



**November 2018**

## **#AidWorks: Reflections on 10 Years of Wheat Improvement**



Since 2008 the Durable Rust Resistance in Wheat and Delivering Genetic Gain in Wheat projects have made significant progress in fighting Ug99, a disease that threatened up to 80% of the world's wheat supply.

This month, the Department for International Development (DFID) of the United Kingdom's [#AidWorks social media campaign](#) highlights the real impact that aid-funded scientific and technological innovations are making in development. We are proud to be one of the projects that has benefitted from the support of UK aid. Here are some highlights from the DRRW/DGGW's achievements in the past decade:

**[VIEW: "10 YEARS OF WHEAT IMPROVEMENT"](#)**

## Training Manuals on the BGRI Website

The new [BGRI Training site](#), launched this October, doesn't just have videos of presentations. It also features a complete text titled "[Protocols for Race Analysis of Wheat Stem Rust \(\*Puccinia graminis\* f. sp. \*tritici\*\)](#)" written by Getaneh Woldeab, Endale Hailu and Netsanet Bacha of the Ethiopian Institute of Agricultural Research.



Accompanied by pictures and videos for clearer instruction, the manual examines stem rust collecting, incubation, and sample storage among other best practices and techniques. All are encouraged to make use of this resource, especially if you are starting a new laboratory.

if you have training materials you would like to share or ideas for topics that we have not yet covered, please [contact the BGRI](#).

## Breeding wheat for sustainable agriculture under climate change: prioritizing traits and approaches for pre-breeding



This 28-question survey is part of an ongoing discussion at The International Maize and Wheat Improvement Centre (CIMMYT) to review options and propose priority traits for future breeding. The objective is to identify key traits for future breeding that significantly enhance the sustainability of wheat-based cropping systems. The survey uses a trait-based approach to target breeding efforts for future agronomy scenarios, stressing the urgent need to assimilate breeding in a sustainable agronomic context. While future wheat will continue to require increased yield potential, heat and drought tolerance as well as quality traits, our interest is to shed light on desirable complementary traits.

[BEGIN SURVEY](#)

## Multimedia Spotlight: Speed Breeding Wheat

Researchers at the U.K.'s John Innes Center and Australia's University of Queensland have been working on making 'speed breeding' -- [a technique that originated from the US aerospace program](#) -- a viable method of breeding improved crops.

Pioneered by Lee Hickey's lab at the University of Queensland, the speed breeding protocols have since been tested with different crops by different research institutions around the world.

The [latest protocols from the John Innes Centre](#), with 2018 Women in Triticum awardee Sreya Ghosh as first author, outline the results of their experiments in speed breeding with different crops.

You can see speed breeding in action in the following videos:



[Space-inspired Crop Improvement](#)  
(John Innes Centre)



[DIY Crop Speed Breeding System](#)  
(University of Queensland)

## Events and Opportunities

### International Phytobiomes Conference

4-6 December 2018 (*Montpellier, France*)

<http://www.phytobiomesconference.org>

### Plant and Animal Genome XXVII Conference

12-16 January 2019 (*San Diego, CA, USA*)

<http://www.intlpag.org/2019/>

### 30th Fungal Genetics Conference

12-17 March 2019 (*Pacific Grove, CA, USA*)

<http://conferences.genetics-gsa.org/Fungal/2019/index>

### Rust Workshop at the Fungal Genetics Conference

12 March 2019

*Speakers:* Catherine Aime, Anna Berlin, Fungi DB, Tao Siqi

*Brainstorm Session:* Diane Saunders, Peter van Esse, Anna Berlin, Sebastien Duplessis, Catherine Aime, Melania Figueroa

*Contact:* [Peter.vanesse@tsl.ac.uk](mailto:Peter.vanesse@tsl.ac.uk)

## Contribute to the BGRI Newsletter and Social Media

If you have any news of interest to the BGRI community, please send us a message and we will try to include it in subsequent BGRI newsletters! We also publish and share stories on our [Twitter](#) and [Facebook](#) accounts. Use [@globalrust](#) to tag any contributions.

Events, career and educational opportunities, photos, and new publications are especially welcome.

Contact BGRI newsletter editor [Samantha Hautea](#) or [the BGRI](#).

**VISIT OUR WEBSITE**

**Borlaug Global Rust Initiative**  
| [bgri@cornell.edu](mailto:bgri@cornell.edu) |

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