



Figure 2. Analysis of the *sit1* mutant in root development. Rice seeds of the *sit1* mutant and wild-type (WT) control were germinated and grown in half-strength KimuraB nutrient solution (NS) or deionized water (DW) for 1 week. Detached roots were used to scan and measure for root development. (a) Representative images of 1-week-old *sit1* mutant and WT roots. (b) Comparison of lateral root number in primary roots ($n = 30$ with 3 replicates). (c) Lateral root density ($n = 30$ with 3 replicates). (d) Average length of lateral root ($n = 30$ with 3 replicates). (e) Sum of lateral root length ($n = 30$ with 3 replicates). Lateral root number, average length of lateral root, and sum of lateral root length were analyzed within 3-cm root samples from root base. (f) Length of root immature zone ($n = 30$ with 3 replicates). Root immature zone was defined as the zone of the root where lateral roots were not detected from the root tip. (g) Length of root mature zone ($n = 30$ with 3 replicates). Root mature zone was defined as the zone of the root where lateral root initiation and development takes places to root base. (h) Length of primary root (PR) width ($n = 30$ with 3 replicates). (i) Length of lateral root width ($n = 30$ with 3 replicates). Value represent means \pm SD, ns = non-significant, *** $p < 0.001$, two-way ANOVA with Sidak's multiple comparison test.