Yoshihiro Okabe, Ph.D.

Date of Birth: May 9, 1984

Affiliation:

Gene Research Center, Laboratory of Olericulture and Floriculture,

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Academic History

2007	Bachelor in Applied Life Sciences	Niigata University of Pharmacy and Applied Life
		Sciences, Japan
2009	Master in Agricultural Science	University of Tsukuba, Japan
2012	Ph.D. in Agricultural Science	University of Tsukuba, Japan

Professional/Scientific Career

2012, April -	Postdoctoral Fellow	Faculty of Life and Environmental Sciences,
		University of Tsukuba, Japan

2014, December- Assistant Professor Faculty of Life and Environmental Sciences,

University of Tsukuba, Japan

Professional Societies

Japanese Society for Plant Cell and Molecular Biology Japanese Society of Breeding

Research Area/Interests

We are interested in the mechanism of fruit development and ripening and genetic regulation of parthenocarpy and fruit shelf-life which are important traits in tomato breeding. In addition, we are trying to improve agronomically-useful traits of tomato including fruit production and qualities through screening and use of tomato mutant resources.

Selected Publications

Research Articles

- 1. Mubarok S, <u>Okabe Y</u>, Fukuda N, Ariizumi T, Ezura H (2015) The potential use of a weak ethylene receptor mutant *Sletr1-2* as a breeding material to extend fruit shelf-life of tomato. *Journal of Agricultural and Food Chemistry*. 63(36), 7995-8007.
- 2. Shinozaki Y, Hao S, Kojima M, Sakakibara H, Ozeki-Iida Y, Zhen Y, Fei Z, Zhong S, Giovannoni J, Rose JKC, <u>Okabe Y</u>, Heta Y, Ezura H, Ariizumi T. (2015) Ethylene suppresses tomato fruit set through modification of gibberellin metabolism. *The Plant Journal*. 83(2), 237-251.
- 3. Chusreeaeom K, Ariizumi T, Asamizu E, <u>Okabe Y</u>, Shirasawa K, Ezura H (2014) A novel tomato mutant, *Solanum lycopersicum elongated fruit1* (*Slelf1*), exhibits an elongated fruit shape caused by increased cell layers in the proximal region of the ovary. *Molecular Genetics and Genomics*, 289(3), 399-409.
- 4. Baldet P, Brès C, Okabe Y, Mauxion JP, Just D, Bournonville C, Ferrand C, Mori M, Ezura H, Rothan C (2013) Investigating the role of vitamin C in tomato through TILLING identification of ascorbate-deficient tomato mutants. *Plant Biotechnology*, 30(3), 309-314.
- 5. Okabe Y, Asamizu E, Ariizumi T, Shirasawa K, Tabata S, Ezura H (2012) Availability of Micro-Tom mutant library combined with TILLING in molecular breeding of tomato fruit shelf-life. *Breeding Science*, 62(2), 202-208.
- 6. Okabe Y, Asamizu E, Saito T, Matsukura C, Ariizumi T, Brès C, Rothan C, Mizoguchi T, Ezura H (2011) Tomato TILLING technology: Development of a reverse genetics tool for the efficient isolation of mutants from Micro-Tom mutant libraries. *Plant and Cell Physiology*, 52(11), 1994-2005.
- 7. Saito T, Ariizumi T, <u>Okabe Y</u>, Asamizu E, Hiwasa-Tanase K, Fukuda N, Mizoguchi T, Yamazaki Y, Aoki K, Ezura H (2011) TOMATOMA: A novel tomato mutant database distributing Micro-Tom mutant collections. *Plant and Cell Physiology*, 52(2), 283-296.

Books/Reviews

- 1. Okabe Y and Ariizumi T (2016) Chapter6, Mutant Resources and TILLING Platforms in Tomato Research. Functional Genomics and Biotechnology in Solanaceae and Cucurbitaceae Crops, Biotechnology in Agriculture and Forestry, Springer., NewYork, 70, 75-92.
- 2. Okabe Y, Ariizumi T, Ezura H (2013) Updating the Micro-Tom TILLING platform. *Breeding Science*, 63(1):42-48.
- 3. Okabe Y and Miura K (2013) Chapter 9. Agroinfiltration. What is NBT (new breeding technology)?, Ed., Ezura H &, Ohsawa R, Kokusai Bunken Press, Tokyo, pp. pp. 87-97. (In Japanese)