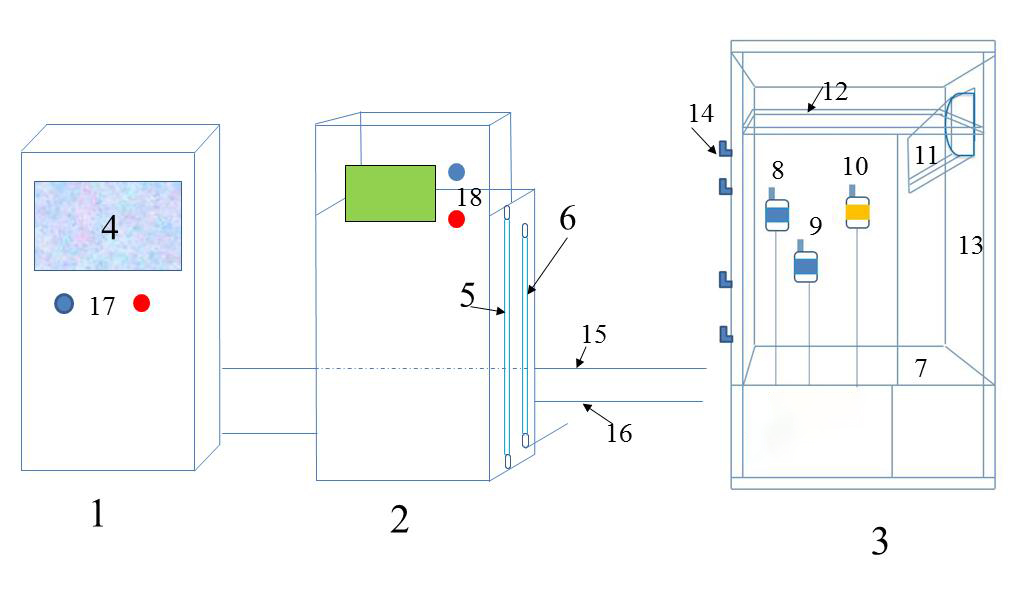
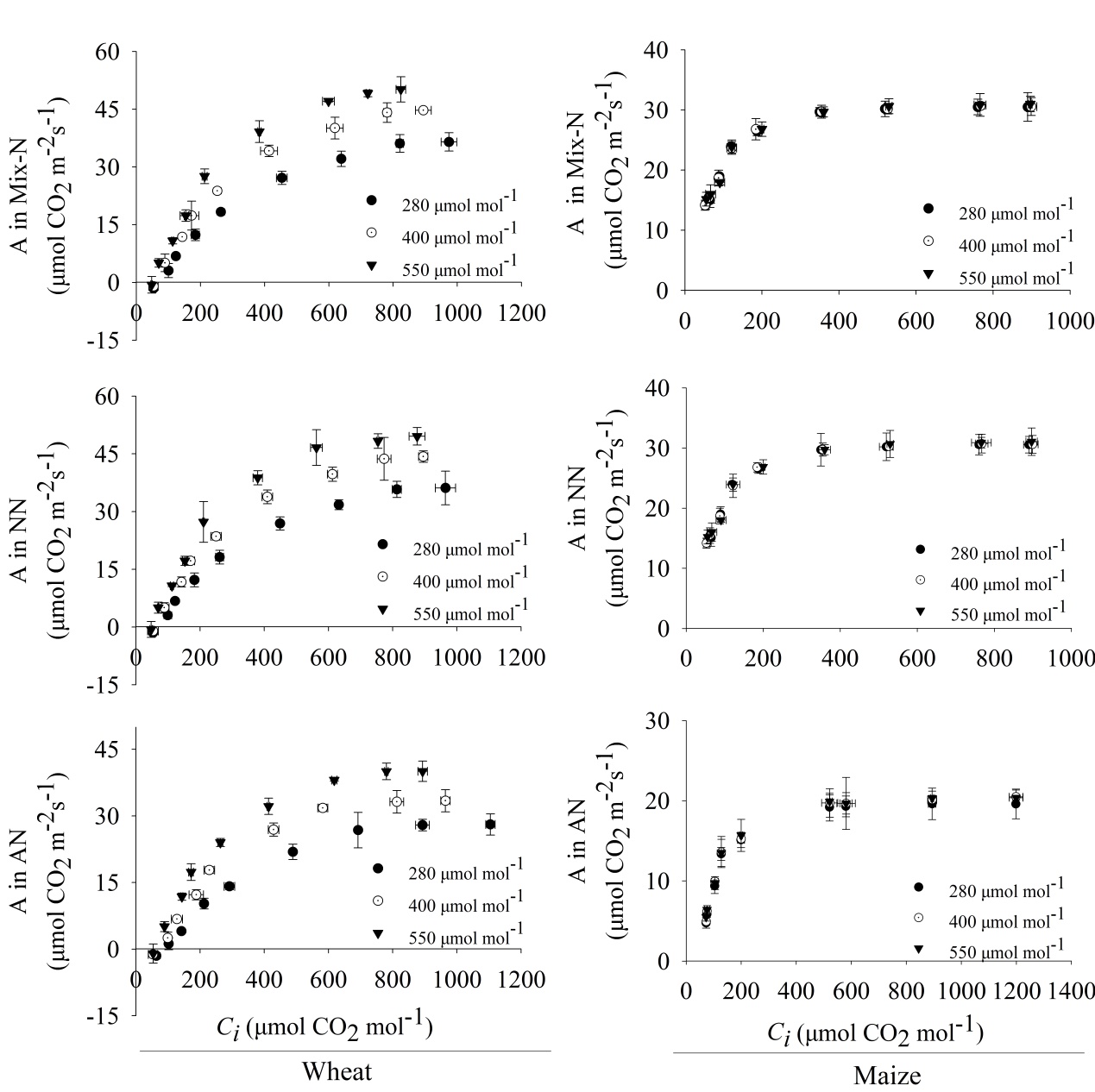
Supplementary Material



**Fig. S1 |** The automatically controlled-environment facility consists of the CO2 control system equipment (1), the CO2 generator (2) and nine chambers (3). 4, the liquid crystal display (LCD) screen; 5, Na2CO3 feeding inlet; 6, H2SO4 feeding inlet; 7, polyvinyl chloride (PVC) for the floor; 8, the outside temperatures and humidity sensors; 9, the inside temperatures and humidity sensors; 10, the inside CO2, sensors; 11, the temperature control system; 12, CO2 pipes; 13, toughened glass (10mm, Transmittance: 99%); 14, doorknob of the chamber; 15, signal lines connected the sensors to the control system equipment; 16, CO2 pipes connected the chambers to the CO2 generator. 17, power switch for the CO2 control system equipment; 18, power switch for the CO2 generator.



**Fig. S2 |** Effects of different CO2 levels on *A/Ci* curves in newly expanded leaves of C3 wheat and C4 maize seedlings after 21 days of treatment with different N-sources. Data are means ± SE (*n* = 3). NN refers to NO3– as a N source; AN refers to NH4+ as a N source; Mix-N refers a mixture of NO3– and NH4+.