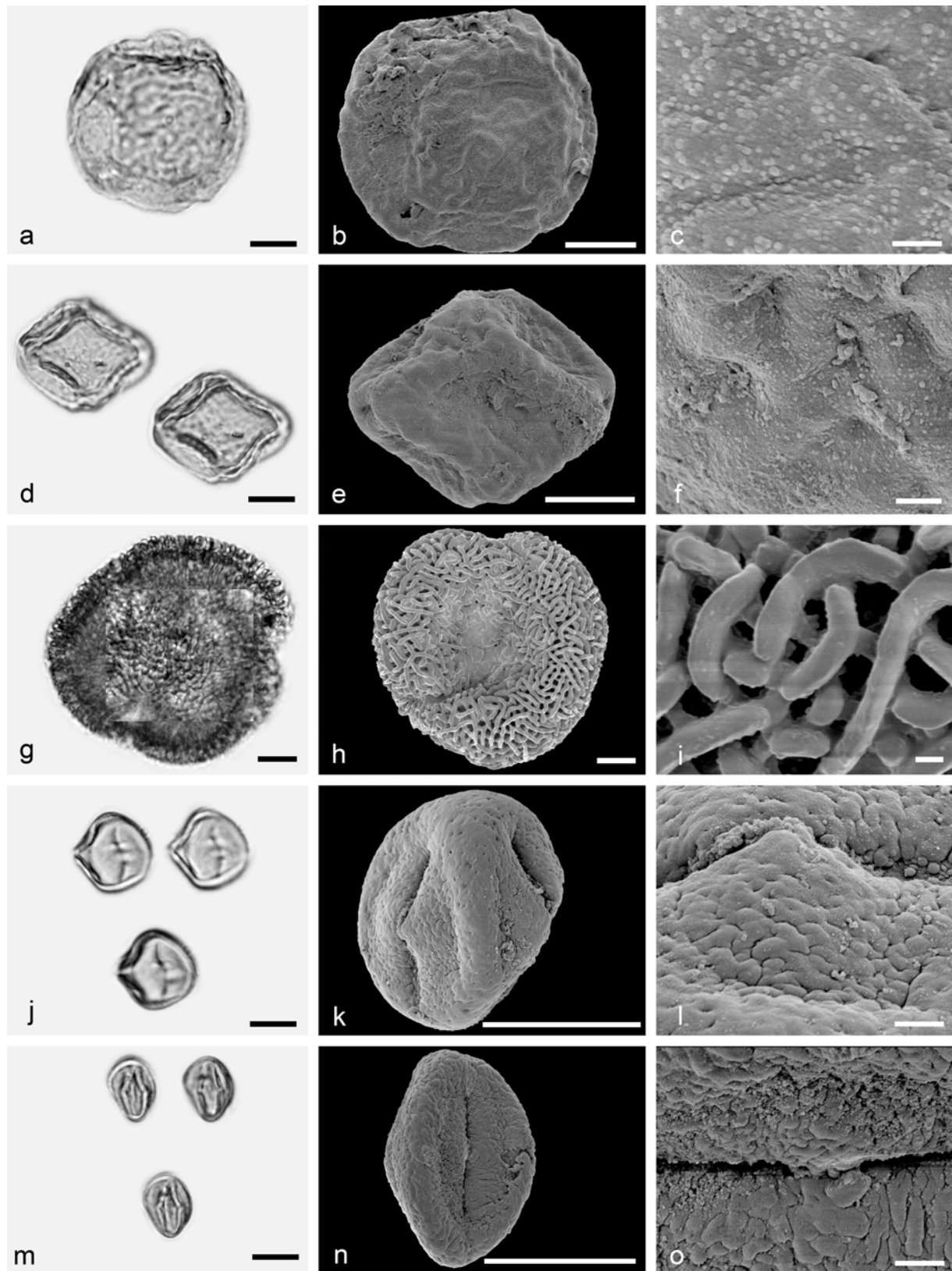


Fig. 11. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Ulmaceae, Geraniaceae, and Lythraceae pollen. a–c *Ulmus* sp. (S153629), PV. d–f *Zelkova* sp. (S153646), PV. g–i *Erodium* sp. (S153622), PV. j–l. *Decodon* sp. 1 (S153635), EV. m–o *Decodon* sp. 2 (S153627), EV. Abrev.: polar view (PV), equatorial view (EV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

