Zi-Yu Song et al., J Nutr Food Sci 2017, 7:4 (Suppl)
DOI: 10.4172/2155-9600-C1-045

A novel real-time PCR quantitative method of crab species

Zi-Yu Song and Cheng-Hong Hsieh
Asia University, Taiwan

Meat adulteration has posed considerable risks to public health, and quantitative methody real-time PCR (qPCR) is a powerful tool used for both research and diagnostic, which has the advantages, compared to relative quantification, of providing an absolute copy number for a particular target. However, reliable standard is important for qPCR by using genome synthesis of generic crab fragments as a standard (fragments region is 16s rRNA) . In this study, we developed a novel real-time PCR quantitative method for the detection of crab species that are used as meat products or meat adulterants, And design generic primers and probes for crabs, and then calculate copy number of crabs. The results confirmed crab species could be tested to calculate their copy number. The limit of quantification was 12 copies of crabs genomic DNA or 1% meat ingredient. This assay enables detection of multiple species of crab copy number. This is also applicable to other adulterated foods and genetically modified foods.

Biography

Zi-Yu Song graduated from the Asia University of Food Nutrition and Biotechnology, after graduation continue to study, studying at the Asian University Master student. Because Taiwan is surrounded by the sea, the sea food is very rich in resources, many people poisoning in Taiwan because of eating toxic crab. So my direction of the study of the crab qualitative, quantitative, and calculate the copies, the future will continue to study crab processed products, and combined with the detection of toxic crabs(TTX), the future hope that I can make effort to protect the Taiwanese food safety issues.

kuan-1024@hotmail.com

Notes: