

Youngjun Mo
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EDUCATION

Sep 2013 – Present: PhD student. Dubcovsky Lab, Horticulture and Agronomy Graduate Group, Department of Plant Sciences, University of California, Davis (UC Davis)
Mar 2010: MS in Crop Science and Biotechnology. Seoul National University, Korea
Aug 2007: BS in Plant Science (cum laude). Seoul National University, Korea

WORK EXPERIENCES

Dec 2007 – Jul 2013: Research Scientist. National Institute of Crop Science (NICS), Rural Development Administration (RDA), Suwon, Korea
Aug 2010 – Feb 2011: Visiting Research Fellow. Plant Breeding, Genetics, and Biotechnology Division, International Rice Research Institute (IRRI), Philippines
Aug 2007 – Dec 2007: Research Assistant. National Agrobiodiversity Center, RDA, Suwon, Korea
Jul 2003 – Aug 2005: Mechanized Infantryman, 2nd Infantry Division, 8th United States Army, Korean Augmentation to the US Army (KATUSA), Dongducheon, Korea

TEACHING EXPERIENCES

Fall 2016: Guest Lecturer for Plant Genetics (PLS152). Department of Plant Sciences, UC Davis
Winter 2016: Guest Lecturer for Seminars in Postharvest Biology (PBI 293). Plant Biology Graduate Group, UC Davis
Fall 2014: Teaching Assistant for Plant Genetics (PLS152). Department of Plant Sciences, UC Davis

SERVICES

Jan 2017 – May 2017: Admission Committee, Horticulture & Agronomy Graduate Group, UC Davis
Aug 2014 – Apr 2015: Organizing Committee, UC Davis Plant Breeding Symposium, UC Davis

PUBLICATIONS

10. **Mo Y**, Pearce S, Dubcovsky J (in preparation) Characterization of induced mutations in the SAW motif of *Rht-B1*, a wheat DELLA protein affecting stem elongation.
9. **Mo YJ**, Howell T, Vasquez-Gross H, de Haro LA, Dubcovsky J, Pearce S (in review) Mapping causal induced mutations by exome sequencing in wheat: a tall mutant case study. PLoS One

8. **Mo YJ**, Jeung JU, Shin WC, Kim KY, Ye C, Redoña ED, Kim BK (2014) Effects of allelic variations in starch synthesis-related genes on grain quality traits of Korean nonglutinous rice varieties under different temperature conditions. *Breeding Science*. 64: 164-175.
7. **Mo YJ**, Jeung JU, Shin YS, Park CS, Kang KH, Lee JS, Kim BK (2013) Agronomic and genetic analysis of Suweon 542, a rice floury mutant line suitable for dry milling. *Rice* 6: 37.
6. **Mo YJ**, Jeung JU, Kang KH, Lee JS, Kim BK (2013) Genetic analysis on floury endosperm characteristics of 'Namil(SA)-flo1', a japonica rice mutant line. *Korean Journal of Crop Science* 58(3): 283-291.
5. **Mo YJ**, Kim KY, Shin WC, Lee GM, Ko JC, Nam JK, Kim BK, Ko JK, Yu Y, and Yang TJ (2012) Characterization of *Imcrop*, a Mutator-like MITE family in the rice genome. *Genes & Genomics* 34:189-198.
4. **Mo YJ**, Kim KY, Park HS, Ko JC, Shin WC, Nam JK, Kim BK, and Ko JK (2012) Changes in the panicle-related traits of different rice varieties under high temperature condition. *Australian Journal of Crop Science* 6(3):436-443.
3. Ye C, Argayoso MA, Redoña ED, Sierra SN, Laza MA, Dilla CJ, **Mo Y**, Thomson MJ, Chin J, Delaviña CB, Diaz GQ, and Hernandez JE (2012) Mapping QTL for heat tolerance at flowering stage in rice using SNP markers. *Plant Breeding* 131:33-41.
2. Park HS, Kim KY, **Mo YJ**, Choi IB, Baek MK, Ha KY, Ha WG, Kang HJ, Shin MS, and Ko JK (2011) Characteristics and Variation of Panicle Traits of Korean Rice Varieties in Wet Season of the Philippines. *Korean Journal of Breeding Science* 43(1):68-80.
1. Park HS, Kim KY, **Mo YJ**, Choung JI, Kang HJ, Kim BK, Shin MS, Ko JK, Kim SH, and Lee BY (2010) Characteristics of Panicle Traits for 178 Rice Varieties Bred in Korea. *Korean Journal of Breeding Science* 42(2):169-180.

