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SYDNEY

Australian Government

Australian Centre for
International Agricultural Research

Mitigating the effects of stripe rust on wheat production in South Asia and Eastern Africa



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ACIAR Project: CIM/2014/081 Newsletter No. 3, 2019

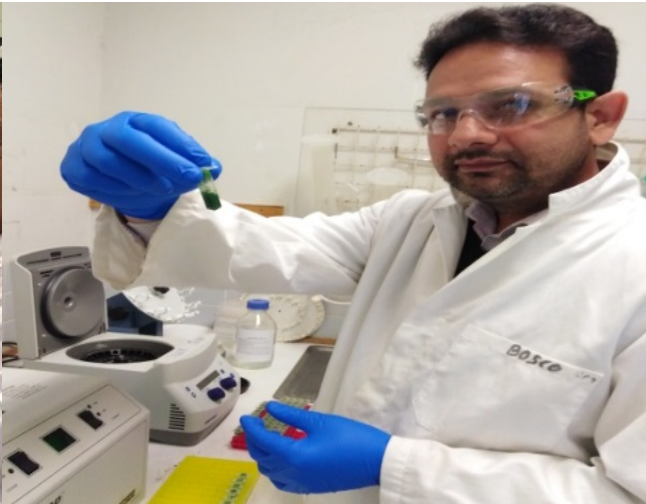
At the University of Sydney, we are coordinating the ACIAR funded research project “CIM/2014/081”, under which we conduct research on wheat stripe rust in partnership with scientists from Ethiopia, India, Nepal and Pakistan. The project has progressed well, this year we successfully undertook training of early career scientists from partner countries at the Plant Breeding Institute.

The diverse group of trainees comprised Mr Dawit Asnake Tigabu and Mr Tamene Mideksa Sarbesa (Ethiopian Institute of Agricultural Research, Ethiopia), Dr Satish Kumar and Dr Pramod Prasad (Indian Institute of Wheat & Barley Research, Karnal, India) and Mr Prem Bahadur Magar and Mr Shiwarttan Kumar Gupt from Nepal Agricultural Research Council, Nepal). Ms Aline Casassola, a student of Bachelor of Agronomy at the University of Passo Fundo, Brazil, also joined this training to complete her internship. The two remaining scientists, Dr Muhammad Fayyaz and Mr Muhammad Sufyan from the Pakistan Agricultural Research Council are expected to start their training at the Plant Breeding Institute in July 2019. The training emphasised building partner capacity in rust pathology and genetics, and the establishment of a network of rust researchers in the project target region.

Trainees learnt different techniques in studying host pathogen interactions



Training in cytology and genotyping using SSR and KASP Markers



Field operations involved in working with rust pathogens in field rust nurseries



Visit to the main campus of the University of Sydney

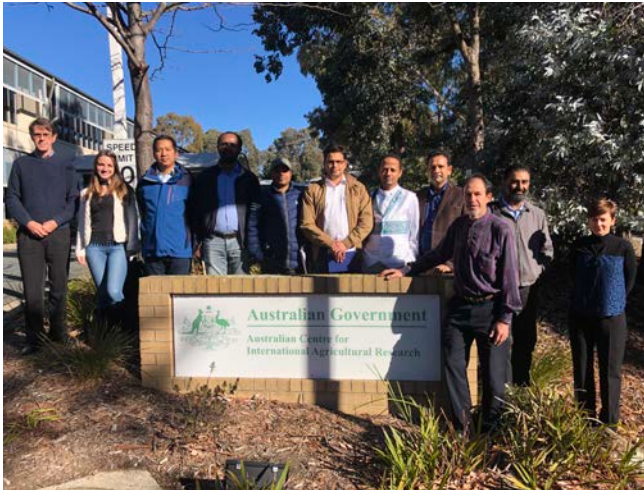


PLANT BREEDING INSTITUTE, COBBITTY, NSW, AUSTRALIA



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Visit to the Australian Centre for International Agricultural Research, Canberra



