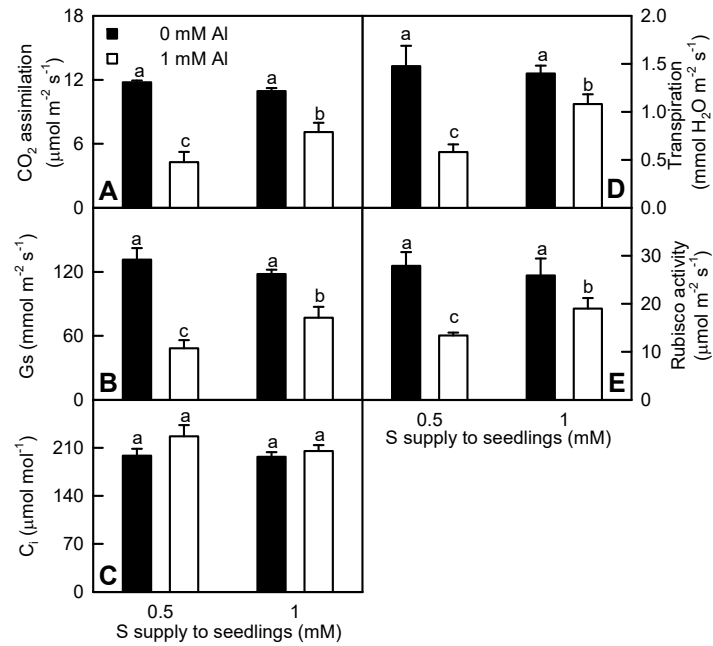
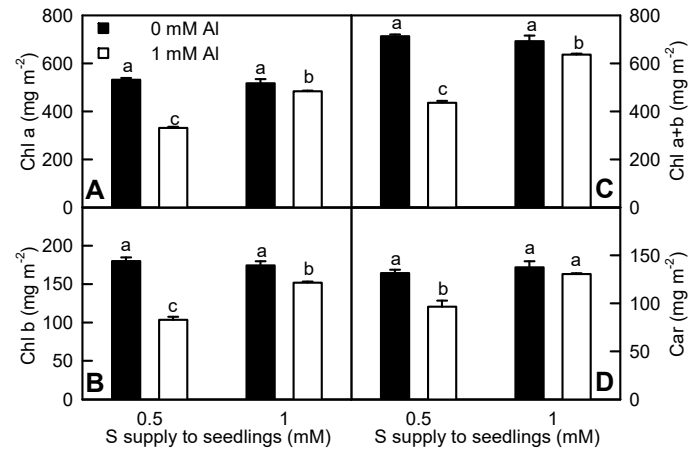




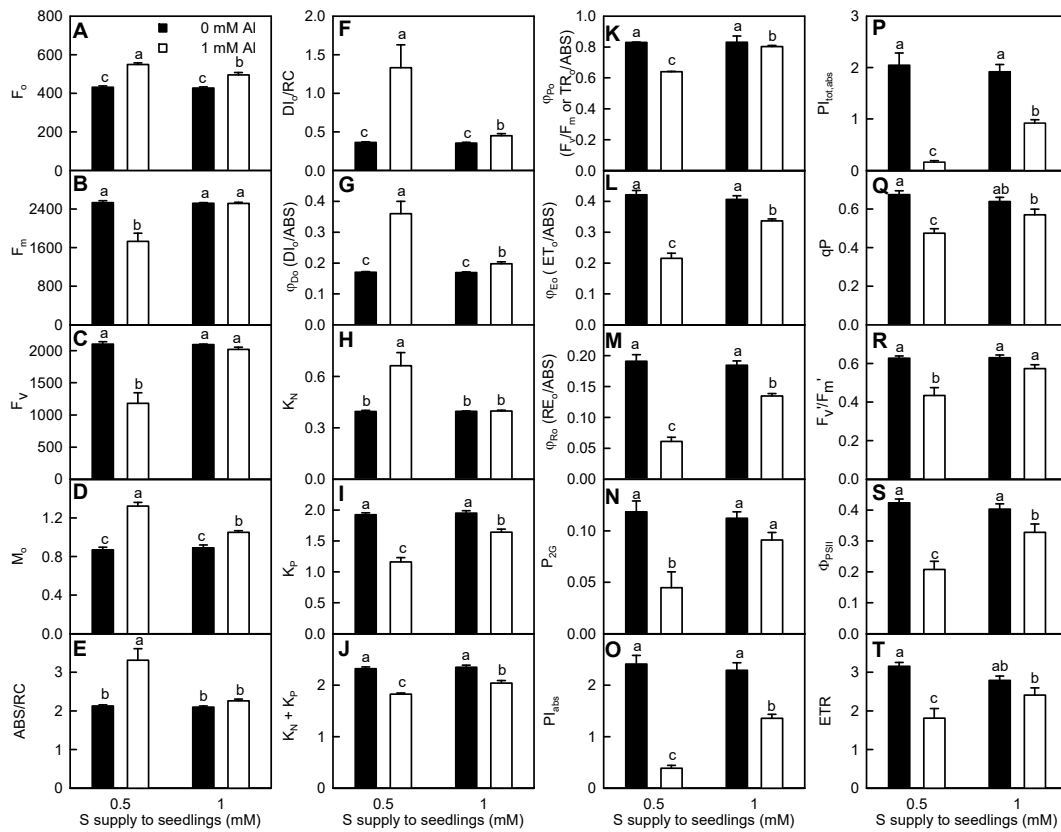
Supplementary Figure S1. Effects of S and Al interactions on *C. grandis* seedling growth.



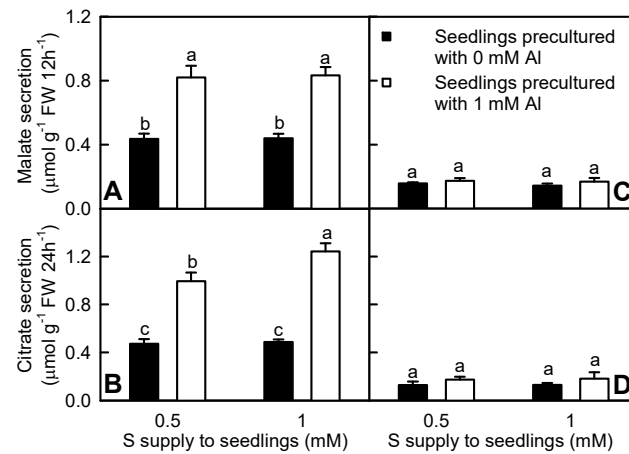
Supplementary Figure S2. Effects of S and Al interactions on leaf gas exchange and Rubisco activity. Bars represent means \pm SE ($n = 3 - 5$). Differences among four treatments were analyzed by two (Al levels) \times two (S levels) ANOVA. Different letters indicate a significant difference at $P < 0.05$.



Supplementary Figure S3. Effects of S and Al interactions on leaf pigments. Bars represent means \pm SE ($n = 4$). Differences among four treatments were analyzed by two (Al levels) \times two (S levels) ANOVA. Different letters above the bars indicate a significant difference at $P < 0.05$.



Supplementary Figure S4. Effects of S and Al interactions on 20 fluorescence parameters in leaves. Bars represent means \pm SE ($n = 4 - 18$). Differences among four treatments were analyzed by two (Al levels) \times two (S levels) ANOVA. Different letters above the bars indicate a significant difference at $P < 0.05$.



Supplementary Figure S5. Al-induced secretion of malate and citrate by excised roots from seedlings submitted to different S and Al levels for 18 weeks. Malate and citrate secretion from excised roots was measured after 12 or 24 h incubation, respectively in 0.5 mM $\text{CaCl}_2 + 0.5 \text{ mM AlCl}_3 \cdot 6\text{H}_2\text{O}$ (A and B) or 0.5 mM CaCl_2 (C and D) solution, pH 4.1-4.2. Bars represent means \pm SE ($n = 4$). Differences among four treatments were analyzed by two (Al levels) \times two (S levels) ANOVA. Different letters above the bars indicate a significant difference at $P < 0.05$.