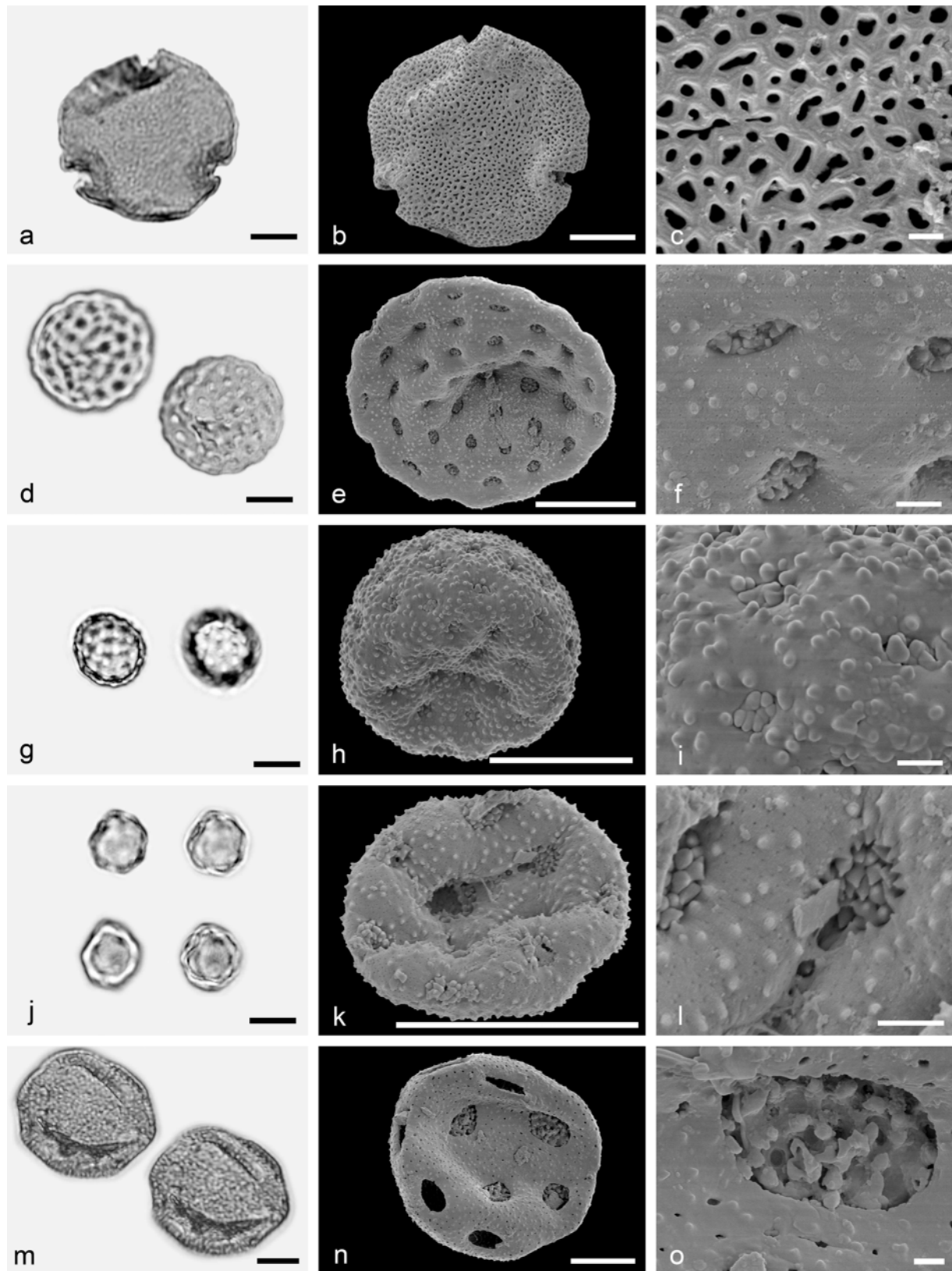


Fig. 12. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Malvaceae, Amaranthaceae, and Caryophyllaceae pollen. a–c *Tilia* sp. / *Intratripoporopollenites instructus* (S153633), PV. d–f Amaranthaceae gen. indet. 1 (S153622). g–i Amaranthaceae gen. indet. 2 (S153623). g–i Amaranthaceae gen. indet. 3 (S153636). m–o Caryophyllaceae gen. indet. 