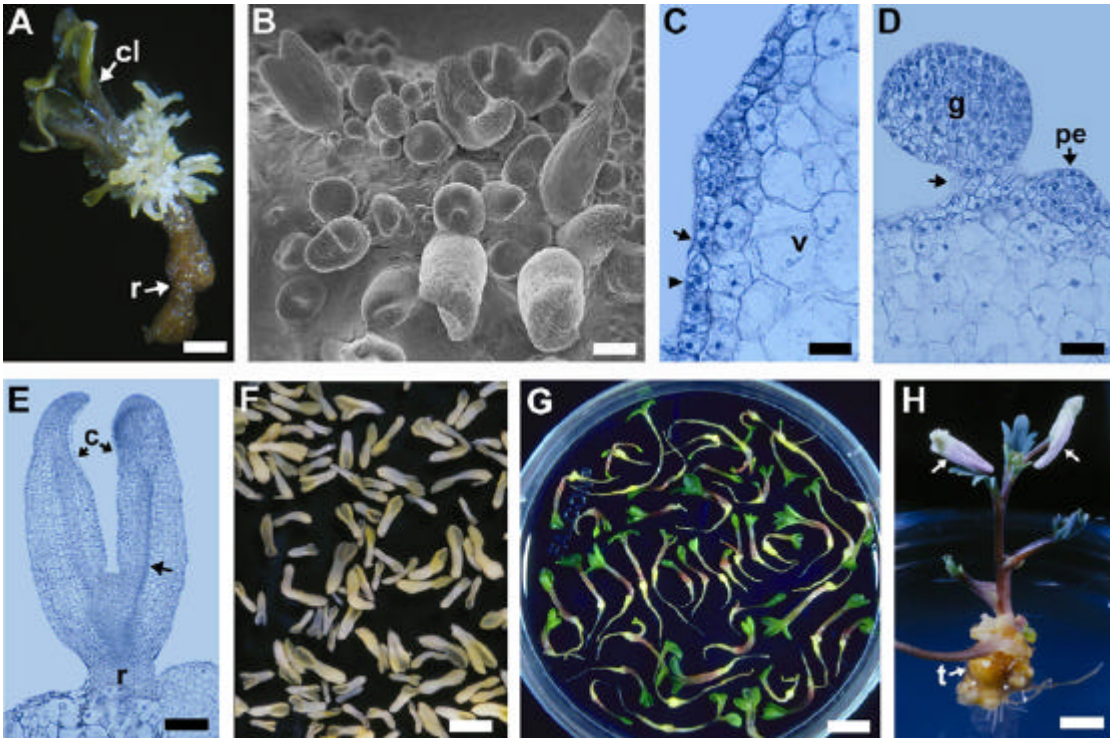

圖 36. 延胡索體胚內部組織及外部形態之觀察

Figures 36 (A-H). Induction of somatic embryos on converted somatic embryos of *Corydaalis yanhusuo* using abscisic acid. (A) Development of somatic embryos directly on the surface of converted somatic embryo at the junction of cotyledonary leaf (cl) and root (r) after two months of culture on MS medium supplemented with 2.0 mg/l ABA. Bar, 2.65 mm; (B) Scanning electron micrograph showing embryos at various stages of development, arising directly without an intervening callus phase. Bar, 212 µm; (C) Transverse section of converted somatic embryo passing through the region at the junction of shoot and root showing periclinal (arrowhead) and anticlinal division (arrow) after 15 days of culture on MS medium supplemented with 2.0 mg/l ABA. Note vacuolated (v) sub-epidermal cells. Bar, 54.87 µm; (D) Transverse section of converted somatic embryo passing through the region at the junction of cotyledonary leaf and root showing proembryo (pe) and globular-stage embryo (g) with suspensor-like stalk (sl) developing directly from epidermal layer of cells after one month of culture on MS medium supplemented with 2.0 mg/l ABA. Bar, 95 µm; (E) Longitudinal section of a cotyledonary-stage somatic embryo developed directly from epidermal layer of cells after two months of culture showing well-developed cotyledons (c), provascular strand (arrow) and root pole (r). Bar, 185 µm; (F) Embryos developed on converted somatic embryo after two months of culture on MS medium supplemented with 2.0 mg/l ABA. Embryos were separated after transfer in liquid MS medium without phytohormones and incubation on a rotary shaker for two days. Bar, 2.37 mm; (G) Converted somatic embryos after culture in MS liquid medium supplemented with 0.1 mg/l GA_3. Bar, 9 mm; (H) A somatic embryo derived plantlet showing flowering (arrows) and well-developed tuber (t) after 4 months of culture on MS medium without phytohormones. Bar, 6.1 mm.