

Supplementary Figure Legends

Supplementary Figure S1. Fourteen days of net CO₂ exchange of *Portulaca cryptopetala* during a wet-dry-wet cycle. Gas exchange was measured for the shoot (leaves plus stem) of a plant growing in a pot. Watering was withheld on day 5 (red arrow) and recommenced on day 13 (blue arrow). During the light periods of day 1, 3, 4, and 6, the shoot was exposed to air containing 2 % O₂ (black arrows) for 44 to 56 min. Shaded areas represent 12 h dark periods. PFD incident on the top of the gas-exchange cuvette was 1000 $\mu\text{mol m}^{-2} \text{s}^{-1}$. At the end of the experiment, total leaf area was 23.7 cm², and leaf and stem dry masses were 0.1063 and 0.0433 g, respectively.

Supplementary Figure S2. Eleven days of net CO₂ exchange of *Portulaca molokiniensis* during a wet-dry-wet cycle. Gas exchange was measured for the shoot (leaves plus stem) of a plant growing in a pot. Watering was withheld on day 2 (red arrow) and recommenced on day 10 (blue arrow). During the light periods of day 1, 2, 3, and 4, the shoot was exposed to air containing 2 % O₂ for 61 to 92 min. Shaded areas represent 12 h dark periods. PFD incident on the top of the gas-exchange cuvette was 1000 $\mu\text{mol m}^{-2} \text{s}^{-1}$. At the end of the experiment, total leaf area was 78.7 cm², and leaf and stem dry masses were 0.383 and 0.0327 g.

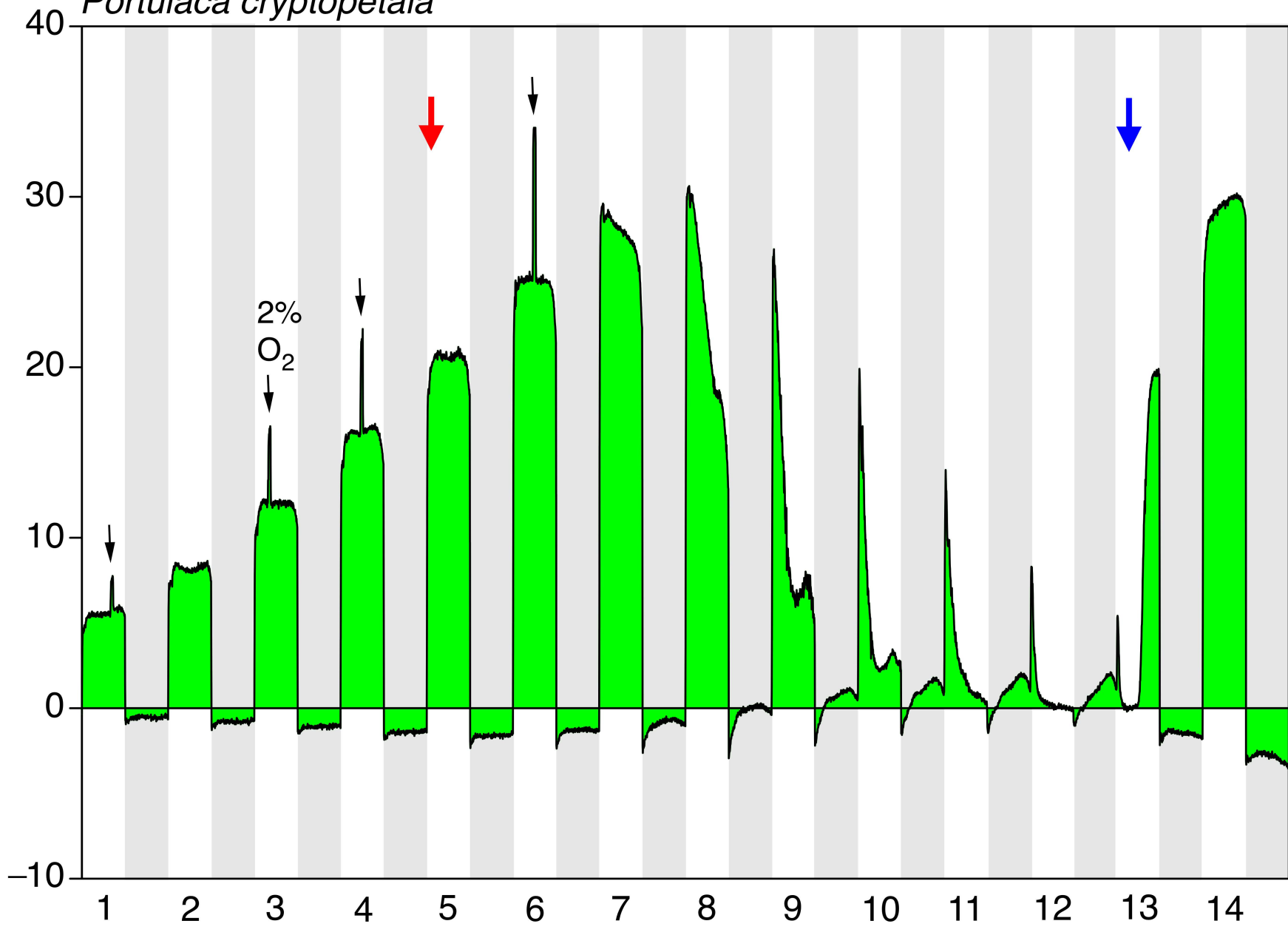
Supplementary Figure S3. Sixteen days of net CO₂ exchange of *Portulaca molokiniensis* during a wet-dry-wet cycle. Gas exchange was measured for the shoot (leaves plus stem) of a plant growing in a pot. Watering was withheld on day 3 (red arrow) and recommenced on day 14 (blue arrow). Shaded areas represent 12 h dark periods. PFD incident on the top of the gas-exchange cuvette was 1000 $\mu\text{mol m}^{-2} \text{s}^{-1}$. At the end of the experiment, total leaf area was 36.1 cm², and leaf and stem dry masses were 0.195 and 0.0165 g.

