10.1071/FP17295\_AC © CSIRO 2018 Supplementary Material: *Functional Plant Biology*, 2018, 45(11), 1162–1171.

## **Supplementary Material**

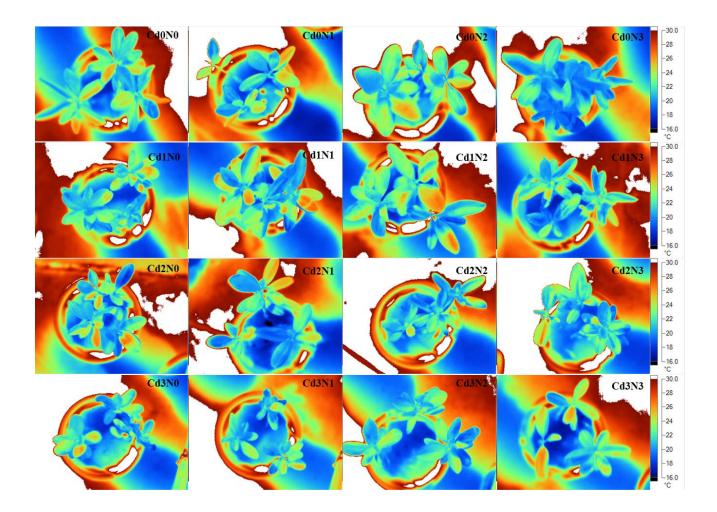
## Assessing the effect of extra nitrogen on *Kandelia obovata* growth under cadmium stress using high-resolution thermal infrared remote sensing and the three-temperature model

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**Fig. S1.** Thermal images of *K. obovata* under 16 treatments using the infrared thermal imager. Cd0, Cd1, Cd2, and Cd3 indicate Cd concentrations of 0, 1, 5, and 10 mg·L<sup>-1</sup>, respectively; N0, N1, N2, and N3 indicate N concentrations of 0, 10, 50, and 100 mg·L<sup>-1</sup>, respectively. Various treatments were named Cd0N0, Cd1N0, Cd2N0, Cd3N0, Cd0N1, ..., Cd3N3 to comprise a total of 16 different treatments.

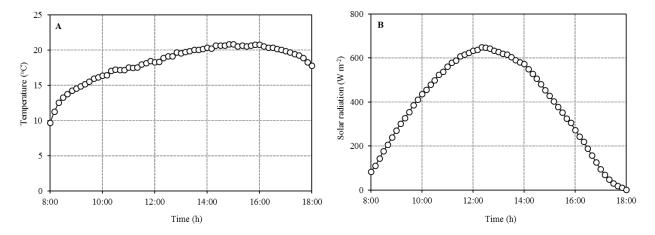
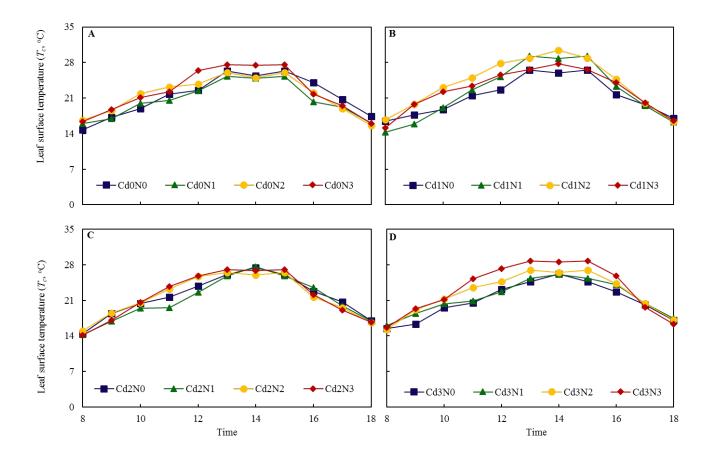
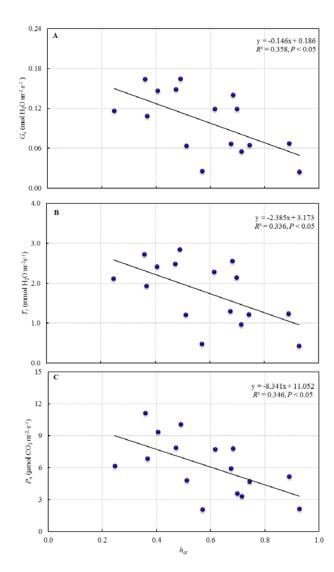


Fig. S2. Daily changes of air temperature (A) and solar radiation (B).



**Fig. S3.** Daily changes of leaf surface temperature ( $T_c$ ) of K. *obovata* under different combined Cd and N stress. (A), (B), (C), and (D) represent daily changes of  $T_c$  under Cd0, Cd1, Cd2, and Cd3 treatments, respectively. Cd0, Cd1, Cd2, and Cd3 indicate Cd concentrations of 0, 1, 5, and 10 mg·L<sup>-1</sup>, respectively; N0, N1, N2, and N3 indicate N concentrations of 0, 10, 50, and 100 mg·L<sup>-1</sup>, respectively.



**Fig. S4.** Relationship between the photosynthetic parameters and plant transpiration transfer coefficient of *K. obovata*. (A), (B), and (C) represent the relationship between the photosynthetic parameters (including stomatal conductance ( $G_s$ ), transpiration rate ( $T_r$ ), and net photosynthetic rate ( $P_n$ )) and plant transpiration transfer coefficient ( $h_{at}$ , using the thermal images and the three-temperature model) under sixteen combined levels of stress, respectively.