

# Updates to the International Cocoa Germplasm Database (ICGD)

C.J. Turnbull<sup>1</sup> | A.J. Daymond<sup>1</sup> | M.J. End<sup>2</sup> | P. Hadley<sup>1</sup>

## Introduction

ICGD aims to support the continuing conservation and breeding efforts required to maintain sustainable cocoa production in the face of increasing pressures from pests and diseases, current low yields, and the uncertainties posed by global climate change.



Supporting the Global Breeding Effort

## The Data

All information in ICGD is referenced to its original source and has been obtained from a wide range of publications, proceedings and reports, as well as directly from individuals from research institutions and genebanks.

- Over 31,500 cocoa clone names, including synonyms
- Agronomic traits (including quality, yield and disease reactions)
- Morphological data
- Origins (>4500) and locations (>11,000) of material
- Over 2000 photographs and drawings
- Genetic fingerprints for 2770 clones
- Fully referenced

## New Features

The website has been redesigned to allow improved access via mobile devices, with more dynamic search options and better integration with the International Cocoa Quarantine Centre at Reading (ICQC,R) to allow quick access to up-to-date information on the clones available for distribution.

## Contact information

- 1 School of Agriculture, Policy and Development, University of Reading, RG6 6EU, UK  
✉ c.j.turnbull@reading.ac.uk | [www.reading.ac.uk/apd/](http://www.reading.ac.uk/apd/)
- 2 Cocoa Research Association | [www.cocoaresearch.org.uk](http://www.cocoaresearch.org.uk)

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## New Information

Search options have been expanded to incorporate new data, including recommended planting material, details on available genomic data (with links to repositories), and climate change-related physiological traits.

Improved access to genetic fingerprints helps breeders and researchers confirm the identity of the plants they are using. Clone lists generated by a search can be submitted to further searches (e.g. current locations).

## Summary

Getting the right planting materials to farmers is a key component of sustainable cocoa production. The International Cocoa Germplasm Database (ICGD) is the primary source of information on the characteristics, origin and location of cocoa clones worldwide and has long been a tool for breeders to identify and locate new genetic resources for breeding improved, resilient cocoa plants. The inclusion of 'Recommended Planting Materials' for different regions, as defined by national cocoa organisations, means that ICGD can help the decision-making of cocoa farmers and organisations involved in growing cocoa.



ICGD is available free of charge, just visit:  
[www.icgd.reading.ac.uk](http://www.icgd.reading.ac.uk)



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