

Standards and tools for evaluating cocoa – a timeline and progress since 2015

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Representing the Working Group on the Development of
International Standards for the Assessment of Cocoa Quality
and Flavours



Fine and Flavour Cocoa Forum

**WORLD
COCOA
CONFERENCE 2018**



22-25 APRIL 2018
MARITIM HOTEL BERLIN
BERLIN, GERMANY



Common objective recognised

- Urgent need to establish accepted, credible and verifiable protocols for assessing and communicating about cocoa quality attributes
- Sept 2015 - Working Group set up *“To explore the development of international standards for the assessment of cocoa quality and flavours”*
Coordinated by the Cocoa of Excellence Programme.



Working Group partnership



- Amacacao/KUNAKakaw: Juan Francisco Mollinedo - Amacacao/KUNAKakaw, Guatemala
- Belcolade/Puratos: Julien Simonis - Belcolade/Puratos, Belgium
- CAF/ILAC: Federico Vignati - Iniciativa Latinoamericana del Cacao, Peru
- CBI: Nubia Martinez - Centre for the Promotion of Imports from Developing Countries, Peru
- CoEx: Brigitte Laliberté - Bioversity International/CacaoNet/Cocoa of Excellence Programme- coordinator of the WG, Italy
- CRC: Darin Sukha - Cocoa Research Centre, Trinidad and Tobago
- CRS: Kraig Kraft - Catholic Relief Services, El Salvador
- ECOM: Daniel Domingo - ECOM, USA
- EE: Christina Liberati - Equal Exchange, USA
- FCIA: Brad Kintzer, Vice-President of the Fine Chocolate Industry Association, USA
- FCCI: Carla Martin - Fine Cacao and Chocolate Institute, USA
- Guittard: John Kehoe - Guittard Chocolate, USA
- ICCO: Yunusa Abubakar - International Cocoa Organization, Côte d'Ivoire
- IICCT: Martin Christy - International Institute of Chocolate & Cacao Tasting, UK
- LWR: Carolina Aguilar - Lutheran World Relief, USA
- LWR: Rick Peyser - Lutheran World Relief, USA – providing critical input from the coffee sector
- Seguire/Guittard: Ed Seguire - Seguire Cacao and Chocolate/Guittard Chocolate, USA
- Valrhona: Pierre Costet – Valrhona, France
- WCF: Paul Macek - World Cocoa Foundation, USA



Review of what was being done

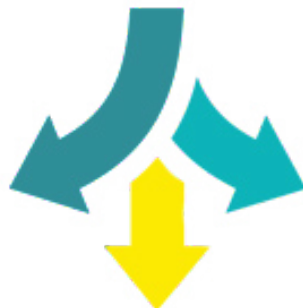


- Cocoa of Excellence Programme and International Cocoa Awards – **CoEx/ICA**
- Cocoa Research Centre of the University of the West Indies - **CRC**
- Centre for the Promotion of Imports from developing countries - **CBI**
- Equal Exchange/TCHO Cooperative Development Program – **EE/TCHO CDP**
- Fine Cocoa and Chocolate Institute - **FCCI**
- Heirloom Cocoa Preservation Project - **HCP of FCIA**
- Iniciativa Latinoamericana del Cacao organized by the Banco de Desarrollo de América Latina - **CAF/ILAC**
- Institute of Cocoa and Chocolate Tasting - **IICCT**
- Mesoamerican Association of Fine Cacao and Chocolate - **AMACACAO**

Steps towards a harmonized international standard for cocoa flavour assessment – a review of current protocols and practices

Darin A. Sukha (PhD)

May 2016



Elements of a harmonized international standard for cocoa flavour assessment – a proposal for further consultation

Darin A. Sukha (PhD)

May 2016





Broad Consultations with value chain actors

International Stakeholders Consultation on the Development and Validation of Proposed International Standards on Cocoa Quality and Flavour Assessments

- **Managua: September 2017 – 62 participants**
- **Paris: October 2017 – 75 participants**
 - **WHAT:** Agree on international standards for assessing cocoa quality and flavours, from physical evaluation of cocoa beans, to sensory evaluation of liquor, powder and chocolate.
 - **WHY:** Help cocoa farmers and cooperatives better understand the unique characteristics and qualities of their cocoas and those demanded by the market to un-lock their value and flavour potential.
 - Optimize the expression of cocoa bean genetic flavour potential and “terroirs” to benefit farmers for niche marketing their beans and origins at best prices.

