Bean Breeding for Adaptation to a Changing Climate in Post-Conflict COlombia (BBACO)

**Summary**
Heat tolerant common beans are urgently needed to prevent food insecurity and secure Colombian farm incomes today, and even more so in the future, when heat events will be more frequent and severe due to climate change.

Applying a holistic, multidisciplinary approach and building on CIAT’s previous breeding efforts, this project will develop novel methods for the breeding, screening and adoption of heat-tolerant beans, therefore reducing breeding, delivery and adoption time. This will enable the development of climate resilient beans, as well as models and decision tools to identify suitable areas for bean cultivation and socio-economic factors relevant for adoption by farmers and consumers. This will contribute to climate resilience, poverty reduction, and nutritional outcomes in current and new (post-conflict) growing areas.

**Key findings/learning/outcomes**
- Better understanding of the detail of how heat stress impacts development and productivity leading to better screens for resilient varieties
- Improved crop models incorporating heat responses permitting better predictions of climate change impacts
- Assessments of economic and social barriers to adoption
- Good interdisciplinary interactions e.g. between physiology and climate impact modelling

**Where?**
UK, Colombia
April 2019 – October 2021

**Project partners/funders**
UK: Reading, Leeds, Lancaster, SRUC, Rothamsted Research
Colombia: (Inter’l Centre for Tropical Agriculture)

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