

Soon Ki Park
Curriculum Vitae
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WORK ADDRESS

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EDUCATION

Ph.D. Kyungpook Nat'l Univ., Daegu, Republic of Korea. Aug. 1994, Major in Plant Breeding

Thesis: Study on male sterile mutants of induced by *Arabidopsis thaliana* by T-DNA gene tagging

M.S. Kyungpook Nat'l Univ., Daegu, Republic of Korea. Aug. 1988

Thesis: Investigation of several factors affecting electrofusion of *Brassica napus* and *B. campestris*.

B.S. Kyungpook Nat'l Univ., Daegu, Republic of Korea. Feb. 1985, Agronomy

EMPLOYMENT

Professor; School of Applied Biosciences, College of Agriculture & Life Sciences, Kyungpook National Univ. Republic of Korea (Mar. 2004 to present)

Director; Biosafety Div. Dept. Agricultural Biotechnology, National Academy of Agricultural Science, RDA, Republic of Korea (Apr. 2014 to Apr. 2015)

Senior Research Scientist; Research Institute, ISTech. Co. Ltd. Republic of Korea (Oct. 2002 to Feb. 2004)

Research Associate; Dept. Biology, Univ. Leicester, Leicester, UK (Sep. 1998 to Aug. 2002)

Post-Doctoral Fellow; Dept. Biology, Univ. Leicester, Leicester, UK (Oct. 1996 to May 1998)

Post-Doctoral Fellow; Dept. Life Science, POSTECH, Pohang, Republic of Korea (Apr. 1996 to Sep. 1996)

Post-Doctoral Fellow; CSIRO Div. Plant Industry, Canberra, Australia (Apr. 1995 to Apr. 1996)

Research Assistant; Dept. Agronomy, Kyungpook National Univ. Republic of Korea (Aug. 1992 to Aug. 1993)

PROFESSIONAL SOCIETIES

Currently serve as Editor-in-chief of the journal “Korean Journal of Breeding Science”

Member of the Korean Society of Plant Biologists

Member of the Korean Society for Plant Biotechnology

RESEARCH FIELD

- 1) Molecular cloning and characterization of genes involving in pollen development/male fertility of Arabidopsis and rice
- 2) Agricultural application through molecular breeding approaches using useful genes involving sexual plant reproduction
- 3) Assessment of agricultural environmental risk for genetically modified (GM) crops
- 4) Development of tolerant rice plants to high-temperature stress based on transcriptome

PUBLICATIONS since 2010

Oh SA, Pal MD, **Park SK**, Johnson JA, Twell D (2010) The tobacco MAP215/Dis1-family protein TMBP200 is required for the functional organization of microtubule arrays during male germline establishment. *Journal of Experimental Botany* 61: 969-981

Seo YJ, Park JB, Cho YJ, Jung C, Seo HK, **Park SK**, Nahm BK, Song JT (2010) Overexpression of the ethylene-responsive factor gene *BrERF4* from *Brassica rapa* increases tolerance to salt and drought in Arabidopsis plants. *Molecules and Cells* 30: 271-277

Oh SA, Park KS, Twell D, **Park SK** (2010) The SIDECAR POLLEN gene encodes a microspore-specific LOB/AS2 domain protein required for the correct timing and orientation of asymmetric cell division. *Plant Journal* 64: 839-850

Bae HK, Kang HG, Kim GJ, Eu HJ, Oh SA, Song JT, Chung IK, Eun MY, **Park SK** (2010) Transgenic rice plants carrying RNA interference constructs of *AOS* (*allene oxide synthase*) genes severe male sterility. *Plant Breeding* 129: 647-651

Oh SA, Twell D, **Park SK** (2011) *Sidecar pollen* suggests a plant-specific regulatory

network underlying asymmetric microspore division in Arabidopsis. *Plant Signalling and Behavior* 63: 416-419

