SUPPLEMENTARY INFORMATION

Stomatal responses to carbon dioxide and light require ABA catabolism in Arabidopsis

Mahsa Movahedi[1], Nicholas Zoulias[2], Stuart A. Casson[2], Peng Sun[3], Yun-Kuan Liang[3], Alistair M. Hetherington[4], Julie E. Gray[2], Caspar C. C. Chater[2, 5*]

[1]Clinical Biomanufacturing Facility, Old Road, Headington, Oxford OX3 7JT, UK

[2]Department of Molecular Biology and Biotechnology, University of Sheffield, Firth Court, Western Bank, Sheffield, S10 2TN, UK

[3]State Key Laboratory of Hybrid Rice, Department of Plant Science, College of Life Sciences, Wuhan University, Wuhan, China
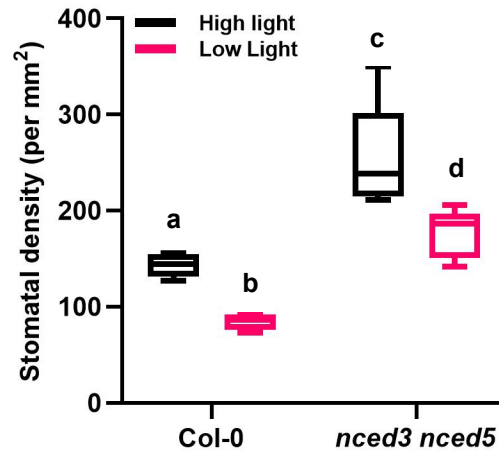
[4]School of Biological Sciences, Life Sciences Building, University of Bristol, Woodland Road, 24 Tyndall Avenue, Bristol BS8 1TQ, UK

[5]Department of Natural Capital and Plant Health, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, UK

*Corresponding author
Email: c.chater@kew.org (CC)

Supplementary Information

Supplementary Fig. S1. The stomatal density response to light intensity is not altered when ABA biosynthesis is impaired. The stomatal density response to light intensity was not impaired in the ABA biosynthesis double mutant *nced3 nced5* compared to wild-type leaves.

Supplementary Information
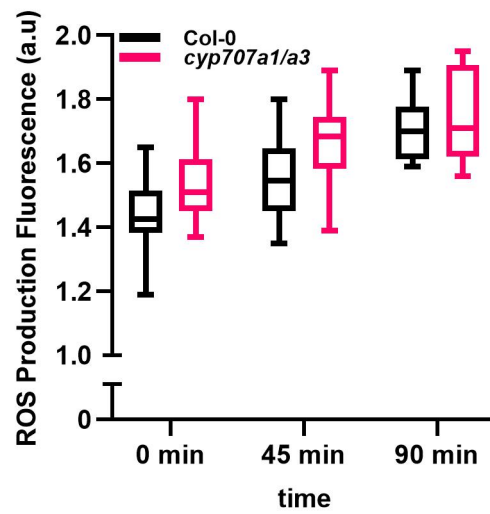
Supplementary Fig. S2. ROS production in response to light is not significantly altered when ABA catabolism is impaired. There is only marginally elevated reactive oxygen species (ROS) production in the *cyp707a1/a3* mutant in response to light.
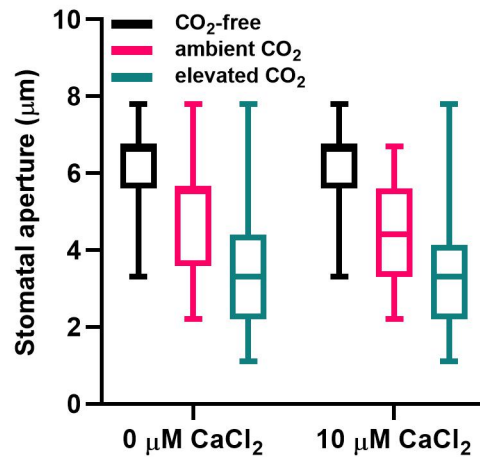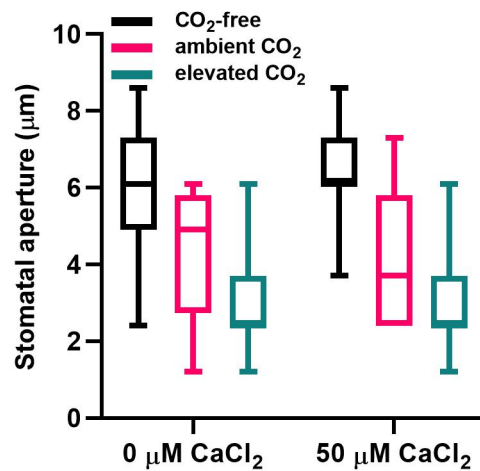
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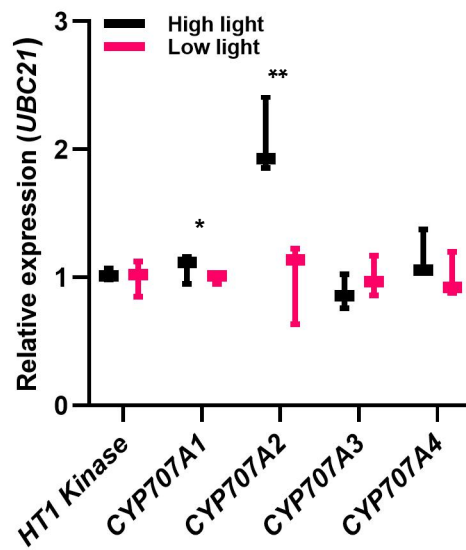
Supplementary Fig. S3. *CYP707A1* **and** *CYP707A2* **are upregulated in response to high light.** Differential expression analysis by quantitative RT-PCR shows upregulation of *CYP707A1* and *CYP707A2* in wild-type Col-0 in response to transfer to high light from growth at low light.

a

b

Supplementary Fig. S4. Supplemental Calcium ions do not affect the stomatal aperture response to changes in carbon dioxide concentration. The addition of (a) 10 μM or (b) 50 μM $CaCl_2$ to the epidermal strip buffer does not affect the stomatal aperture response to $[CO_2]$.