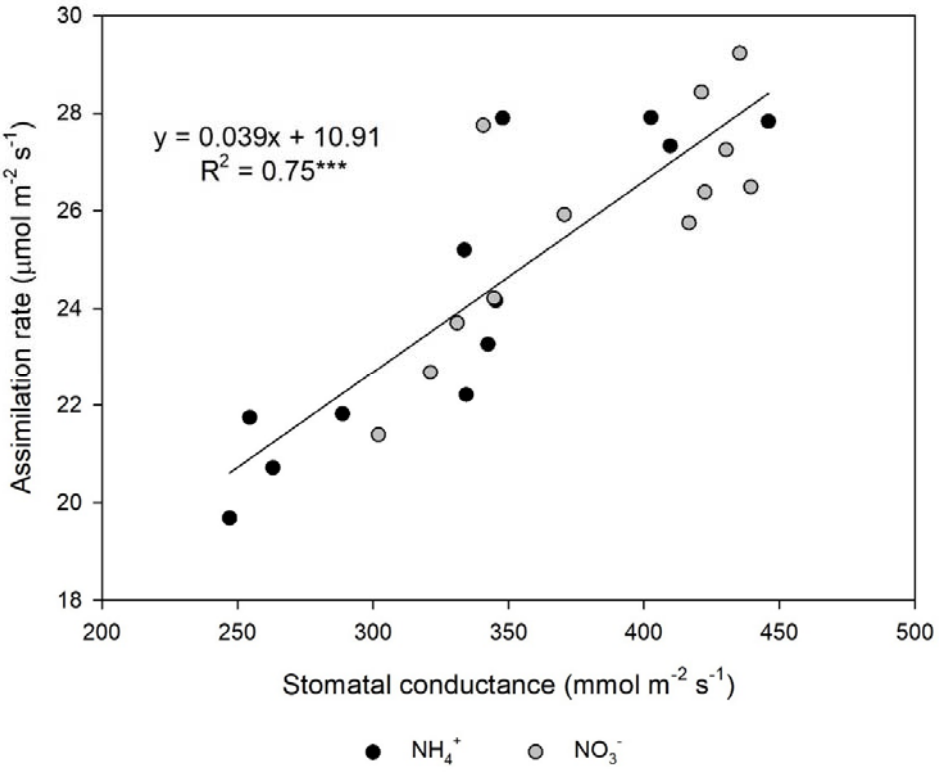
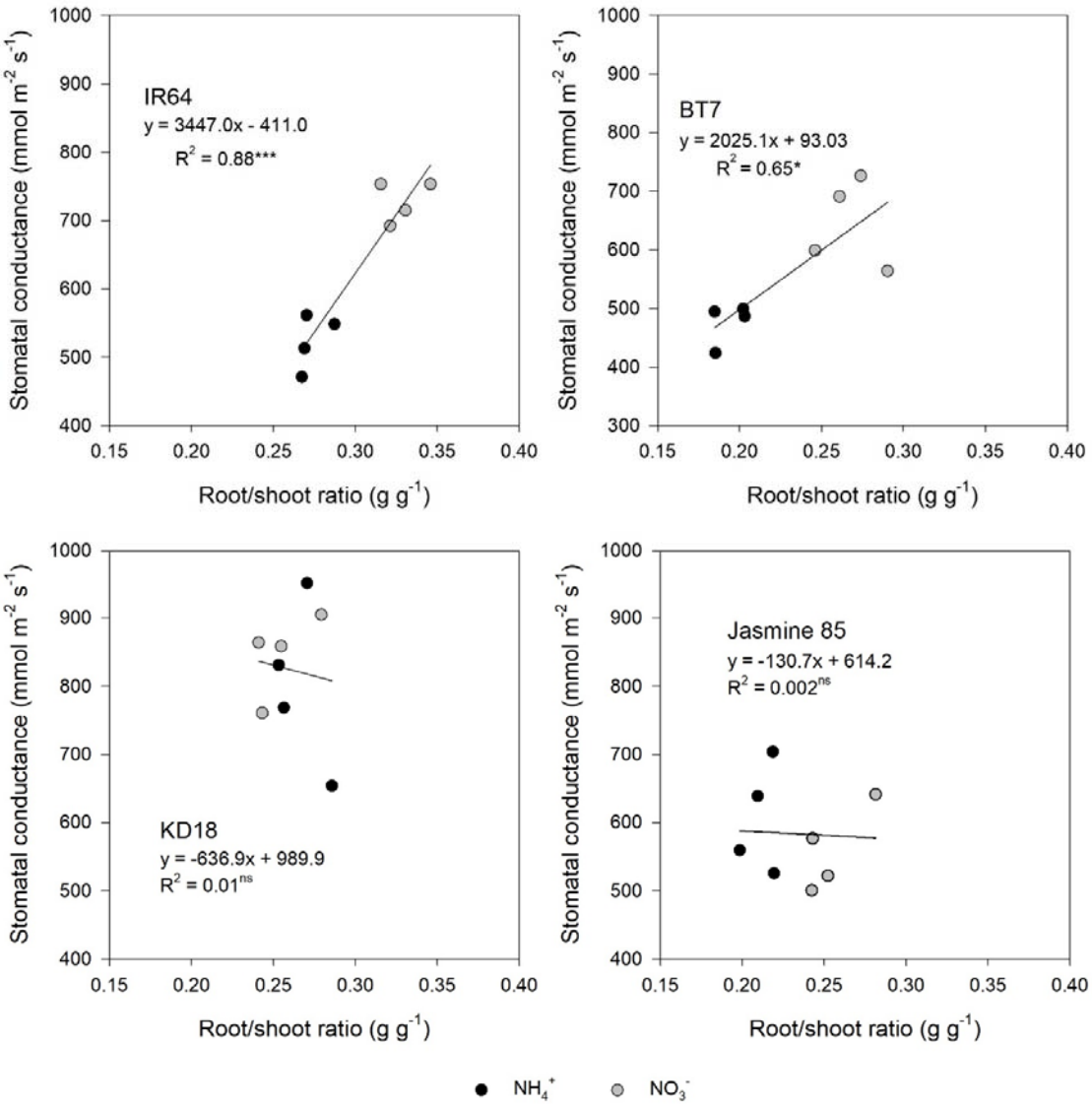
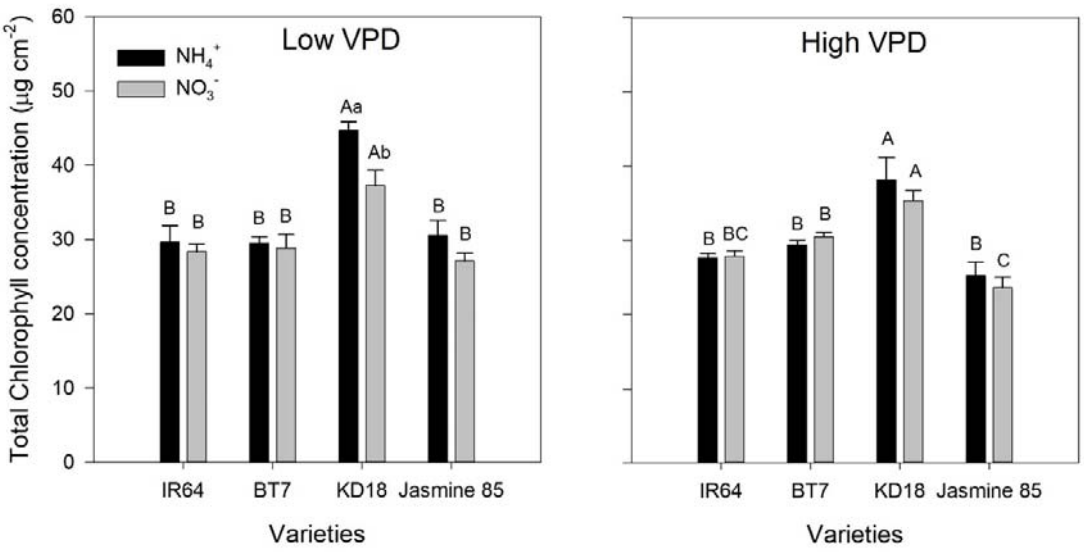


