

**Supplemental Figure 1.** Image of Col-0, ROP1-OE, *ren1-3*, *gdi2-ami2* and *gdi2-ami8* flower (**a**), anther (**b**) and stigma (**c**) under 65% relative humidity conditions. Scale bars=500  $\mu$ m in the images of the first row, and = 100  $\mu$ m in the SEM images of the 2nd and 3rd rows.