



Figure S4. Mechanical cues link cuticle integrity to apical hook development. (A) Representative live confocal micrographs of basal regions of dark-grown hypocotyls of *p35S::PIP2A-GFP* in Col-0, *cyp77a4-4* and *dcr-2* backgrounds. Scale bars represent 100 μm . (B) Violin plots of epidermal cell length in basal regions of hypocotyls expressing *p35S::PIP2A-GFP* in Col-0, *cyp77a4-4* and *dcr-2* backgrounds, see representative images in (A). 10–20 cells were measured for each of ≥ 15 seedlings per line across 3 biological replicates. Different letters indicate statistically significant differences based on one-way ANOVA followed by Tukey's post-hoc tests ($\alpha = 0.05$). (C) Representative light micrographs of dark-grown upper hypocotyls and apical hooks of Col-0, *cyp77a4-4* and *dcr-2* grown on medium with low-agar (LA, 0.8% w/v agar) and high-agar (HA, 2.5% w/v agar) in the maintenance phase (48 hours post-germination) after toluidine blue staining. Scale bars represent 200 μm . (D) Representative live confocal micrographs of dark-grown apical hooks expressing the plasma membrane marker *p35S::PIP2A-GFP* in Col-0, *cyp77a4-4* and *dcr-2* backgrounds grown on HA at approximately 24–32 hours after germination (T0) and 8 hours later (T8). Scale bars represent 50 μm . (E) Exact n for positional bins represented in Figure 5K