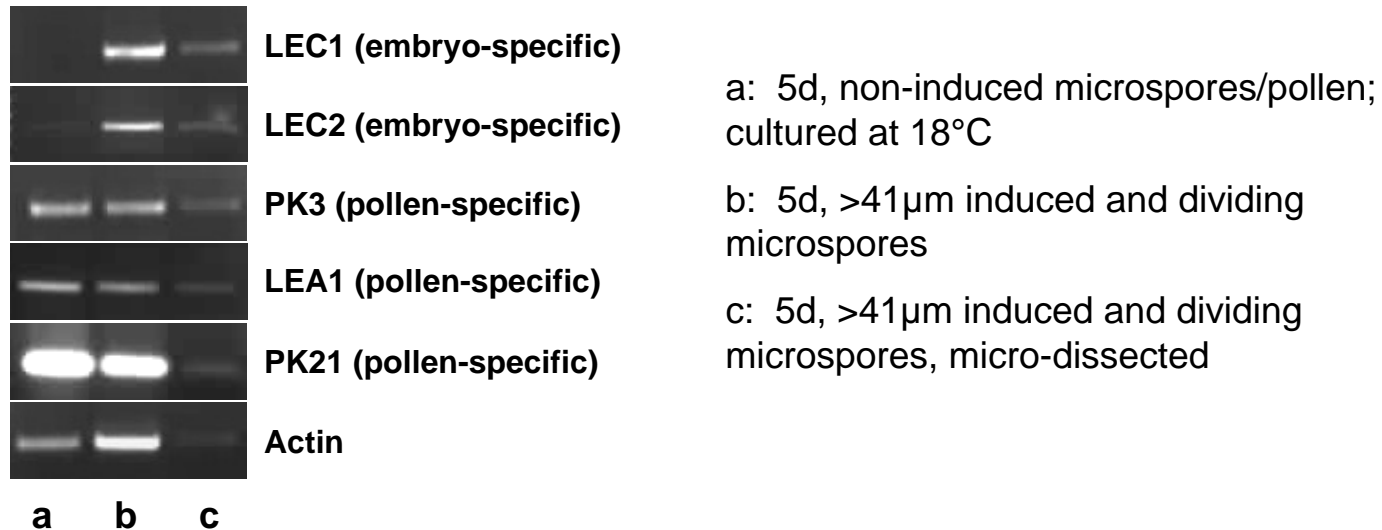


Supplementary Figure S2: Concurrent gene expression.



Supplementary Figure S2. Comparison of gene expression in 5 day-old microspore cultures. a, microspores cultured under non-inducing conditions (5 d at 18°C); b, microspores cultured under inducing conditions (3 d at 32°C, then 2d at 24°C) and sieved (>41µm); c, as in b, except that after sieving (>41µm) a subset of the microspores was selected by micro-dissection based on physical characteristics indicative of embryogenesis.

These gene expression profiles provide strong support for the hypothesis that embryogenesis- and pollen-specific gene expression programs occur concurrently within induced and dividing microspores cultured under embryogenesis-inducing conditions. PK3 and LEA1 are persistent in hand-selected embryogenic cell clusters also expressing LEC1 and LEC2 (lane c). By contrast, PK21 is a pollen-specific gene that is quickly down-regulated with the establishment of embryogenesis.