Fenglin Deng

Plant Cell Biology Laboratory
Departments of Life Sciences
Pohang University of Science and Technology (POSTECH), Korea
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Education & Professional Experience

Postdoctoral Fellow April. 2016~

Departments of Life Sciences,
POSTECH, Korea (with Prof. Youngsook Lee)
Research subjects:
Molecular mechanism of As accumulation in rice grains

Postdoctoral Fellow Jun. 2012~Mar. 2016

Institute of Plant Science and Resources,
Okayama University, Japan (with Prof. Jian Feng MA)
Research subjects:
Genetic and physiological analysis of Cu and Cd accumulation in rice

Other Transition Period

National Key laboratory Crop Genetic Improvement,
Huazhong Agricultural University (HZAU), China (With Prof. Xianlong Zhang)
Research subjects:
Molecular mechanism of cotton fiber development

Ph.D of Crop Biotechnology Sep. 2005~Dec. 2011

National Key laboratory Crop Genetic Improvement, HZAU
(With Prof. Xianlong Zhang)
Research subjects:
Molecular mechanism of cotton fiber development

Bachelor of Agronomy Sep. 2001~Jul. 2005

College of Plant Science and Technology, HZAU
GPA Ranking: 4/118, being given the permission to be a Ph. D. candidate without examination

Main Publications

1. Huang XY[#], **Deng F**[#], Yamaji N, Pinson SR, Fujii-Kashino M, Danku J, Douglas A, Guerinot ML, Salt DE, Ma JF. (2016) A heavy metal P-type ATPase OsHMA4 prevents copper accumulation in rice grain. **Nature Communications,** 2016 Jul 8;7:12138. doi: 10.1038/ncomms12138 (#Co-first authors)

2. Deng F, Yamaji N, Xia J, Ma JF. (2013) A member of heavy metal P-type ATPase OsHMA5 is involved in xylem loading of copper in rice. **Plant Physiology,** 163: 1353–1362

3. Deng F, Tu L, Tan J, Li Y, Nie Y and Zhang X. (2012) GbPDF1 (Protodermal factor 1) is involved in cotton fiber initiation via the core cis-element HDZIP2ATATHB2. **Plant Physiology,** 158: 890–904

4. Tan J, Tu L, **Deng F**, Hu H, Nie Y, Zhang X. (2013) A genetic and metabolic analysis revealed that cotton fiber cell development was retarded by flavonoid naringenin. **Plant Physiology,** 162: 86–95

5. Min L, Zhu L, Tu L, **Deng F**, Yuan D, Zhang X. (2013) Cotton GhCKI disrupts normal male reproduction by delaying tapetum programmed cell death via inactivating starch synthase. **The Plant Journal,** 75: 823–835

6. Tan J, Tu L, **Deng F**, Wu R, Zhang X. (2012) Exogenous jasmonic acid inhibited cotton fiber elongation. **Journal of Plant Growth Regulation,** 31: 599–605

7. Tang W, Tu L, Yang X, Tan J, **Deng F**, Hao J, Guo K, Lindsey K, Zhang X. (2014) The calcium sensor GhCaM7 promotes cotton fiber elongation by modulating reactive oxygen species (ROS) production. **New Phytologist,** 202: 509–520

8. Hao J, Tu L, Hu H, Tan J, **Deng F,** Tang W, Nie Y, Zhang X. (2012) GbTCP, a cotton TCP transcription factor, confers fibre elongation and root hair development by a complex regulating system. **Journal of Experimental Botany,** 63: 6267-6281

9. Munis MF, Tu L, **Deng F,** Tan J, Xu L, Xu S, Long L and Zhang X. (2010) A

thaumatin-like protein gene involved in cotton fiber secondary cell wall development enhances resistance against *Verticillium dahliae* and other stresses in transgenic tobacco. **Biochemical and Biophysical Research Communications,** 393: 38–44

Presentations in International Conferences

1. Detection of novel QTLs controlling Cd accumulation in rice (Oral)

   2015.07.12~16, the 13th International Conference on the Biogeochemistry of Trace Elements, Fukuoka, Japan.

2. Translocation of copper from roots to shoots is mediated by OsHMA5 in rice (Invited speaker)

   2013.06.09~12, COST Meeting, Event: Essential and Detrimental trace Elements entering the Food Chain via Plants, Norwegian University Of Life Science, ÅS, Norway

3. OsHMA5 is involved in the xylem loading of Cu in rice (Poster)

   2013.03.26~31, the International Workshop on Plant Membrane Biology (IWPMB2013), Kurashiki, Japan

4. Function analysis of the gene GbPDF1 and its promoter during fiber initiation and development (Oral Presentation by Dr. Zhang)

   2010, 09.21~23, International Cotton Genomics Initiative Research Conference, Canberra, Australia.

5. Isolation and analysis of expansins from the Gossypium barbadense cotton elongating fiber (Abstract)

   2008.08.08~11, International Cotton Genomics Initiative Research Conference, Anyang, China

Honors & Awards:

The Excellent Doctoral Dissertation Award, Hubei Province, China (Dec. 2013)

Outstanding Poster of the 12th Conference of Plant Genomics in China (Aug. 2011)

The Top10 Stars of Science and Technology, HZAU (May. 2006)

First prize, the 9th National "Challenge Cup" Technology Contest, China (Nov. 2005)

First prize, the 5th "Shennong Cup" Technology Contest, HZAU (Aug. 2005)

First prize, the 5th Hubei Province "Challenge Cup" Technology Contest, Hubei Province (Jun. 2005)

One First-class and One Second-class Scholarship and “Excellent Graduate Student”, HZAU (Sep. 2005~Jun. 2007)

Two First-class and Two Second-class Scholarships and “Excellent Student”, HZAU (Sep. 2001~Jun. 2005)