

# Shinya Hagihara

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Research Field(s) Plant Chemical Biology

## Academic Career

B.S., 1998, Kyoto University; Ph.D., 2003, Kyoto University (advisor: Isao Saito); Postdoctoral Training, 2003-2007, RIKEN (advisor: Yukishige Ito); Postdoctoral Training, 2007-2008, University of Geneva (advisor: Stefan Matile); Assistant Professor, 2008-2013, Tohoku University, Associate Professor. 2013-2018, Nagoya University, Team Leader, 2018-present, RIKEN

## Selected Publications

1. Probing strigolactone receptors in *Striga hermonthica* with fluorescence. Tsuchiya, Y., et al. *Science*, 349, 864-868 (2015)
2. Discovery of Shoot Branching Regulator Targeting Strigolactone Receptor DWARF14. Yoshimura, M., et al. *ACS Cent. Sci.*, 4, 230-234 (2018)
3. Chemical hijacking of auxin signaling with an engineered auxin-TIR1 pair. Uchida, N., et al. *Nat. Chem. Biol.*, 14, 299-307 (2018)
4. Rapid and reversible root growth inhibition by TIR1 auxin signalling. Fendrych, M., et al. *Nat. Plants*, 4, 453-459 (2018)
5. A super-sensitive auxin-inducible degron system with an engineered auxin-TIR1 pair Nishimura, K., et al. *Nucleic Acids Res.* 48, e108 (2020)
6. Development of potent inhibitors for strigolactone receptor DWARF 14 Yoshimura, M., et al. *Chem. Commun.*, 56, 14917-14919 (2020)
7. Development of 1,8-naphthalimide dyes for rapid imaging of subcellular compartments in plants. Kusano, S., et al. *Chem. Commun.*, 58, 1685-1688 (2022)
8. Discovery of a Plant 14-3-3 Inhibitor Possessing Isoform Selectivity and In Planta Activity. Nishiyama, K., et al. *Angew. Chem. Int. Ed.*, 63, e202400218 (2024)

## Why My Lab?

My lab can offer research environment for interdisciplinary research between chemistry and plant biology that contribute to sustainable food production, and support program for non-Japanese students (e.g., RIKEN IPA program).