## **Green Biotechnology**

**R&D Project Title:** Development of symbiotic nitrogen-fixing crops adapted to fluctuating environments

Project Leader: Takuya Suzaki

Associate Professor, Faculty of Life and Environmental Sciences, University of Tsukuba

R&D Team: Kyushu University, GRA & GREEN Inc



## **Summary:**

Utilizing soybeans, the foremost legume crop in the global market, we aim to play a role in achieving a decarbonized society by enhancing the capacity of symbiotic nitrogen fixation and cultivating environmentally resilient plants capable of consistently fixing nitrogen, even in variable environmental conditions.

## **Scenarios for Achieving Carbon Neutrality:**

Boosting the nitrogen-fixing potential of plants enhances the efficient use of atmospheric nitrogen, resulting in increased yields while reducing the need for nitrogen fertilizers. This reduction in nitrogen fertilizer usage leads to a decrease in the CO<sub>2</sub> emissions associated with its production, thereby making a valuable contribution to a carbon-neutral society.

