

## Supplementary Material

### **MIC-100, a new system for high-throughput phenotyping of instantaneous leaf photosynthetic rate in the field**

*Yu Tanaka<sup>A,E</sup>, Kazuki Taniyoshi<sup>A</sup>, Ayumu Imamura<sup>B</sup>, Ryo Mukai<sup>A</sup>, Shun Sukemura<sup>A</sup>, Kazuma Sakoda<sup>A,C,D</sup> and Shunsuke Adachi<sup>B</sup>*

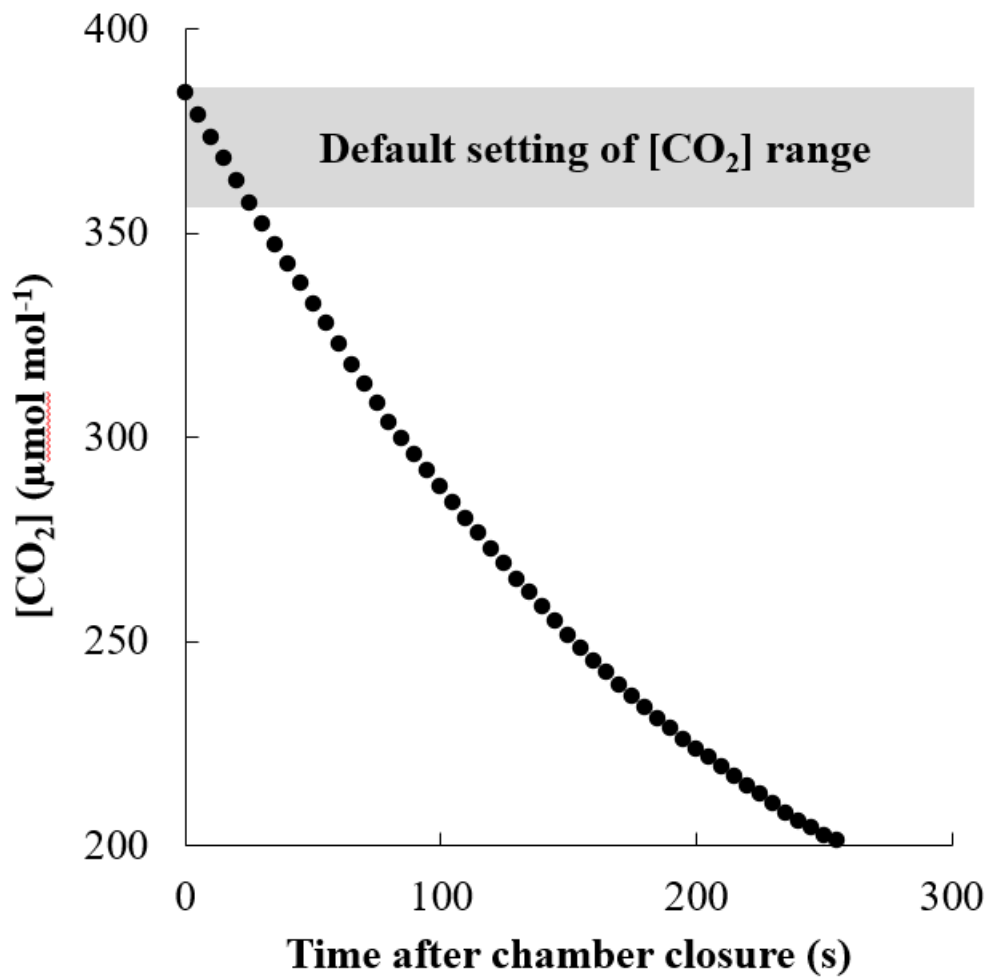
<sup>A</sup>Graduate School of Agriculture, Kyoto University, Kitashirakawa Oiwake-chou, Sakyo-ku, Kyoto, 606-8502, Japan.

<sup>B</sup>College of Agriculture, Ibaraki University, 3-21-1 Chuo, Ami, Inashiki, Ibaraki 300-0393, Japan.

<sup>C</sup>Graduate School of Agricultural and Life Sciences, The University of Tokyo, 1-1-1 Midori-cho, Nishitokyo, Tokyo 188-0002, Japan.

<sup>D</sup>Japan Society for the Promotion of Science, 5-3-1, Kojimachi, Chiyoda-ku, Tokyo 102-0083, Japan.

<sup>E</sup>Corresponding author. Email: [tanaka.yu.2s@kyoto-u.ac.jp](mailto:tanaka.yu.2s@kyoto-u.ac.jp)



**Fig. S1.** The example of the [CO<sub>2</sub>] decline from 380 to 200 µmol mol<sup>-1</sup> after clamping the soybean leaf into the leaf chamber in MIC-100. The range of the [CO<sub>2</sub>] measurement is set from 380 to 200 µmol mol<sup>-1</sup> and the data is recorded every 5 s. The default setting of the [CO<sub>2</sub>] range (380 to 360 µmol mol<sup>-1</sup>) is shown as gray area.