



# VIII Scientific Wallace Conference

## Proceedings



**Review  
and  
editing**


Fernando Casanoves, CATIE  
Leida Mercado, CATIE  
Marianela Argüello, CATIE  
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ISBN: 978-9977-57-795-1

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C397

VIII Scientific Wallace Conference Proceedings/ CATIE- Centro Agronómico Tropical de Investigación y Enseñanza  
– 1ª ed. – Turrialba, Costa Rica : CATIE, 2024.  
120 p. : il. – (Serie divulgativa / CATIE ; no. 24)

ISBN 978-9977-57-795-1

1. agricultural research 2. conferences 3. agrarian structure  
4. climate change 5. farms 6. sustainability 7. governance  
I. CATIE II. Título III. Serie IV. Alejandra Martínez Salinas  
V. Catalina Abadie VI. Claudia Sepúlveda VII. Laura Benegas  
VIII. Leida Mercado IX. Marianela Arguello X. Pablo Imbach  
XI. Reinhold Muschler XII. Róger Madrigal XIII. Rolando Cerda

#### Citación sugerida:

CATIE (Centro Agronómico Tropical de Investigación y Enseñanza, Costa Rica). 2024. VIII Scientific Wallace Conference Proceedings (en línea). Scientific Wallace Conference (8, 2023, Turrialba, Costa Rica). Turrialba, Costa Rica, CATIE. 100 p. (Serie divulgativa/ CATIE, no. 24). Disponible en: <https://repositorio.catie.ac.cr/handle/11554/5175>

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# ClimaLoca Project: fostering innovations for cadmium reduction in cocoa beans in Colombia, Ecuador, and Peru

## Abstract

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Cocoa is an important crop for South American countries such as Ecuador, Peru, and Colombia, providing a source of income to nearly 300,000 households, mainly small farm holders, who have, until the recent past, been able to improve their revenue thanks to the high quality of their cocoa. Unfortunately, a large part of these fine cocoa producers is no longer allowed to export their cocoa to E.U., because of its level of cadmium, in many cases higher than the value permitted by an E.U regulation effective since January 2019. The ClimaLoca Project, initiated in 2021 aims at 1) precisely assessing the geographical extent of the cadmium in soil and cocoa beans, 2) assessing the impact of the new regulation on the income of the farmers of the three countries, 3) assessing the impact of climatic change on cadmium uptake, 4) assess the efficiency and cost-effectiveness of soil amendments to reduce cadmium uptake and 5) identify cocoa genotypes with low cadmium uptake and identify the genomic regions involved in this attribute. A participatory approach has been adopted, including on-farm experiments and the establishment of stakeholders' platforms. In addition, a strong collaboration has been maintained between participating research institutions from the three LATAM countries and from the European countries participating (France, Belgium, Netherlands). This collaboration is ensured through seminars and workshops and through the project website ([climaloca.org](http://climaloca.org)). The strong link between the research team and the cocoa producers' organization has already permitted a successful transfer of a new quick and low-cost methodology of cadmium measurement in cocoa beans to a Peruvian cocoa cooperative, allowing the selection of the cocoa batches complying with the regulation of cadmium, that can be exported to E.U.

**Keywords:** participatory research, technology transfer, regional collaboration