

## JOURNAL OF FOOD SCIENCE AND TOXICOLOGY

# Food legumes – Climate smart crops to improve human nutrition and food security in the developing countries

## Karthika Rajendran, Naveen AT and Bharath R

Vellore Institute of Technology (VIT), India

#### **Abstract**

Food legumes such as pea, chickpea, lentil, faba bean, pigeon pea, mung bean and urd bean provide dietary protein, B vitamins and minerals (Fe and Zn) to the millions of people all over the world. They facilitate to maintain food and nutritional security of resource poor people particularly, living in the developing countries. Besides, they are the great option for climate smart agriculture. The small-holder farmers and the vulnerable households affected by drought and high temperature stress can cultivate food legumes in order to ensure food and nutritional security. Increasing the essential nutrient content and its bioavailability of the food legume crops through biofortification approaches, namely transgenics, agronomy, breeding and microbiology; either alone or in combination with one or more approaches would bring maximum benefit to several communities around the world. Food legumes could be an excellent solution to combat global food and nutritional insecurities, as well as other human health issues.

### **Biography**

Karthika Rajendran has completed her Ph.D from the university of adelaide, Australia and Post-Doc research (lentil breeding) from the international agricultural centre for dry areas (ICARDA). At present, she is a assistant professor at the VIT School of agricultural innovations and advanced learning (VAIAL), vellore institute of technology (VIT). She published 14 peer reviewed publications in the reputed journals, 2 book chapters and presented about-17 conference proceedings.



6th international conference on Food science and Food safety | October 16, 2020

Citation: Karthika Rajendran, Food legumes – Climate smart crops to improve human nutrition and food security in the developing countries, Food Safety Summit 2020, 6th International Conference on Food Science and Food Safety, October 16, 2020 | Webinar, 05