1 (S153622). Abrev.: polar view (PV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

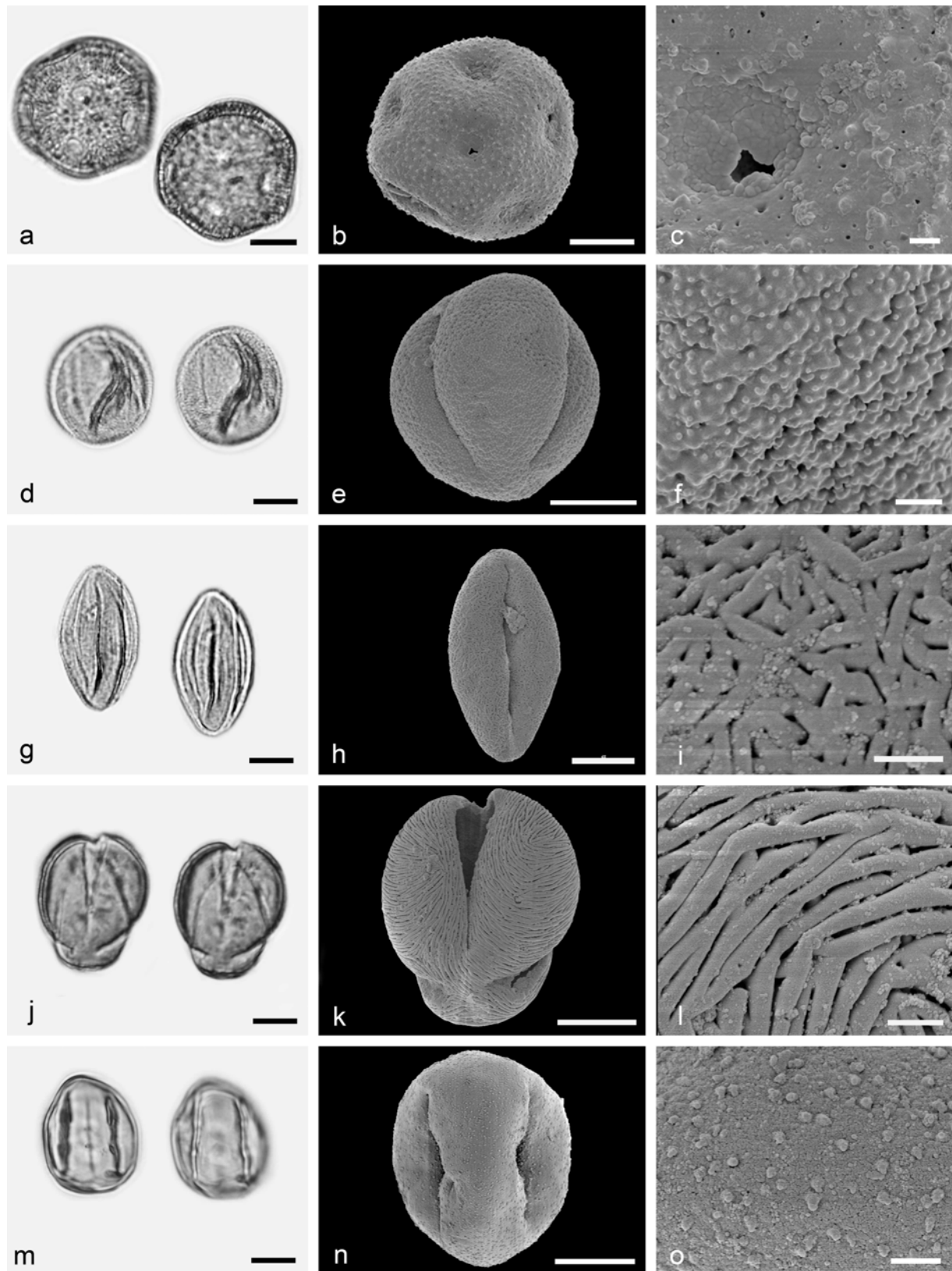


Fig. 13. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, n) micrographs of Caryophyllaceae, pollen. a–c Caryophyllaceae gen. indet. 2 (S153622). d–f *Rumex* sp. (S153623), EV. g–i *Acer* morphotype 1 (S153627), EV. j–k *Acer* morphotype 2 (S153623), EV. m–o *Eucommia* sp. (S153623), EV. Abrev.: polar view (PV), equatorial view (EV). Abrev.: equatorial view (EV). Scale bars – 10 μ m (a, b, d, e, g, h, j, k, m, n), 1 μ m (c, f, i, l, o).

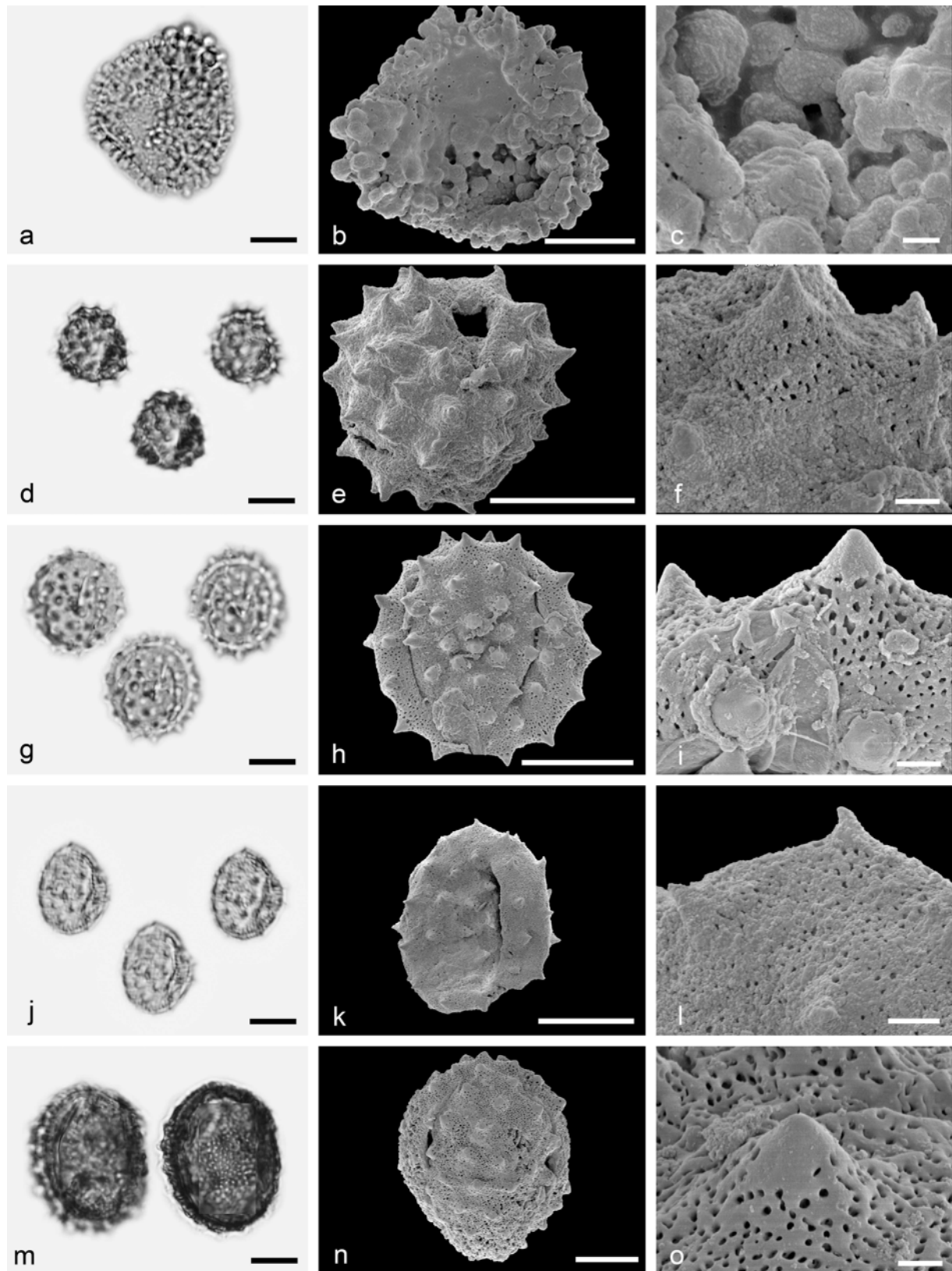


Fig. 14. LM overview (a, d, g, j, m), SEM overview (b, e, h, k, n) and SEM detail (c, f, i, l, o) micrographs of Aquifoliaceae and Asteraceae pollen. a–c *Illex* sp. (S153637), PV. d–f Asteroideae type 2 (S153623), EV. g–i Asteroideae type 3 (S153648), EV. j–l Asteroideae type 3 (S153648), EV. m–n Asteroideae type 5 (S153622), EV. Abrev.: polar view (PV), equatorial view (EV). Abrev.: equatorial view (EV), polar view (PV). Scale bars – 10 µm (a, b, d, e, g, h, j, k, m, n), 1 µm (c, f, i, l, o).

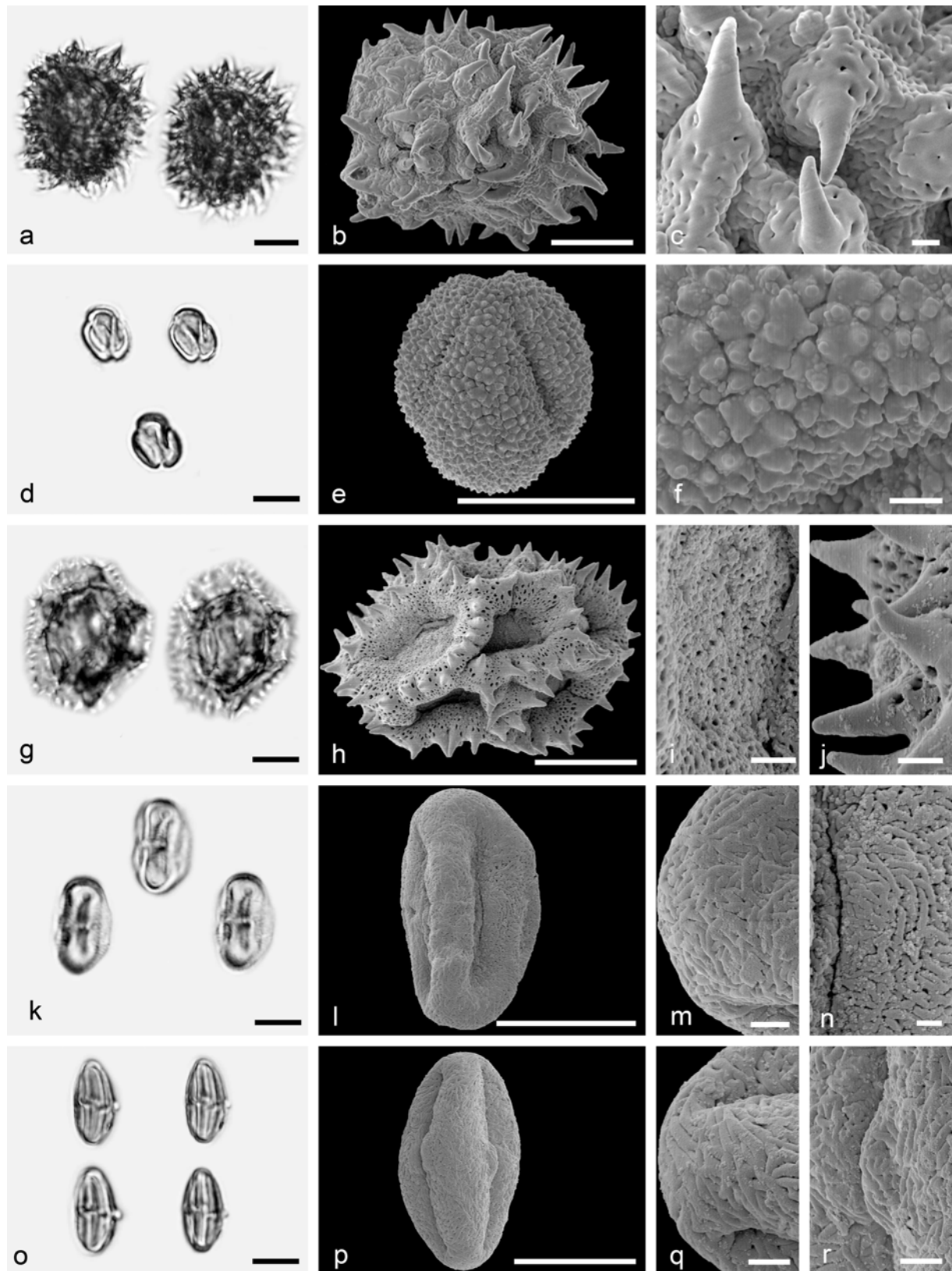


Fig. 15. LM overview (a, d, g, k, o), SEM overview (b, e, h, l, p), apex (f, j, n, r) and aperture (c, g, k, o, s) SEM detail micrographs of Asteraceae and Apiaceae pollen. a–c Asteroideae type 4 (S153622). g–j Cichorioideae gen. indet. (S153623). k–n Apiaceae type 1 (S153623), EV. o–r Apiaceae type 2 (S153623), EV. Abrev.: equatorial view (EV), Scale bars – 10 μm (a, b, d, e, g, h, k, l, p, q), 1 μm (c, f, i, j, m, n, q, r).

