

2016 Awards in the *Journal of Plant Research*

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Each year, the Botanical Society of Japan (BSJ) honors excellence in publications of the *Journal of Plant Research* (JPR) through the Best Paper Awards and the Most-Cited Paper Award. We are proud to announce this year's recipients.

Best Paper Awards

Michiko Sasabe, Nanako Ishibashi, Tsuyoshi Haruta, Aki Minami, Daisuke Kurihara, Tetsuya Higashiyama, and Yasunori Machida in the Division of Biological Science in the Graduate School of Science at Nagoya University; Ryuichi Nishihama in the Graduate School of Biostudies at Kyoto University; and Masaki Ito in the Graduate School of Bioagricultural Sciences at Nagoya University have found that the C-terminal region of NACK1 plays an important role in its localization in the cell plate during cytokinesis (Sasabe et al. 2015). In the cytokinesis of plant cells, developing cell plates expand from the central region to the peripheral, which is regulated by a dynamic turnover of microtubules (MTs). NACK1 is an M-phase-specific kinesin consisting of an N-terminal motor domain and a C-terminal stalk region. NACK1 has been known to position itself to a developing region of the cell plate through interaction with its N-terminal motor domain, but the role of the C-terminal stalk region remained to be elucidated. Sasabe et al. (2015) showed that the C-terminal stalk region

is also important for proper positioning of NACK1 in the developing cell plates, demonstrating its excellence by providing a new insight into the molecular mechanism of cell plate formation.

Akitaka Tono and Noriaki Murakami in the Makino Herbarium at Tokyo Metropolitan University, Takaya Iwasaki in the Center for Ecological Research at Kyoto University, and Akihiro Seo in the Department of Botany in the Graduate School of Science at Kyoto University have found that the formation of contact zones for some deciduous species in the Kinki-Chugoku region was established by “habitat suitability” of the species. A few deciduous species survived after the last glacial age and developed in the Kinki-Chugoku region by forming a contact zone in Hyogo Prefecture. It is generally accepted that contact zones could be formed due to geographical factors such as the Alps and Pyrenees Mountains, but no such geographical factors have been recognized in the contact zone of Hyogo Prefecture. Tono et al. (2015) theoretically address the question about the formation of contact zones in Hyogo Prefecture, using generalized additive models considering various environmental factors including climate and topography. The results indicate that “the pattern of low habitat suitability estimated by ecological niche modeling was the most appropriate for determining the location of the common contact zone”, demonstrating its excellence by proposing a new global concept in the field of botanical geography.

Most-Cited Paper Award

Reimo Zoschke, Yujiao Qu, and Christian Schmitz-Linneweber in Molekulare Genetik in the Institut für Biologie at Humboldt-Universität zu Berlin, and Yan O. Zubo and Thomas Börner in Genetik in the Institut für Biologie at

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Humboldt-Universität zu Berlin published a regular article in January 2013 on the role of the pentatricopeptide repeat-SMR protein SVR7 in *Arabidopsis* chloroplasts (Zoschke et al. 2013). Compared with cyanobacteria, post-transcriptional processing of RNAs is one of the most prominent features in chloroplasts. Pentatricopeptide proteins (PPRs) are ubiquitously encoded by the nuclear genome but play important roles in organelles such as chloroplasts and mitochondria by regulating the RNA metabolism. Zoschke et al. (2013) have genetically demonstrated that SVR7 improves translational efficiency of mRNA for a chloroplast-encoded subunit of ATPase in *Arabidopsis* chloroplasts. They also addressed the evolutionary importance of SVR7 in the maize genome and have enhanced our understanding of RNA metabolism in chloroplasts. This article has been cited 13 times since 2013, excluding the authors' own citation.

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Editor-in-Chief, *Journal of Plant Research*

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