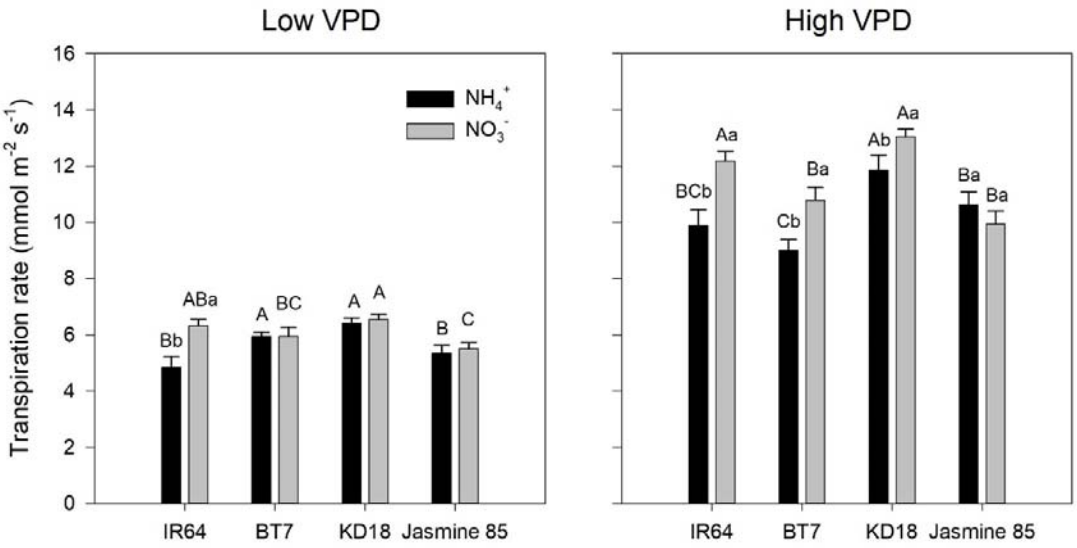
Supplemental Figure 1: Linear regression between assimilation rate (A) and stomatal conductance (g_s) of 12 rice varieties at high VPD ("standard greenhouse"; experiment 1). The regression was performed over 12 varieties with two nitrogen sources (n = 24). *** significant at $p \leq 0.001$



