

Ling Yu

Professor of Biology

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Education:

- Feb, 1999 – Aug, 2004:
Ph.D. student in the Department of Agricultural Botany, the Faculty of Agriculture, Hebrew University of Jerusalem.
- March, 1998 - Feb, 1999:
Research for complementation of Master thesis in the Department of Agricultural Botany, the Faculty of Agriculture, Hebrew University of Jerusalem.
- Sept. 1994 - July 1996:
M.Sc. Degree in the Specialty of Plant Nutrition and Fertilization, Nanjing Agricultural University, China.
- Sept. 1985 - July 1988:
Self-taught in the specialty of Agronomy, Nanjing Agricultural University, China.
Sept. 1982 - July 1985 Study Soil Sci. & Agri-Chem. in Yancheng Agronomy secondary school, China.

Research interests and expertise:

My current research interests are studying the signaling molecules and pathways on the regulation and function of Na and K transporters and channels in plants. In addition to the standard biochemistry assay, I use also Patch-clamp channel recording method to study the regulation of channel gating. My current ongoing subject is OsHAKs in rice high affinity K uptake and translocation.

Selected publications:

- 1: Plant HAK/KUP/KT K⁺ transporters: Function and regulation. Semin Cell Dev Biol. 2017 Jul 13. Li W, Xu G, Alli A, Yu L*
- 2: Two NHX-type transporters from Helianthus tuberosus improve the tolerance of rice to salinity and nutrient deficiency stress Plant Biotechnol J. 2017 Jun 19. Zeng Y, Li Q, Wang H, Zhang J, Du J, Feng H, Blumwald E, Yu L*, Xu G
- 3: Rice potassium transporter OsHAK1 is essential for maintaining potassium mediated growth and functions in salt tolerance over low and high potassium concentration ranges. Plant Cell and Environment. 2015 Chen G, Hu Q, Luo L, Yang T, Zhang S, Hu Y, Yu L*, Xu G
- 4: The role of OsHAK5 in potassium acquisition and transport from roots to shoots in rice

at low potassium supply levels. *Plant Physiology*. 2014. 166 (2), 945–959. Tianyuan Yang², Song Zhang², Yibing Hu, Fachi Wu, Qingdi Hu, Guang Chen, Jing Cai, Ting Wu, Nava Moran, **Ling Yu***, and Guohua Xu

- 5:** Extracellular protons inhibit the activity of inwardly rectifying potassium channels in the motor cells of *Samanea saman* Pulvini. *Plant Physiology*. 2001. 127: 1310-1322.
Ling Yu, Menachem Moshelion, and Nava Moran