

Video Captions

Video 1: Top view of simulated growth of Sprout 1 in Figs. 4-5 during first 6 days. Speed is determined based on the phase contrast time-point observations of tip cell location and position is determined by the center line obtained from 3D endpoint imaging.

Video 2: Side view of simulated growth of Sprout 1 in Figs. 4-5 during first 6 days.

Video 3: Top view of simulated growth of Sprout 2 in Figs. 4-5 during days 3-6 using the parameter values from Table 1. The simulation predicts that the faster growing sprout will have a smaller diameter.