- Kim HJ, Ok SH, Bahn SC, Jang J, Oh SA, **Park SK**, Twell D, Ryu SB, Shin JS (2011) Endoplasmic reticulum- and golgi-localized phospholipase A₂ plays critical roles in *Arabidopsis* pollen development and germination. *Plant Cell* 23: 94-110
- Kim YH, Lee YY, Kim YH, Choi MS, Jeong KH, Lee SK, Seo MJ, Yun HT, Lee CK, Kim WH, Lee SC, **Park SK**, Park HM (2011) Antioxidant activity and inhibition of lipid peroxidation in germinating seeds of transgenic soybean expressing *OsHGGT*. *Journal of Agricultural and Food Chemistry* 59: 584-591
- Hu GS, Hur YJ, Jia JM, Lee JH, Chung YS, Yi YB, Yun DJ, **Park SK**, Kim DH (2011) Effects of 2-aminoindan-2-phosphonic acid treatment on the accumulation of salidroside and four phenylethanoid glycosides in suspension cell culture of *Cistanche deserticola*. *Plant Cell Report* 30: 665-674
- Park H-M, Choi M-S, Kwak D-Y, Lee B-C, Kim M-K, Kim Y-G, Shin D-B, **Park S-K**, Kim Y-H (2012) Suppression of *NS3* and *MP* is important for the stable inheritance of RNAi-mediated rice stripe virus (RSV) resistance obtained by targeting the fully complementary RSV-CP gene. *Molecules and Cells* 33: 43-51
- Oh SA, Allen T, Kim GJ, Sidorova A, Borg M, **Park SK**, Twell D (2012) Arabidopsis fused kinase and the kinesin-12 subfamily constitute a signalling module required for phragmoplast expansion. *Plant Journal* 72: 308-312
- Park JB, Sendon PM, Kwon SH, Seo HS, **Park SK**, Kim JH, Song JT (2012) Overexpression of stress-related genes, BrERF4 and AtMYB44, in *Arabidopsis thaliana* alters cell expansion but not cell proliferation during cell death. *Journal of Plant Biology* 55: 406-412
- Sendon PM, Park JB, Seo HS, **Park SK**, Song JT (2012) Temporal and spatial expression patterns of the gene *AtBSMT1* encoding a salicylic Acid methyltransferase in Arabidopsis transgenic plants. *Journal of the Korean Society for Applied Biological Chemistry* 55: 823-826
- Lee S, Shin K, Lee I, Song H-R, Noh Y-S, Lee R-A, Lee S, Kim S-Y, **Park SK**, Lee S, Soh M-S (2013) Genetic identification of a novel locus, *ACCELERATED FLOWERING 1* that controls chromatin modification associated with histone H3 lysine 27 trimethylation in *Arabidopsis thaliana*. *Plant Science* 208: 20-27
- Shin K, Lee R-A, Lee I, Lee S, **Park SK**, Soh M-S (2013) Genetic identification of a second site modifier of *ctr1-1* that controls ethylene-responsive and gravitropic root growth in *Arabidopsis thaliana*. *Molecules and Cells* 36: 88-96
- Sendon PM, Oo MM, Park JB, Lee BH, Kim JH, Seo HS, **Park SK**, Song JT (2014) Activation of C2H2-type zinc finger genes induces dwarfism in *Arabidopsis thaliana*.