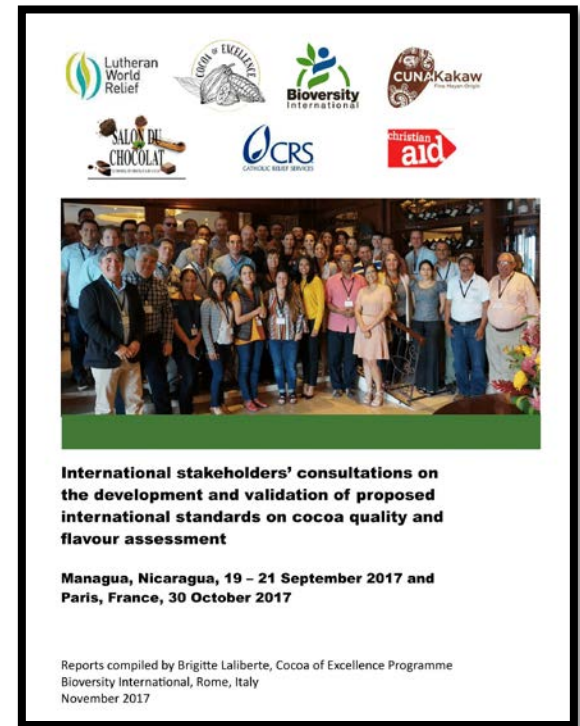


Broad Consultations

Managua,
Nicaragua



Paris,
France





Reformatting of the standard from the Broad Consultations

| Sections | |
|--|--|
| 0.1 Foreword | |
| 0.2 Introduction – objective of the standards and scope of this manual | |
| 0.3 Acknowledgments of contributions and support | |
| 0.4 Definition of terms, list of acronyms etc | |
| Section 1: General | |
| • 1.0 Introduction | |
| • 1.1 Protocols for General Procedures | |
| ○ 1.1.1 Cocoa Beans Sampling | |
| ○ 1.1.2 Identification of cocoa beans sample | |
| ○ 1.1.3 Storage of Cocoa Products: beans, coarse powder, nibs, liquor | |
| ○ 1.1.4 Food Safety remarks | |
| Section 2: Physical Evaluation | |
| • 2.0 Introduction | |
| • 2.1 Protocols for Physical Evaluation of Beans | |
| ○ 2.1.1 Moisture Content of Beans - <i>Preparation and Measurement</i> | |
| ○ 2.1.2 Bean Count and Weight - <i>Preparation and Measurement</i> | |
| ○ 2.1.3 Cocoa Butter Content - <i>Preparation and Measurement</i> | |
| ○ 2.1.4 External Aroma and Appearance - <i>Preparation and Assessment</i> | |
| ○ 2.1.5 Cut Test - <i>Preparation and Assessment</i> | |
| ○ 2.1.6 Measurement of contaminants (physical, microbiological and contaminants) | |
| Section 3: Flavour Sensory Evaluation | |
| • 3.0 Introduction | |
| • 3.1 Protocols for Sample Preparation | |
| ○ 3.1.1 Roasting Cocoa Beans | |
| ○ 3.1.2 Breaking and Winnowing Cocoa Beans | |
| ▪ 3.1.2.1.Objective and Scope | |
| ▪ 3.1.2.2.Equipment and Materials | |
| ▪ 3.1.2.3.Procedure (description of steps) | |
| ▪ 3.1.2.4.Food Safety Measures | |

| Sections | |
|--|--|
| ▪ 3.1.2.5.Annexes (Form, calculations, charts, graphs) | |
| ○ 3.1.3 Coarse/Pre-grinding cocoa nibs | |
| ○ 3.1.4 Liquefying Cocoa Mass | |
| ○ 3.1.5 Chocolate Formulation | |
| ○ 3.1.6 Mixing, Refining and Conching Chocolate | |
| ○ 3.1.7 Tempering and Moulding Chocolate | |
| • 3.2 Protocols for Sample Assessment | |
| ○ 3.2.1 Tasting Area and Sample Preparation | |
| ○ 3.2.2 Coarse Powder Tasting | |
| ○ 3.2.3 Cocoa Liquor Tasting | |
| ○ 3.2.4 Chocolate Tasting | |
| • 3.3 Protocols for Training in Flavour Assessment | |
| ○ 3.2.1 Tasting Area and Sample Preparation | |
| ○ 3.2.2 Coarse Powder Tasting | |
| ○ 3.2.3 Cocoa Liquor Tasting | |
| ○ 3.2.4 Chocolate Tasting | |
| Annexes | |
| References | |



Strategy from the Broad Consultations

- **GOAL** - A clear communication throughout the value chain
- (cocoa producers, bean buyers/traders, chocolate makers and other users) – using a common language
- **WHAT** – to identify the intrinsic flavour attributes and characteristics (flavour potential) of the beans when beans are converted into chocolate
- **WHY** – Unlock the value and empower producers and buyers – so users can decide how to use the beans
- **HOW** – targeted marketing flavour customisation – to meet customers' needs



Implementation of Recommendations

1. Move forward with revision of document based on proposed reorganization of info/data, and compilation of existing protocols available in public domain.
2. Identify the protocols ready for use (published and accepted) and immediately those for which limited discussion is needed to come to agreement.
3. Focus initially on sample preparation – to build trust and consensus.
4. Testing recommended equipment in different locations.
5. Small Technical Task Forces (4-6 experts) for recommendation to the larger Working Group.
6. Keep the collaboration inclusive and open for input.
7. Ensure that final products are global public goods.





