

International Conference on

Food Chemistry & Hydrocolloids

August 11-12, 2016 Toronto, Canada

The accumulation of endocrine-disrupting chemicals in vegetables and fruits in coastal zone

Jian Lu

Yantai Institute of Coastal Zone Research- CAS, China

EDCs are substances that interfere with hormone biosynthesis, metabolism, or action resulting in a deviation from normal homeostatic control or reproduction. Endocrine-disrupting chemicals (EDCs) have been attracting public attention because of their negative effects on human health and wide occurrence in various environments and foodstuffs. There is growing interest concerning the possible food safety posed by endocrine-disrupting chemicals (EDCs) in coastal zone. Isotope dilution method was developed for monitoring the potential bioaccumulation of typical EDCs in the vegetables and fruits in coastal zone. Accumulation of EDCs in vegetables and fruits from coastal zone with intensive reclaimed water irrigation was observed. The estimated daily intake of EDCs was beyond the recommended acceptable daily intake (ADI) for children as recommended by the Joint FAO/WHO Expert Committee on Food Additives (JECFA). The accumulation of EDCs in vegetables and fruits indicates a potential thread of EDCs to human health through the food chain in coastal zone with intensive reclaimed water irrigation. The rapid accumulation of EDCs using edible intertidal macroalgae indicates another potential thread of EDCs to human health through the food chain in coastal zone. Financial support from One Hundred-Talent Plan of Chinese Academy of Sciences (CAS) is gratefully acknowledged.

Biography

Jian Lu has completed his PhD from Shanghai Jiao Tong University and Post-doctoral studies from University of Florida. He is a Professor of Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences. He has published more than 50 papers in reputed journals and has been serving as an Editorial Board Member of repute.

jlu@yic.ac.cn

Notes: