

2013 Awards for *Journal of Plant Research* publications

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Each year, the Botanical Society of Japan 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

Kimitsune Ishizaki, Maiko Nonomura, Hiroataka Kato, Katsuyuki Yamato, and Takayuki Kohchi at Kyoto University studied the role of the phytohormone auxin in the liverwort (Ishizaki et al. 2012). Auxin responses have been extensively studied in *Arabidopsis* and other vascular plants. However, it remained unclear whether non-vascular plants respond to auxin during development. In research reported in this article, the authors tested to see whether the soybean auxin-responsive promoter ProGH3 could drive the expression of *uidA* (GUS) reporter gene in the liverwort *Marchantia polymorpha*. They found that the activity of GUS is detected in both gametophytes and sporophytes of *M. polymorpha*, concluding that auxin-mediated transcriptional activation had been established when plants emerged in the terrestrial environment. This study is highly evaluated not only for its demonstration of the auxin model in non-vascular plants but also for the evolutionary interest of the research.

Hitoshi Sakio at Niigata University and Takehiro Masuzawa at Shizuoka University studied the advancing

timberline on Mt. Fuji based on ecological data collected over a 21-year period. Mt. Fuji is a volcano with a height of 3,776 m and has recently been registered as a World Heritage site by UNESCO. This beautiful mountain experienced one of its biggest eruptions in 1707, which destroyed vegetation at higher altitudes. Around the alpine timberline, plants are known to struggle for survival, causing upward and downward migration over time. The main plant-limiting factors at the timberline are low air and soil temperature, carbon limitation, and damage by winter frost, desiccation, wind, and snow. It is also conceivable that global warming affects polar and high-altitude ecosystems. Based on ecological data collected over a long period, Sakio and Masuzawa confirmed that the alpine timberline is advancing upward as a recovery process from the volcanic eruption and suggested that climate changes might positively contribute to the advance. We are proud of this study for such long-term efforts to understand basic ecological processes.

Most-cited paper award

Takeshi Obayashi and Kengo Kinoshita at Tohoku University published a review article in April 2010 on the utility of ATTED-II, a web-supported tool for gene coexpression analyses (Obayashi and Kinoshita 2010). ATTED-II is familiar to many plant molecular biologists, who know that gene coexpression analyses predict or even identify the function of genes or the genes that are functionally related to query genes. In this article, Obayashi, a founder of ATTED-II, and his collaborator Kinoshita provided two basic views of ATTED-II, a gene list view and a gene network view. They also introduced some examples of the usage of ATTED-II, which are helpful for potential users. This article has been cited 23 times since 2010.

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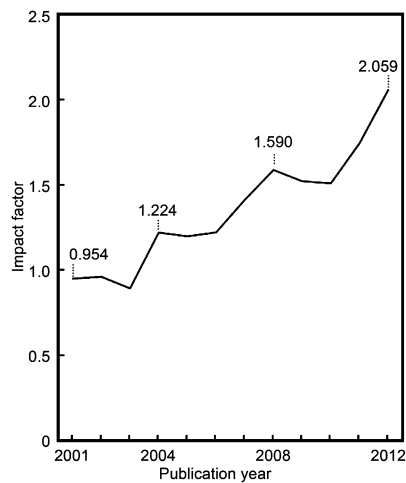


Fig. 1 Impact factor of JPR since 2001

As represented by the above articles, JPR has published outstanding papers across the breadth of plant sciences. The ISI impact factor of JPR has reached a value over 2.0 (Fig. 1). Moreover, the ranking of JPR among all plant

science journals has risen from the top 37.4 % (71st among 190 journals) in 2011 to 31.3 % (61st among 195 journals) in 2012. This increase is attributable to the continuous efforts of editors, authors, reviewers, readers, and our publisher, Springer, to improve the quality of the journal.

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

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