

Ying Zhang

Date of Birth: 29.06.1989 Nationality: Chinese

School of Chemistry, University of St Andrews, North Haugh, St. Andrews, Fife. KY16 9ST

Tel: 07380287308 Email: yz88@st-andrews.ac.uk

I am a PhD student in Goss group and focusing on finding new Flavin Dependent Halogenases (FDHs). I have expertise in bioinformatics, heterologous expression and protein production

Through my MSc I have developed skills in microorganism cultivation including isolating and identifying poisonous microbes and general molecular biology techniques, cloning work (total RNA isolation-cDNA reverse transcription-DNA reproducing), Sugar content detection in fresh fruit using HPLC.

I am motivated, highly-efficient and have great communication skills, I am able to work under pressure independently and have team spirit.

Employment experience

Technical Engineer

3/2018 to 12/2018

Gansu Hongchuan Liquor Co Ltd. China

Relevant skills:

Quality control during manufacture including inspection of final product. Testing of final alcohol content, solids, acidity, ester content, heavy metals and methanol content. Visually inspect the quality and appearance of the finished item including all packaging. Keep accurate records of all tests and inspection results.

Laboratory Technician-Quality Control

7/2014 to 6/2016

Kunlun Mountain Mineral Water Co., Ltd. China

Relevant skills:

Quality control of mineral water, on-line monitoring of O₃ for disinfection in source water, detect electrical conductivity and pH, microorganism cultivation (total plate count, *E. coli*, *P. aeruginosa*, mould, yeast) to evaluate finished products pollution level. Writing reports, daily duties and instruments maintenance. Complete all the work according to SOP and national standards.

Awarded annual outstanding employee, seasonal outstanding employee for 3 times.

Education

School of Chemistry Engineering, Tianjin University

Master's Degree

7/2011 to 9/2014

Thesis: Sugar Metabolism and Related Genes Expression in Different Pear Cultivars.

Testing of the physiological and biochemical indexes of fresh fruit including starch, TSS, sugar content (HPLC). Testing of activities of enzymes related to glycometabolism. Total RNA isolating from fresh fruit, RT-PCR.

This project aimed to reveal the interaction with sugar content and enzymes and related gene expressions from fruit growth till after-harvest storage.

Our results provided a theoretical basis for the improvement of pear fruit quality during after harvest storage, and also revealed the key enzyme related to sugar accumulation during pear fruit growth stage.

Bachelor's Degree

9/2007 to 7/2011

Main courses: Postharvest Technology of Fruits and Vegetables, Food Microbiology, Food Chemistry, Food Transgenic Technology, Inorganic Chemistry, Organic chemistry, Biochemistry.

Scholarships

CSC PhD studentship Scholarship

National Encouragement scholarship (Awarded to Top 5% students)

Scholarship For Excellence in Study (Awarded to Top 5% students)

Publications

1. Zhao Y, Geng J, Zhang Y, et al. Changes in Sugar Metabolism and Fruit Quality of Different Pear Cultivars During Cold Storage[J]. Transactions of Tianjin University, 2019, 25(4): 389-399.
2. Kou X, Li Y, Zhang Y, et al. Gene expression and activity of enzymes involved in sugar metabolism and accumulation during “Huangguan” and “Yali” pear fruit development[J]. Transactions of Tianjin University, 2018, 24(2): 101-110.
3. Kou X, Jiang B, Zhang Y, et al. The regulation of sugar metabolism in Huangguan pears (*Pyrus pyrifolia* Nakai) with edible coatings of calcium or Pullulan during cold storage[J]. 원예과학기술지, 2016, 34(6): 898-912.
4. Kou X, Wang S, Zhang Y, et al. Effects of chitosan and calcium chloride treatments on malic acid-metabolizing enzymes and the related gene expression in post-harvest pear cv. ‘Huang guan’[J]. Scientia horticulturae, 2014, 165: 252-259.
5. Kou X, Chen Q, Li X, et al. Quantitative assessment of bioactive compounds and the antioxidant activity of 15 jujube cultivars[J]. Food Chemistry, 2015, 173: 1037-1044.