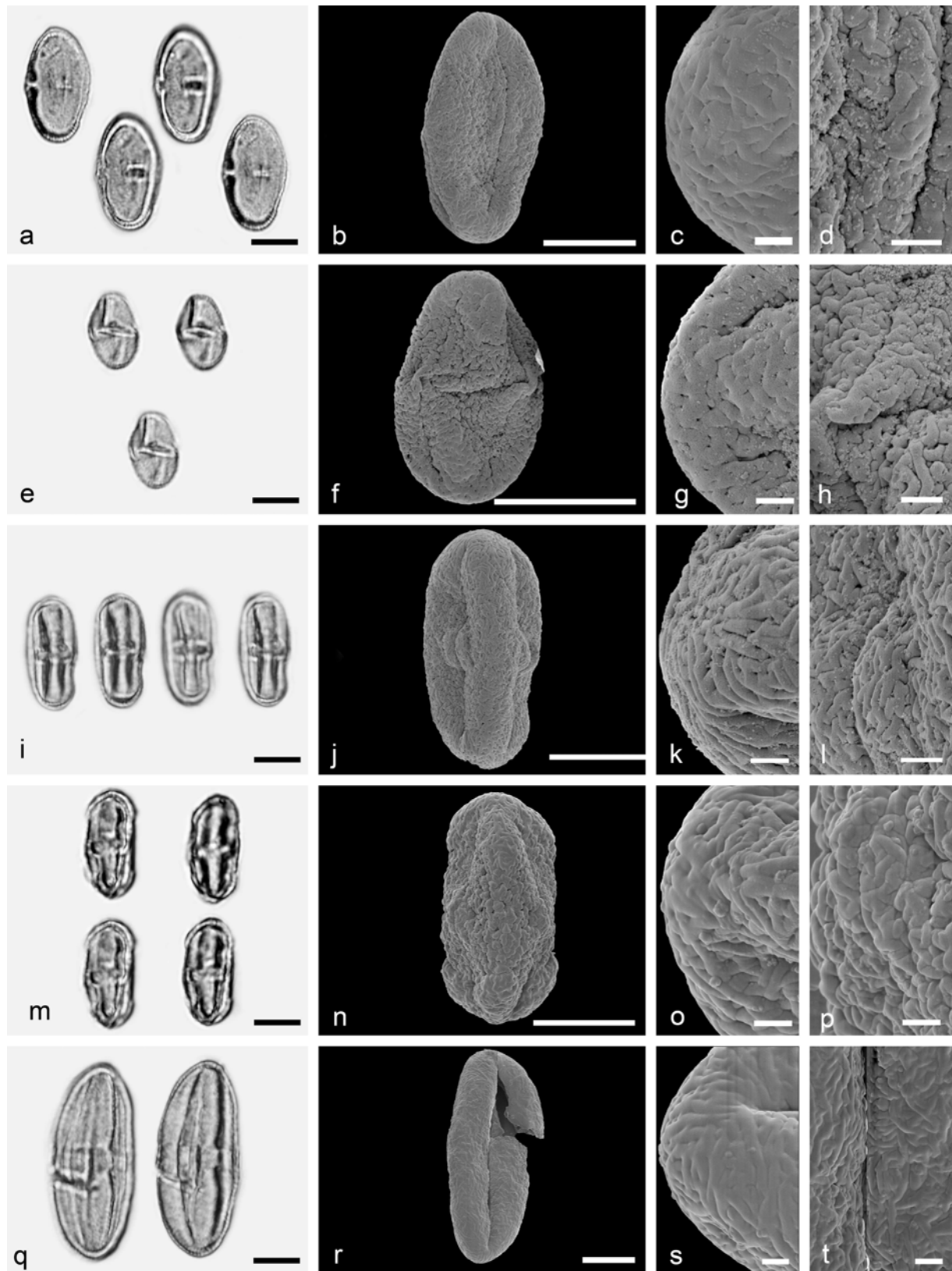


Fig. 16. LM overview (a, e, i, m, q), SEM overview (b, f, j, n, r), apex (c, g, k, o, s) and aperture (d, h, l, p, t) SEM detail micrographs of Apiaceae pollen. a–d Apiaceae type 3 (S153623), EV. e–h Apiaceae type 4 (S153641), EV. i–l Apiaceae type 5 (S153623), EV. m–p Apiaceae type 6 (S153622), EV. q–t Saniculoideae gen. indet. (S153622), EV. Abrev.: equatorial view (EV), Scale bars – 10 µm (a, b, e, f, i, j, m, n, q, r), 1 µm (c, f, g, h, k, l, o, p, s, t).