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Background

- 2010 Ph.D. in Life Science, The Department of Life Science, Hokkaido University
- 2008-2010 JSPS Research fellow (DC2)
- 2010-2013 Postdoctoral fellow, The Department of Agriculture and Life Science, Seoul National University (Republic of Korea)
- 2013-2016 Research Professor, The Department of Agriculture and Life Science, Seoul National University (Republic of Korea)
- 2015-2016 Guest Scientist, Max-Planck Institute (Germany)
- 2016-2021 Assistant Professor, The Department of Agriculture and Life Science, The University of Tokyo
- 2021- Associate Professor, The Department of Agriculture and Life Science, The University of Tokyo
- 2025 Japanese Society of Plant Biologists Young Investigator Award 2025

Research Interest

Molecular mechanism of leaf senescence / Nitrogen deficiency responses / Light signaling-mediated regulation of nutrient acquisition and use / Molecular mechanism of small RNA dynamics

Major publications

1. [Sakuraba Y](#), Yang M, Yanagisawa S. (2024) HASTY-mediated miRNA dynamics modulate nitrogen starvation-induced leaf senescence in Arabidopsis. **Nature Communications** 15: 7913.
2. [Sakuraba Y](#) (2022) Molecular basis of nitrogen starvation-induced leaf senescence. **Frontiers in Plant Science** 13: 1013304
3. [Sakuraba Y](#), Chaganzhana, Mabuchi A, Iba K, Yanagisawa S. (2021) Enhanced NRT1.1/NPF6.3 expression in shoots improves growth under nitrogen deficiency stress in Arabidopsis. **Communications Biology** 4: 256
4. [Sakuraba Y](#), Kim D, Has SH, Kim SH, Piao W, Yanagisawa S, An G, Paek NC. (2020) Multilayered regulation of membrane-bound ONAC054 is essential for abscisic acid-induced leaf senescence in rice. **The Plant Cell** 32: 630-649
5. [Sakuraba Y](#), Kanno S, Mabuchi A, Monda K, Iba K, Yanagisawa S. (2018) A phytochrome-B-mediated regulatory mechanism of phosphorus acquisition. **Nature Plants** 4: 1089-1101
6. [Sakuraba Y](#), BulBul S, Piao W, Choi G, Paek NC (2017) EARLY FLOWERING3 increases salt tolerance by suppressing salt stress response pathways. **The Plant Journal** 92:1106-1120
7. [Sakuraba Y](#), Kim EY, Han SH, Piao W, An G, Todaka D, Yamaguchi-Shinozaki K, Paek NC (2017) Rice Phytochrome-Interacting Factor-LIKE 1 (OsPIL1) is involved in the promotion of chlorophyll biosynthesis through feed-forward regulatory loop. **Journal of Experimental Botany** 68: 4103-4114.
8. [Sakuraba Y](#), Kim YS, Han SH, Lee BD, and Paek NC (2015) The Arabidopsis transcription factor NAC016 promotes drought stress responses by repression AREB1 transcription through a trifurcate feed-forward regulatory loop involving NAP. **The Plant Cell** 27:1771-1787
9. [Sakuraba Y](#), Jeong J, Kang MY, Kim J, Paek NC, and Choi G. (2014) Phytochrome-interacting transcription factors PIF4 and PIF5 induce leaf senescence in Arabidopsis. **Nature Communications** 5:4636
10. [Sakuraba Y](#), Park SY, Kim YS, Wang SH, Yoo SC, Hortensteiner S, Paek NC. (2014) Arabidopsis STAY-GREEN2 is a negative regulator of chlorophyll degradation during leaf senescence. **Molecular Plant** 7:1288-1302
11. [Sakuraba Y](#), Rahman ML, Cho SH, Kim YS, Koh HJ, Yoo SC, and Paek NC (2013) The rice fade green leaf locus encodes protochlorophyllide oxidoreductase B and is essential for chlorophyll synthesis under high light conditions. **The Plant Journal** 74: 122-133
12. [Sakuraba Y](#), Schelbert S, Park SY, Han SH, Lee BD, Andres CB, Kessler F, Hortensteiner S, Paek NC (2012) STAY-GREEN and chlorophyll catabolic enzymes interact at light-harvesting complex II for chlorophyll detoxification during leaf senescence in Arabidopsis. **The Plant Cell** 24:507-518