

# Vacancy for a Research Assistant position

NRC Grant Number: 18-091

**Location** : Department of Botany, Faculty of Science, University of Peradeniya  
**Position Type** : Full time Research Assistant  
**Contract** : 36 months (3 years) and commence from 20<sup>th</sup> May 2018  
**Salary** : Rs. 40,000.00 per month (salary is available for 24 months only)

The candidate will have to register and read for a MPhil/PhD preferably at the PGIS

## Project

*In-silico* mining for resistance gene analogs and identification of genetic resources for blast disease resistance in the local finger millet germplasm

The effects of climate change and measures to reduce these effects such as restrictions on use of fossil-fuel based nitrogen fertilizer, call attention on climate resilient, low input demanding crops like finger millet and sustainable agriculture. Crop improvement for host resistance can provide cost effective and sustainable means for increasing finger millet production and profits. Disease resistance genes (R-genes) are an integral component of host resistance. R-genes have highly conserved domains that enable computational identification of potential candidate genes that are known as Resistance Gene Analogs (RGAs). This project aims to deliver finger millet RGAs, resistant germplasm and efficient disease screening protocols that can be effectively utilized in resistance breeding programs to develop elite blast resistant varieties. The scientific merit of the project includes novelty approaches in *in-silico* mining and comparative genomics utilizing latest developments in finger millet genomic resources. Improved finger millet varieties can generate income for subsidiary farmers to uplift the socioeconomic status of the farming community. At the same time the broad impact of the project will enhance host resistance and thereby yield and production of finger millet. Therefore the outcome of this project will be of national significance providing affordable and sustainable solutions for food and nutritional security.

This is a multidisciplinary project conducted in collaboration with the Field Crop Research and Development Institute of Sri Lanka (FCRDI). The project duration is 36 months.

***Apply by sending me a CV and a statement of intent.***

***Applications are entertained till the filled.***

***. position is***

Principal investigator  
Dr. Chandima Ariyaratna  
Dept. of Botany, Faculty of Science,  
University of Peradeniya, Sri Lanka  
+94718298401; ckariyaratna@yahoo.com