CULTIVAR RELEASE

5. Nam JK, Ko JK, Kim KY, Kim BK, Kim WJ, Ha KY, Shin MS, Ko JC, Kang HJ, Park HS, Baek MK, Shin WC, **Mo YJ**, Choi IB, Kim YD, Yang HS, Kim JG (2013) A New Early-Maturing Rice with Blast, Bacterial Blight, Rice Stripe Virus Resistant and High Grain Quality, 'Jopyeong'. *Kor J Breed Sci* 45(2):177-182.
4. Shin MS, Ko JK, Ko JC, Kim BK, Kang HJ, Kim YD, Nam JK, Ha KY, Kim KY, Baek MG, Shin WC, Kim WJ, Park HS, Baek SH, **Mo YJ**, Choi IB, Lee GH, Lee YB, Kim JG (2012) A Brown Planthopper Resistance and High Quality Rice Variety 'Chinnong'. *Kor J Breed Sci* 44(3):373-378.
3. Kim KY, Shin MS, Ko JK, Nam JK, Ha KY, Baek MG, Ko JK, Kim BK, Park HS, Shin WC, Kang HJ, Choung JI, Kim WJ, **Mo YJ**, and Kim JG (2010) A New Mid-late Maturing Rice Variety, 'Honong' with High-Quality and Multiple Disease Resistance. *Kor J Breed Sci* 42(3):252-256.

2. Kim KY, Shin MS, Kim BK, Ko JK, Noh TH, Ha KY, Ko JC, Kim WJ, Nam JK, Baek MG, Noh KI, Park HS, Baek SH, Shin WC, **Mo YJ**, Choung JI, Kim YD, Kang HJ, Kim JK, Hwang HG, and Kim JK (2009) A Mid-late Maturing Rice Cultivar with High-Quality and Bacterial Blight Resistance “Jinbaek”. *Kor J Breed Sci* 41(3):314-318.
1. Ko JC, Kim BK, Nam JK, Baek MG, Ha KY, Kim KY, Son JY, Lee JK, Choung JI, Ko JK, Shin MS, Kim YD, **Mo YJ**, Kim KH, and Kim CK (2008) A Medium-late Maturing New Rice Cultivar with High Grain Quality, Multi-disease Resistance, Adaptability to Direct Seeding and Transplanting Cultivation, “Hopum”. *Kor J Breed Sci* 40(4):533-536.

CONFERENCES

(Oral presentation)

1. **Mo YJ**, Vasquez-Gross H, de Haro LA, Howell T, Pearce S, Dubcovsky J (2017) Mapping by exome sequencing in wheat: a tall mutant case study. *Korean Society of Breeding Science*, Korea

(Poster presentations)

