

平瀬賞受賞論文

第 9 回 (2004 年度)

**Glom is a novel mitochondrial DNA packaging protein in *Physarum polycephalum* and causes intense chromatin condensation without suppressing DNA functions.**

N. Sasaki, H. Kuroiwa, C. Nishitani, H. Takano, T. Higashiyama, T. Kobayashi, Y. Shirai, A. Sakai, S. Kawano, K. Murakami-Murofushi, T. Kuroiwa

Mol. Biol. Cell (2003) 14, 4758-4769.

DOI: 10.1091/mbc.E03-02-0099

**$\gamma$ -Tubulin in basal land plants: Characterization, localization, and implication in the evolution of acentriolar microtubule organizing centers**

M. Shimamura, R.C. Brown, B.E. Lemmon, T. Akashi, K. Mizuno, N. Nishihara, K.-I. Tomizawa, K. Yoshimoto, H. Deguchi, H. Hosoya, T. Horio, Y. Mineyuki

Plant Cell (2004) 16, 45-59.

DOI: 10.1105/tpc.016501

第 10 回 (2005 年度)

**Intermittent pollen-tube growth in pistils of alders (*Alnus*)**

A. Sogo, H. Tobe

Proc. Natl. Acad. Sci. USA (2005) 102, 8770-8775.

DOI: 10.1073/pnas.0503081102

**Molecular variation of *Spiranthes sinensis* (Orchidaceae) in Japan, with special reference to systematic treatment of seasonally differentiated groups and a dwarf form, f. *gracilis*, from Yakushima Island**

H. Tsukaya

J. Plant Res. (2005) 118, 13-18.

DOI: 10.1007/s10265-004-0186-y

第 11 回 (2006 年度)

**Microtubule-dependent microtubule nucleation based on recruitment of  $\gamma$ -tubulin in higher plants**

T. Murata, S. Sonobe, T.I. Baskin, S. Hyodo, S. Hasezawa, T. Nagata, T. Horio, M. Hasebe

Nature Cell Biol. (2005) 7, 961-968.

DOI: 10.1038/ncb1306

**GENERATIVE CELL SPECIFIC 1 is essential for angiosperm fertilization**

T. Mori, H. Kuroiwa, T. Higashiyama, T. Kuroiwa

Nature Cell Biol. (2006) 8, 64-71.

DOI: 10.1038/ncb1345

第 12 回 (2007 年度)

**Males evolved from the dominant isogametic mating type**

H. Nozaki, T. Mori, O. Misumi, S. Matsunaga, T. Kuroiwa

Curr. Biol. (2006) 16, 1018-1020.

DOI: 10.1016/j.cub.2006.11.019

第 13 回 (2008 年度) 該当論文なし

第 14 回 (2009 年度)

**The preprophase band is a localized center of clathrin-mediated endocytosis in late prophase cells of the onion cotyledon epidermis.**

I. Karahara, J. Suda, H. Tahara, E. Yokota, T. Shimmen, K. Misaki, S. Yonemura, L. A. Staehelin, Y. Mineyuki

Plant J. (2009) 57, 819-831.

DOI: 10.1111/j.1365-313X.2008.03725.x

**Defensin-like polypeptide LUREs are pollen tube attractants secreted from synergid cells**

S. Okuda, H. Tsutsui, K. Shiina, S. Sprunck, H. Takeuchi, R. Yui, R.D. Kasahara, Y. Hamamura, A. Mizukami, D. Susaki, N. Kawano, T. Sakakibara, S. Namiki, K. Itoh, K. Otsuka, M. Matsuzaki, H. Nozaki, T. Kuroiwa, A. Nakano, M.M. Kanaoka, T. Dresselhaus, N. Sakaki, T. Higashiyama

Nature (2009) 458, 357-361.

DOI: 10.1038/nature07882

第 15 回 (2010 年度)

**The PLASTID DIVISION1 and 2 components of the chloroplast division machinery determine the rate of chloroplast division in land plant cell differentiation**

K. Okazaki, Y. Kabeya, K. Suzuki, T. Mori, T. Ichikawa, M. Matsui, H. Nakanishi, S. Miyagishima

Plant Cell (2009) 21, 1769-1780.

DOI: 10.1105/tpc.109.067785

第 16 回 (2011 年度)

**Expression of SHOOT MERISTEMLESS, WUSCHEL, and ASYMMETRIC LEAVES1 homologs in the shoots of Podostemaceae: Implications for the evolution of novel shoot organogenesis**

N. Katayama, S. Koi, M. Kato

Plant Cell (2010) 22, 2131-2140.

DOI: 10.1105/tpc.109.073189

**Chloroplasts divide by contraction of a bundle of nanofilaments consisting of polyglucan**

Y. Yoshida, H. Kuroiwa, O. Misumi, M. Yoshida, M. Ohnuma, T. Fujiwara, F. Yagisawa, S. Hirooka, Y. Imoto, K. Matsushita, S. Kawano, T. Kuroiwa

Science (2010) 329, 949-953.

