



**Fig. S1. Comparison of three pollen germination medium for semi-*in vitro* pollen germination.**

(a) Representative images of the wild-type pollen tubes growing semi-*in vitro* on different solid pollen germination medium (PGMs) without AtLURE1.2 peptide attraction. Scale bar, 50 μm.

(b, c) Quantification of the growth rate (b) and pollen tube width (c) on three PGMs without AtLURE1.2. More than 10 pollen tubes were measured. Data are mean ± SE. \*\*P < 0.01 (one-way anova).

(d) Representative images of wild-type pollen tubes growing semi-*in vitro* on different PGMs containing 1 μM AtLURE1.2 peptide. Scale bar, 50 μm.

(e, f) Quantification of the growth rate (e) and width (f) of pollen tubes on three PGMs containing 1 μM AtLURE1.2. More than 10 pollen tubes were measured. Data are mean ± SE. \*\*P < 0.01 (one-way anova).