Figure 6

The effects of growth light intensity on FR-dependent P700 oxidation kinetics and Gompertz-fitted parameters. P700 oxidation kinetics in LL- (a), ML-(b), and HL-grown rice leaves(c) were obtained from seven biologically independent samples, and averaged data are shown. The gray bars above the figure indicate the period of dark, and red bars indicate the period of FR illumination. The yellow bars indicate a saturation pulse illumination at that time. From each P700 oxidation kinetics, k_{fast}(d), and k_{slow}(e) 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 error obtained by independent biological replicates (n = 7). (f) and (g) shows an initial slope of k_{fast} and k_{slow} to the change in illuminated FR intensity, respectively. These data are shown as box plots obtained by independent biological replicates (n = 7), 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). (h) shows the relationship between total LHCI content and $k_{fast/slow}$(FR-PFD)$^{-1}$ of leaves grown under the different light intensity. Data of $k_{fast/slow}$(FR-PFD)$^{-1}$ were same shown in (f) and (g), and total LHCI content is quoted from Figure 4. The data are shown as means with standard errors.