Supplementary Figure S4. Twelve days of net CO₂ exchange of *Portulaca molokiniensis* during a wet-dry-wet cycle. Gas exchange was measured for the shoot (leaves plus stem) of a plant growing in a pot. Watering was withheld on day 2 (red arrow) and recommenced on day 11

(blue arrow). Shaded areas represent 12 h dark periods. PFD incident on the top of the gas-exchange cuvette was $1000 \mu\text{mol m}^{-2} \text{s}^{-1}$. At the end of the experiment, total leaf area was 70.6 cm^2 , and leaf and stem dry masses were 0.3908 and 0.0491 g .

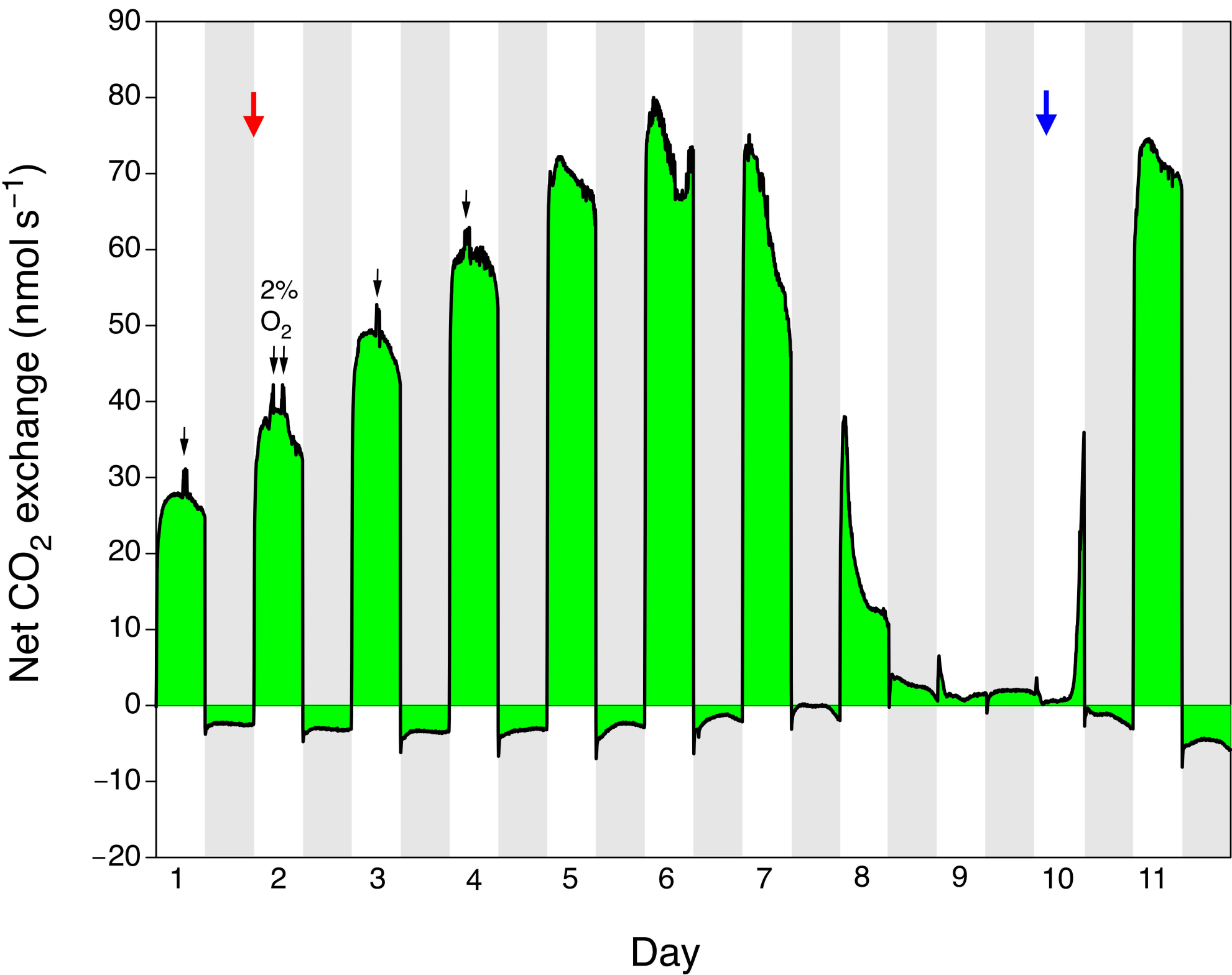
Portulaca cryptopetala

Net CO₂ exchange (nmol s⁻¹)



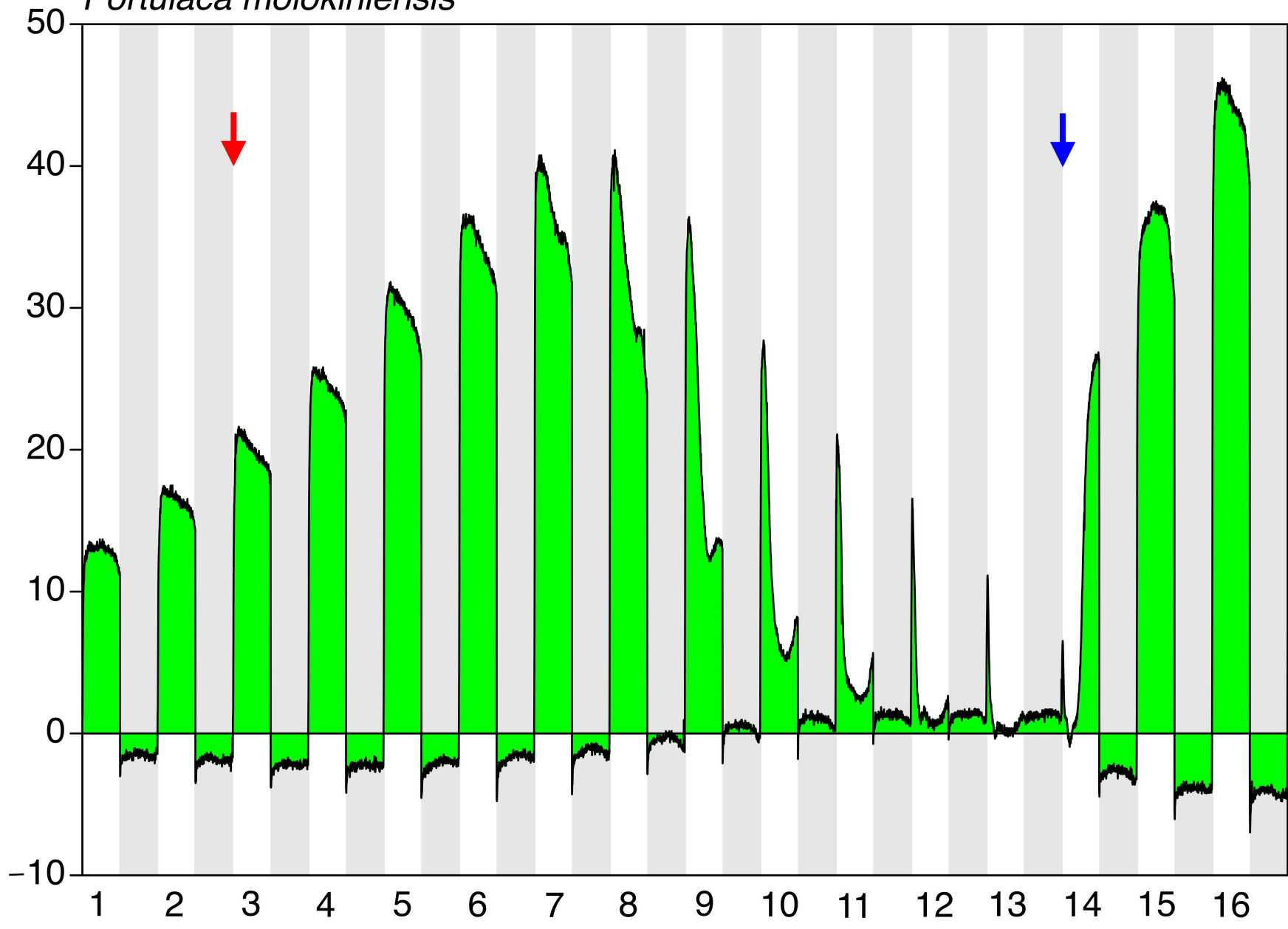
Day

Portulaca molokiniensis



Portulaca molokiniensis

Net CO₂ exchange (nmol s⁻¹)



Day

Portulaca molokiniensis

