

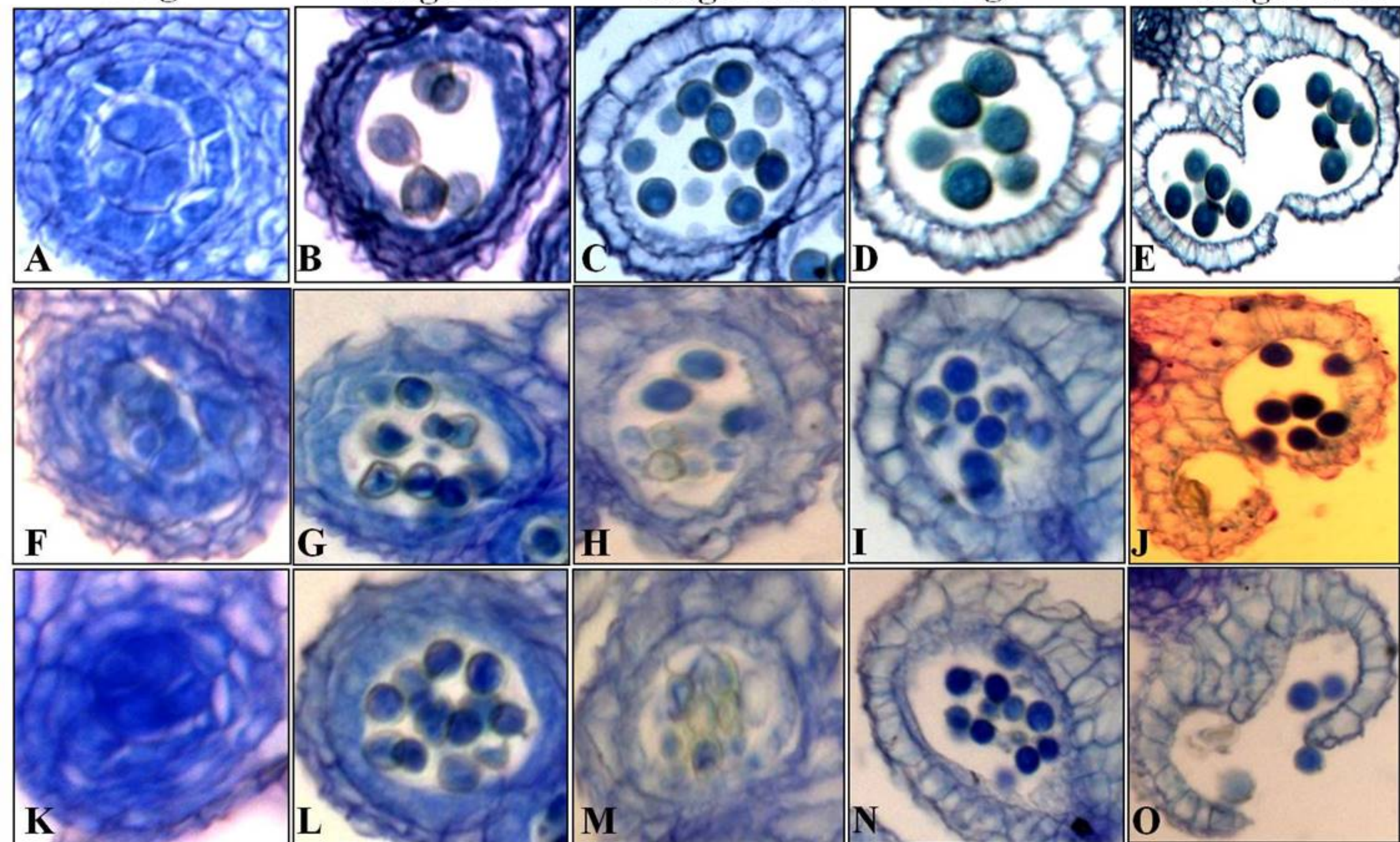
Stage 7

Stage 8/9

Stage 10/11

Stage 12

Stage 13/14



**Supplemental Figure S4.** Stage-wise developmental analysis of pollen in WT and *Athemnl* mutants. (A to E) Cross section of anthers from WT plants showing normal development of pollen. (F to O) Cross section of anthers from *Athemnl-1* (F to J) and *Athemnl-2* (K to O) mutant plant showing defects in microspore development. (F, K) Anthers from the mutant plants showing normal development at stage 7. (G, L) Anthers from mutant plants displaying defects during release of microspores from tetrads at stage 8/9. (H, M) Anthers from mutant plants showing defects in development of sporopollenin wall during stage 10/11. (I, N) Anthers from mutant plants with defects during pollen maturation at stage 12. Fertile and sterile pollen in mature anther locule. (J, O) Anthers from mutant plants showing normal well stained and defective, empty pollen during stage 13/14.