Se protocol in Cui\_et\_al\_2025 for the reflectance measurements and the description of the site and plant material.

The protocol for gas exchange was adapted in this study.

Gas exchange measurements were collected in the field using a LI-6800 Portable Photosynthesis System (Licor Biosciences, Lincoln, Nebraska, USA). We performed an A-Ci curve on each leaf using the Dynamic Assimilation Technique (DAT) in order to estimate rates of *V*cmax and *J*max. For each curve, CO2 assimilation rates on a per leaf area basis (Aarea; μmol CO2 m-2 s-1) were logged every two seconds across continuously ramping CO2 concentrations, with a ramp rate of 100 μmol mol-1 min-1, beginning at 50 μmol mol-1 CO2 and concluding at 1500 μmol mol-1 CO2. Otherwise, conditions in the leaf chamber were set to a photosynthetic photon flux density (PPFD) of 1500 μmol m-2 s-1 of photosynthetically active radiation (PAR; 400-700 nm), 60% relative humidity, leaf vapour pressure deficits of 1.7 KPa, and leaf temperatures of 25°C. Furthermore, CO2 and H2O sensor calibrations were readjusted using the range match function after every three to four leaf measurements, and each DAT A-Ci curve required approximately 17 minutes, including a 60-120 second acclimation period.