PLANT BREEDING INSTITUTE, COBBITTY, NSW, AUSTRALIA

Visit to the Iconic Blue Mountains, Jenolan Caves and Celebrations



PLANT BREEDING INSTITUTE, COBBITTY, NSW, AUSTRALIA



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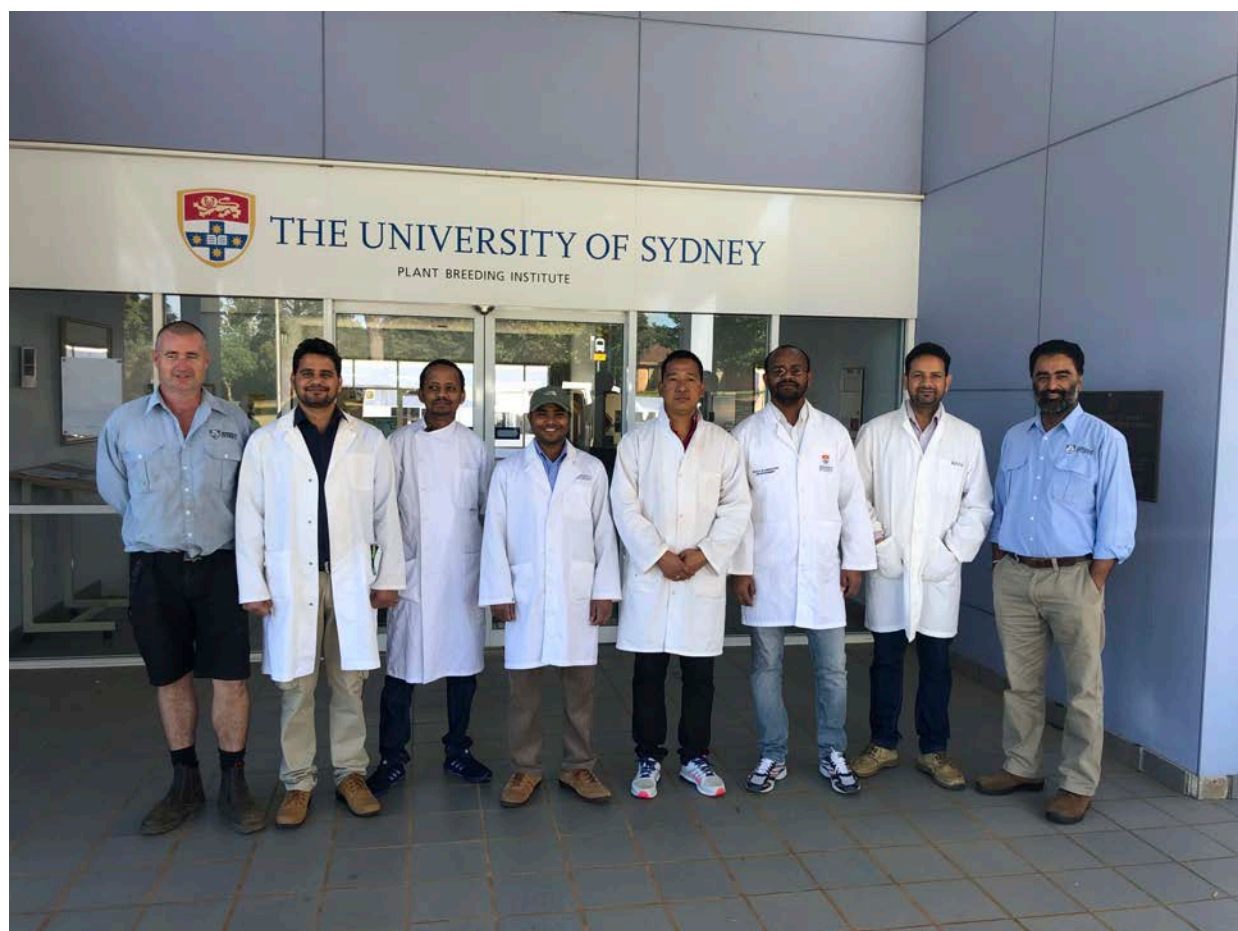
Farewell and best wishes from PBI family



PLANT BREEDING INSTITUTE, COBBITTY, NSW, AUSTRALIA



Value of training as attested by trainees



From L to R: Mr Andrew McIntosh (PBI), Dr Pramod Prasad (India), Mr Dawit Asnake (Ethiopia), Mr Shiwarttan Gupt and Mr Prem Magar (Nepal), Mr Tamene Sarbesa (Ethiopia), Dr Satish Kumar (India) and Dr Karanjeet Sandhu (PBI)

Pramod: “Was great to learn about rust survey and online data base, I’d like to adopt this system at Shimla”

Dawit and Tamene: “Training has built our confidence in germplasm screening for rust resistance and conducting molecular studies, now we should be able to help our wheat breeding program in Ethiopia. In addition, we learned about the Work Health & Safety and we are keen to adopt these measures”

Prem and Shiwarttan: “We are feeling blessed to visit PBI and learning host pathogen interactions in detail, which has built our capacity to conduct gene postulations, race analysis and running molecular markers. We’d like to start our rust survey and race analysis, independently”

Satish: “Genotyping using KASP markers was new to me, now I have this knowledge and certainly I am going to adopt this system to enhance my wheat breeding program to develop rust resistant wheat cultivars”

Trainees: “We are highly thankful to ACIAR for providing this training opportunity”

For more information, contact:

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