11. **Mo YJ**, Vasquez-Gross H, de Haro LA, Howell T, Pearce S, Dubcovsky J (2016) Rapid mutant mapping in wheat using exome capture and sequencing technology. *Signature Research in Genomics Symposium*, Davis, USA.
10. **Mo YJ**, Vanzetti L, Pearce S, Zhang J, Hale I, Dubcovsky J (2015) Association mapping of *Rht18* region using a hexaploid spring wheat GWAS panel. *Triticeae CAP Workshop at Plant and Animal Genome XXIII*, San Diego, USA.
9. **Mo YJ**, Jeung JU, Kim KY, Shin WC, Won YJ, Ahn EK, Hyun UJ, Jeong EG, Choi IS, Kim CG (2013) Association Between Allelic Variations in Starch Synthesis-Related Genes (SSRGs) and Grain Quality Traits of Rice Under High Temperature. *Plant and Animal Genome Asia*, Singapore.
8. **Mo YJ**, Kim KY, Park HS, Ko JC, Shin WC, Nam JK, Kim BK, and Ko JK (2011) Changes in the Panicle-Related Traits of Different Rice Cultivars under the High Temperature Condition. *ASA-CSSA-SSSA International Annual Meetings*, San Antonio, USA.
7. **Mo YJ**, Sierra S, Ye C, Redoña E, Kim KY, Ko JC, Shin WC, Nam JK, Kim BK, and Ko JK (2011) Relationship between Starch Synthesis-related Gene Alleles and Starch Properties of Rice Ripened under the High Temperature Condition. *Korean Society of Breeding Science*, Korea
6. **Mo YJ**, Kim KY, Shin WC, Ko JC, Nam JK, Kim BK, and Ko JK (2011) Identifying Heat-tolerant Korean Rice Cultivars under High Temperature Conditions. *Korean Society of Crop Science*, Korea
5. **Mo YJ**, Kim KY, Shin WC, Nam JK, Kim BK, Ko JK, and Yang TJ (2010) Identification of a New MITE family, *Imcrop*, in the rice genome. *3rd International Rice Congress*, Hanoi, Vietnam.

4. **Mo YJ**, Kim KY, Shin WC, Ko JC, Nam JK, Shin MS, Kim BK, and Ko JK (2010) Spikelet Fertility of Korean Rice Cultivars under High Temperature during Anthesis. *Korean Society of Breeding Science*, Korea
3. **Mo YJ**, Kim KY, Shin WC, Nam JK, Ko JC, Shin MS, Kim BK, and Ko JK (2010) Changes in Grain Quality, Amylose and Protein Contents under High Temperature during Grain Filling Stage among Korean Rice Cultivars. *Korean Society of Crop Science*.
2. **Mo YJ**, Kim KY, Shin WC, Nam JK, Ko JC, Shin MS, Kim BK, and Ko JK (2010) Relationship between Panicle Traits and Ripened Grain Ratio under High Temperature among Korean Rice Cultivars. *Korean Society of Crop Science*.
1. **Mo YJ**, Kim KY, Shin WC, Lee GM, Park CS, Kang CS, Choi IB, Nam JK, Park HS, Kim YD, Shin MS, Ko JK, and Yang TJ (2009) New miniature inverted-repeat transposable elements (MITEs) in *Oryza sativa* genome and their insertion polymorphism among different rice varieties. *6th International Rice Genetics Symposium*, Manila, Philippines.

TRAININGS

- Oct 2016: MBTI Assessment and Intercultural Development, TERO International, IA, USA
- Aug 2016: Using Galaxy for Analysis of RNA-Seq, Exome Seq, and Variants. UC Davis, CA, USA
- Oct 2015: IMPACT: How To Speak Your Way To Success. TERO International, IA, USA
- Nov 2010: SNP Analysis and Candidate Gene Discovery Training Course. IRRI, Philippines
- Oct 2010: Rice Breeding Course. IRRI, Philippines

AWARDS

- Aug 2015: Henry A. Jastro Research Award. Horticulture & Agronomy Graduate Group, UC Davis
- Jun 2015: Howard Hughes Medical Institute (HHMI)'s International Student Research Fellowship
- Mar 2015: Monsanto's Beachell-Borlaug International Scholars Program (MBBISP)
- May 2014: Henry A. Jastro Research Award. Horticulture & Agronomy Graduate Group, UC Davis
- Jul 2013: Korean Government Long-term Fellowship for Overseas Studies
- Jul 2011: Excellent Presentation Award. The Korean Society of Breeding Science
- Mar 2007: Full Scholarship for Academic Excellence. Seoul National University, Korea
- Sep 2006: Full Scholarship for Academic Excellence. Seoul National University, Korea