DOI: 10.1126/science.1190791

第 17 回 (2012 年度)

**Fertilization recovery after defective sperm cell release in *Arabidopsis***

R. D. Kasahara, D. Maruyama, Y. Hamamura, T. Sakakibara, D. Twell, T. Higashiyama

Curr. Biol. (2012) 22, 1084-1089.

DOI: 10.1016/j.cub.2012.03.069

**Acquisition and diversification of cladodes: Leaf-like organs in the genus *Asparagus***

H. Nakayama, T. Yamaguchi, H. Tsukaya

Plant Cell (2012) 24, 929-940

DOI: 10.1105/tpc.111.092924

第 18 回 (2013 年度)

**ANGUSTIFOLIA3 signaling coordinates proliferation between clonally distinct cells in leaves**

K. Kawade, G. Horiguchi, T. Usami, M. Y. Hirai, H. Tsukaya

Curr. Biol. (2013) 23, 788-792.

DOI: 10.1016/j.cub.2013.03.044

**Keep an eye on PPI: The vacuolar-type H<sup>+</sup>-pyrophosphatase regulates postgerminative development in *Arabidopsis***

A. Ferjani, S. Segami, G. Horiguchi, Y. Muto, M. Maeshima, H. Tsukaya

Plant Cell (2011) 23, 2895-2908.

DOI: 10.1105/tpc.111.085415

**Mechanism of microtubule array expansion in the cytokinetic phragmoplast**

T. Murata, T. Sano, M. Sasabe, S. Nonaka, T. Higashiyama, S. Hasezawa, Y. Machida, M. Hasebe

Nature Commun. (2013) 4, 1967.

DOI: 10.1038/ncomms2967

第 19 回 (2014 年度)

**Evolutionary developmental transcriptomics reveals a gene network module regulating interspecific diversity in plant leaf shape**

Y. Ichihashi, J. A. Aguilar-Martínez, M. Farhi, D. H. Chitwood, R. Kumar, L. V. Millon, J. Peng, J. N. Maloof, N. R. Sinha  
Proc. Natl. Acad. Sci. USA (2014) 111, E2616-E2621.  
DOI: 10.1073/pnas.1402835111

第 20 回 (2015 年度)

**Five *Cyanophora* (Cyanophorales, Glaucophyta) species delineated based on morphological and molecular data**

T. Takahashi, M. Sato, K. Toyooka, R. Matsuzaki, K. Kawafune, M. Kawamura, K. Okuda, H. Nozaki  
J. Phycol. (2014) 50, 1058-1069.  
DOI: 10.1111/jpy.12236

**Rapid elimination of the persistent synergid through a cell fusion mechanism**

D. Maruyama, R. Völz, H. Takeuchi, T. Mori, T. Igawa, D. Kurihara, T. Kawashima M. Ueda, M. Ito, M. Umeda, S. Nishikawa, R. Groß-Hardt, T. Higashiyama  
Cell (2015) 61, 907-918.  
DOI: 10.1016/j.cell.2015.03.018

第 21 回 (2016 年度)

**Floral anatomy and vegetative development in *Ceratophyllum demersum*: A morphological picture of an “unsolved” plant**

A. Iwamoto, R. Izumidate and L. P. Ronse De Craene  
Am. J. Bot. (2015) 102, 1578-1589.  
DOI: 10.3732/ajb.1500124

**ClearSee: a rapid optical clearing reagent for whole-plant fluorescence imaging**

D. Kurihara, Y. Mizuta, Y. Sato, T. Higashiyama.  
Development (2015) 142, 4168-4179.  
DOI: 10.1242/dev.127613

**The coordination of ploidy and cell size differs between cell layers in leaves**

Y. Katagiri, J. Hasegawa, U. Fujikura, R. Hoshino, S. Matsunaga, H. Tsukaya  
Development (2016) 143, 1120-1125.  
DOI: 10.1242/dev.130021

第 22 回 (2017 年度)

**Holliday junction resolvases mediate chloroplast nucleoid segregation.**

Y. Kobayashi, O. Misumi, M. Odahara, K. Ishibashi, M. Hirono, K. Hidaka, M. Endo, H. Sugiyama, H.

Iwasaki, T. Kuroiwa, T. Shikanai and Y. Nishimura

Science 356: 631-634

DOI: 10.7875/first.author.2017.043

**Chloroplast division checkpoint in eukaryotic algae.**

N. Sumiya, T. Fujiwara, A. Era and S.Y. Miyagishima

Proc Natl Acad Sci USA 113: E7629-E7638

DOI:10.1073/pnas.1612872113/-/DCSupplemental.