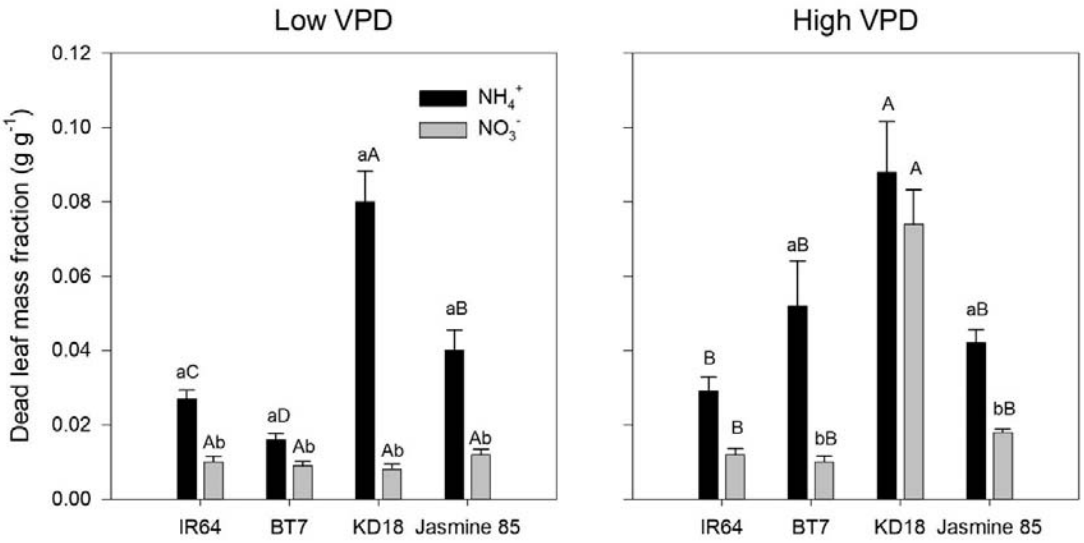
Supplemental Figure 2: Linear regression between stomatal conductance (g_s) and root/shoot ratio of 4 rice varieties at high VPD (experiment 3). The regression was performed over two nitrogen sources with 4 individual plants as replications (n = 8). ***, * significant at $p \leq 0.001$ and $p \leq 0.05$, respectively; ns not significant.



Supplemental Figure 3: Chlorophyll concentration of four rice varieties fed with different nitrogen sources (NH_4^+ or NO_3^-) at low and high VPD (Experiment 3). Columns and error bars show means and standard errors of 4 replications. Small letters indicate significant differences between nitrogen sources, while capital letters indicate significant differences between varieties, all at $p < 0.05$.



Supplemental Figure 4: Transpiration rate of four rice varieties fed with different N-sources (NH_4^+ or NO_3^-) at low and high VPD (Experiment 3). Columns and error bars show means and standard errors of 4 replications. Small letters indicate significant differences between nitrogen sources, while capital letters indicate significant differences between varieties, all at $p < 0.05$.



Supplemental Figure 4: Dead leaf fraction of four rice varieties fed with different nitrogen sources (NH_4^+ or NO_3^-) at low and high VPD (Experiment 3). Mean values of 4 replications are presented. Small letters indicate significance between nitrogen sources, while capital letters indicate significance between varieties, all at $p < 0.05$.