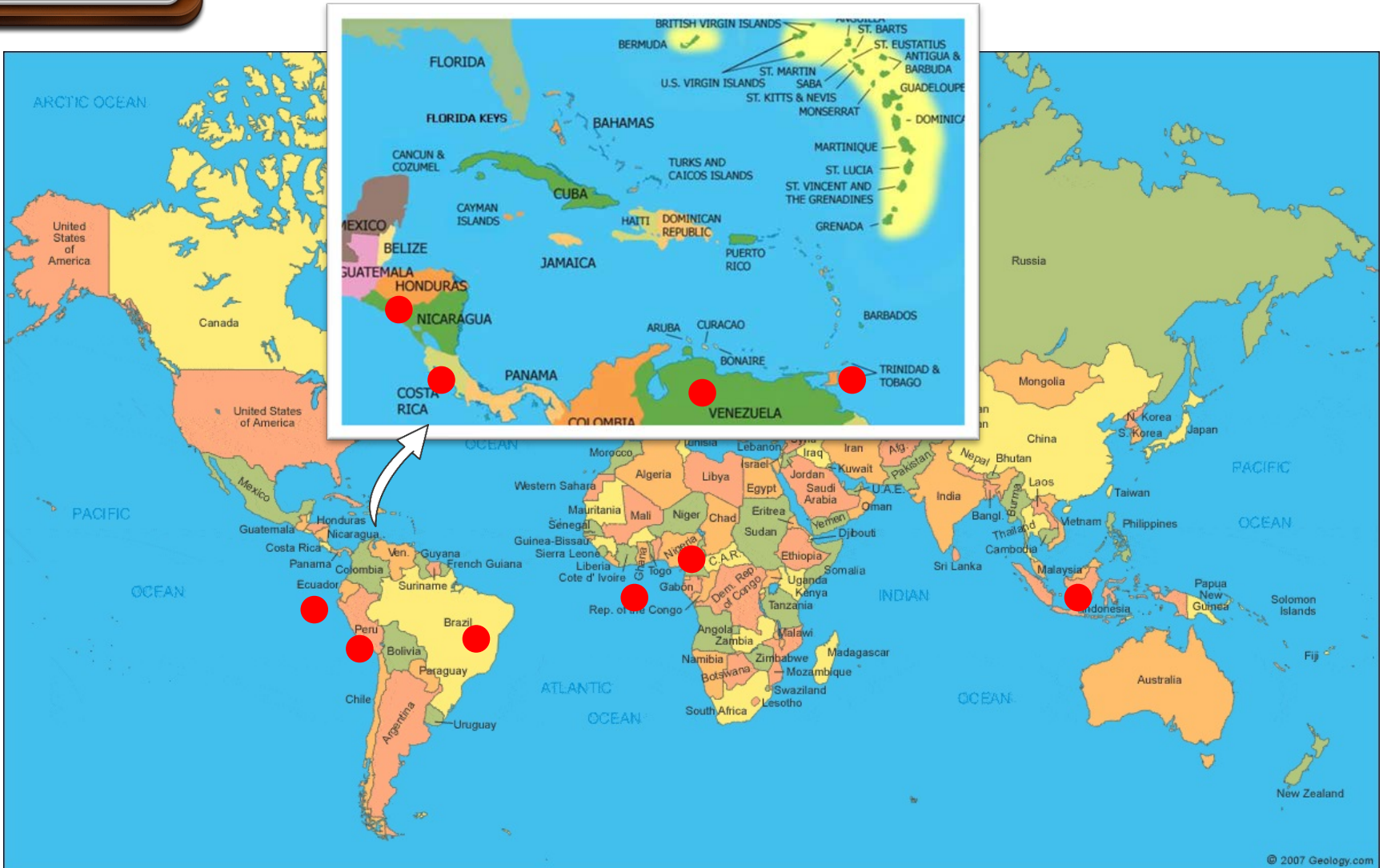
2018 and Beyond

- Ensure the Working Group is inclusive
- Finalise the Version 1.0 of the standards
- Select and prepare flavour reference samples
- Develop training programme and certification
- Strengthen capacity of cocoa-producing countries for sensory evaluation and panels (lab & equipment)
- Long-term sustainability of the standards with everybody involved – the need is great and all can/should play a part



A small icon of a calendar page with a red header and a white body. The year "2018..." is printed in large black font on the white page. The calendar is bound with two silver rings at the top and is set against a dark wood-grain background.

Cocoa Quality Laboratories in cocoa research and innovation centres at origin around the world



A word cloud featuring the phrase "thank you" in multiple languages. The words are arranged in a circular pattern around the central text. The colors of the words include blue, orange, yellow, and green. The languages represented include English, Spanish, French, Italian, German, Polish, Czech, Dutch, Swedish, Turkish, Arabic, Hebrew, and Hindi.

thank you

tusind tak
謝謝 dakujem vám
ngiyabonga
dziękuję
mercì
baie dankie
धन्यवाद molte grazie
gracias
obrigada
obrigado
teşekkür ederim
شكرا
tack så mycket
gràcies
tānan
dank u
teşekkür edire
mahalo
suksema
danke