Journal of the Korean Society for Applied Biological Chemistry 57: 35-41

- Oh SA, Bourdon V, Dickinson HG, Twell D, **Park SK** (2014) Arabidopsis fused kinase TWO-IN-ONE dominantly inhibits male meiotic cytokinesis. *Plant Reproduction* 27: 7-17
- Oo MM, Bae H-K, Nguyen TD, Moon S, Oh SA, Kim JH, Soh M-S, Song JT, Jung K-H, **Park SK** (2014) Evaluation of rice promoters conferring pollen-specific expression in a heterologous system, *Arabidopsis*. *Plant Reproduction* 27: 47-58
- Qin Y, Kweon SJ, Park SY, Lee JH, Woo HJ, Shin KS, Cho HS, **Park SK**, Lim MH (2014) Little impacts on transcriptome and secondary metabolites of transgenic rice by resveratrol synthase. *Plant Omics Journal* 7: 490-498
- Kim YS, Kim IS, Choe YH, Bae MJ, Shin SY, **Park SK**, Kang HG, Kim YH, Yoon HS (2014) Overexpression of the *Arabidopsis* vacuolar H⁺-pyrophosphatase *AVPI* gene in rice plants improves grain yield under paddy field conditions. *Journal of Agricultural Science* 152: 941-953
- Kim MJ, Kim M, Lee MR, **Park SK**, Kim J (2015) *LATERAL ORGAN BOUNDARIES DOMAIN(LBD)10* interacts with *SIDECAR POLLEN/LBD27* to control pollen development in *Arabidopsis*. *Plant Journal* 81: 794-809
- Shin K, Lee S, Song WY, Lee RA, Lee I, Ha K, Koo JC, **Park SK**, Nam HG, Lee Y, Soh MS (2015) Genetic identification of *ACC-RESISTANT2* reveals involvement of *LYSINE HISTIDINE TRANSPORTER1* in the uptake of 1-aminocyclopropane-1-carboxylic acid in *Arabidopsis thaliana*. *Plant Cell Physiology* 56: 572-582
- Oh S, Park SY, Yeo Y, **Park SK**, Kim HY (2015) Comparative analysis of genetically modified brown rice with conventional rice varieties for the safety assessment. *International Journal of Food Science & Technology* 50: 1244-1254
- Francisco AG, Lang P, Kim M-H, Eo HJ, Oh SA, Kim JH, Kulcheski FR, **Park SK**, Manavella PA (2015) THO2, core member of the THO/TREX complex, is required for regulation of small RNA abundance in *Arabidopsis*. *Plant Journal* 82: 1018-1029
- Woo HJ, Qin Y, Park SY, **Park SK**, Cho YG, Shin KS, Lim MH, Cho HS (2015) Development of selectable marker-free transgenic rice plants with enhanced seed tocopherol content through FLP/FRT-mediated spontaneous auto-excision. *PLOS One* (2015-Jul-14;10(7))
- Nguyen TD, Oo MM, Moon S, Bae HK, Oh SA, Soh MS, Song JT, Kim JH, Jung KH, **Park SK** (2015) Expression analysis of two rice pollen-specific promoters using homologous and heterologous systems. *Plant Biotechnology Reports* 9: 297-306
- Lee BH, Kwon SH, Lee S-J, **Park SK**, Song JT, Lee S, Lee MM, Hwang Y-S, Kim JH

- (2015) The *Arabidopsis thaliana* NGATHA transcription factors negatively regulate cell proliferation of lateral organs. *Plant Molecular Biology* 89: 529-538
- Woo HJ, Lee SB, Qin Y, Lim MH, Lee JH, Shin KS, Cho HS, **Park SK** (2015) Generation and molecular characterization of marker-free Bt transgenic rice plants by selectable marker-less transformation. *Plant Biotechnology Reports* 9: 351-360
- Park GT, Sundaramoorthy J, Park JB, Lee JD, Choi KS, Kim JH, Seo HS, **Park SK**, Song JT (2015) Diversity of the *W1* gene encoding flavonoid 3',5'-hydroxylase in white- and purple-flowered soybeans. *Plant Genetic Resources* 13: 213-218
- Park S-Y, Lee SY, Yang JW, Lee J-S, Oh S-D, Oh S, Lee SM, Lim M-H, **Park SK**, Jang J-S, Cho HS, Yeo Y (2016) Comparative analysis of phytochemicals and polar metabolites from colored sweet potato (*Ipomoea batatas* L.) tubers. *Food Sciences & Technology* 25:283-291
- Oh SW, Park SY, Lee SM, Oh SD, Cho HS, **Park SK**, Lee HJ, Kim HY, Yeo YS, (2016) Multivariate analysis for the safety assessment of genetically modified rices in the anti-nutrients and phenolic compounds. *International Journal of Food Science & Technology* 51:765-776