

TAJIMA Ryosuke Ph.D.  
Agronomist /Root Scientist /Plant Modeler, born in Japan

#### Academic Degrees

BSc 2001 Faculty of Agriculture, Hokkaido University  
MSc 2003 Graduate School of Agriculture, Hokkaido University  
PhD 2006 Graduate School of Agricultural and Life Sciences, the University of Tokyo

#### Professional Experience

April 2006 - October 2007  
Post doctoral Fellow, Field Production Science Center, Graduate School of Agricultural and Life Sciences, the University of Tokyo  
November 2007 - April 2008  
Post doctoral Fellow, National Agricultural Research Center for Hokkaido Region on loan from Hokkaido Intellectual Tank  
May 2008 - current  
Assistant Professor, Field Science Center, Graduate School of Agriculture Science, Tohoku University

#### Publications

- Tajima, R. 2021. Importance of individual root traits to understand crop root system in agronomic and environmental contexts. *Breeding Science* 71(1). 13-19.
- Uno, T., R. Tajima, K. Suzuki, M. Nishida, T. Ito, M. Saito. 2021. Rice yields and the effect of weed management in an organic production system with winter flooding. *Plant Production Science*. in press
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- Nasukawa, H., R. Tajima, B. I. J. Muacha, M. C. F. Pereira, K. Naruo, S. Nakamura, M. Fukuda, T. Ito, K. Homma. 2019. Analyzing soil-available phosphorus by the Mehlich-3 extraction method to recommend a phosphorus fertilizer application rate for maize production in northern Mozambique *Plant Production Science*. 22: 211-214.
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- Tajima, R. and Y. Kato 2013. A Quick Method to Estimate Root Length Distribution in Diameter Classes by Using Freeware ImageJ. *Plant Production Science*. 16. 9-11.
- Tajima, R. and Y. Kato 2011. Comparison of threshold algorithms for automatic image processing of rice roots using freeware ImageJ. *Field Crops Research*. 121. 460-463.
- Koga, N. and R. Tajima. 2011. Assessing energy efficiencies and greenhouse gas emissions under bioethanol-oriented paddy rice production in northern Japan. *Journal of Environmental Management*. 92. 967-973.
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- Changdee, T., S. Morita, J. Abe, K. Ito, R. Tajima and A. Polthannee. 2008. Root anatomical responses to waterlogging at seedling stage of three cordage fiber crops. *Plant Production Science*. 11. 232-237.
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Kimura, S. D., K. Schmidtke, R. Tajima, K. Yoshida, H. Nakashima and R. Rauber. 2004. Seasonal N uptake and N<sub>2</sub> fixation by common and adzuki bean at various spacings. *Plant and Soil*. 258. 91-101.

#### International Conferences

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- Nakano, Y., W. Matsuzaki, T. Uno, R. Tajima, M. Saito, T. Ito. 2018. The effect of three major insecticides applied in nursery boxes on terrestrial arthropods in paddy fields of Miyagi Prefecture, Japan. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Ohsima, K., T. Uno, R. Tajima, M. Saito, T. Ito. 2018. Growth medium for seedling production of arbuscular mycorrhizal fungi-based cultivation of Welsh onion. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Piccolla, C. D., E. H. Novotny, R. Tajima, M. Saito. 2018. Effect of biochar pyrolysed at different temperatures on plant-AM fungi symbiosis in a soil with low 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Sueki, R., T. Uno, R. Tajima, M. Saito, T. Ito. 2018. The relationship between seedling quality and root system of rice seedling in organic farming analyzing with root modeling. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Suga, K., T. Uno, R. Tajima, M. Saito, T. Ito. 2018. Analysis of differences in rice panicle structure between organic and conventional farmings using image analysis technique. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Suzuki, T., T. Uno, R. Tajima, T. Ito, M. Saito. 2018. Optimum level of soil available phosphorus for AMF inoculation to Welsh onion in non-allophanic Andosol. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Suzuki, T., T. Uno, R. Tajima, T. Ito, M. Saito. 2018. Optimum level of soil available phosphorus for AMF inoculation to Welsh onion in non-allophanic Andosol. 6th Symposium on Phosphorus in Soils and Plants, Luvein, Belgium (9-13/Sep/2018)
- Tajima, R. 2018. Root phenotyping with root modeling: towards sustainable rice production. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Uno, T., R. Tajima, T. Ito, M. Saito. 2018. Effectiveness of winter-flooding in organic rice farming and some relating management practices. 15th International Symposium on Integrated Field Science, Sendai (13-15/Mar/2018)
- Watanabe, T., T. Uno, R. Tajima, T. Ito, M. Saito. 2018. The relationship between deep rooting and nitrate leaching of wheat in subsoil acidity. 15th International Symposium on Integrated Field Science, Sendai 13 - 15 March, 2018.
- Tajima, R. 2017 Phenotyping of root system architecture using root model. 2017 JST International Workshop on Field Phenotyping and Modeling for Cultivation, Tokyo. (8-9/Dec/2017)
- Suzuki, T., T. Uno, R. Tajima, T. Ito, M. Saito. 2017. Optimum level of soil available phosphorus for AMF inoculation to Welsh onion in non-allophanic Andosol. 9th International Conference on Mycorrhiza, Prague. (31/Jul-4/Aug/2017)
- Tajima, R., K. Takahashi, T. Umetsu, T. Ito, M. Saito. 2016. Predicting yield, flowering and harvesting dates of highbush blueberry using temperature data: a case study in Field Science Center of Tohoku University. The 13th International Symposium on Integrated Field Science. Sendai. (10/Mar/2016)
- Saito, M., R. Tajima, S. Uchida. 2016. Possibility of non-nodulating soybean cultivation from the viewpoint of phosphorus resource scarcity. Ecobalance 2016 International Conference, Kyoto, (3-6/Oct/2016)
- Tajima, R., T. Ito, M. Saito. 2015. The evaluation of root system architecture in rice plant using the data of root distribution. Rhizosphere 4, Maastricht, Netherlands. (21-25/Jun/2015)
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- Tajima, R., K. Tsushima, K. Kamo, T. Ito and M. Saito. 2011. Effect of PolySilicate-Iron sludge on rice roots at organic farming. The JSRR's 20th Anniversary Symposium, Tokyo, Japan. (6/Nov/2011). Root Research 20(5): 195.
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- Akita, T., T. Uno, K. Suzuki, R. Tajima, M. Saito and T. Ito. 2011. Aquatic Biota in Winter Flooded Paddy Field with Organic Farming -Case Study in Field Science Center, Tohoku University, Japan-. 9th International Symposium on Integrated Field Science, Sendai, Japan. (3/Sep/2011).
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- Kimura S. D., R. Tajima, K. Schmidthe, K. Yoshida, H. Nakashima and R. Rauber. 2001. Nitrogen balance and time course of soil N uptake and N<sub>2</sub> fixation of *Phaseolus vulgaris* L. and *Vigna angularis* (Willd.) Ohwi & Ohashi. International Conference on Nature Farming and Ecological Balance Hisar, India. (7-10/May/2001)