



Figure 8

The FR-dependent P700 oxidation kinetics and Gompertz-fitted parameters in WT and *pgr5* × *crr6* mutant in rice. P700 oxidation kinetics before (a), and after HL illumination (b) were obtained from four biologically independent samples in WT and *pgr5* × *crr6* mutant respectively, and averaged data were shown. From each P700 oxidation kinetics, k_{fast} (c), and k_{slow} (d) were calculated by fitting the P700 oxidation kinetics to the double Gompertz function described in the main text. Data are shown as means with standard errors obtained by independent biological replicates (n = 4). (e) shows the change in Pm before and after HL illumination. (f) and (g) show an initial slope of k_{fast} and k_{slow} to the change in illuminated FR intensity, respectively. These data are shown as box plots from independent biological replicates (n = 4): the central squares within the box indicate the mean value, and bars indicate the range of the maximum or minimum data within a 1.5 × interquartile range (IQR). To figure out the significance of mutation, HL illumination, and their interaction to the change

in $k_{fast}(FR-PFD)^{-1}$ and $k_{slow}(FR-PFD)^{-1}$, the general regression analysis was conducted, and the significance of those is indicated above the figures (**: $p < 0.01$, ***: $p < 0.001$, *n.s.*: not significant).