

**INTERNATIONAL  
COTTON  
CONFERENCE  
BREMEN**

2024



20 - 22 MARCH 2024 | BREMEN PARLIAMENT HOUSE

## PRESENTATION

**Session:**

**Cotton Quality And Testing**

**Title:**

**Evolution of the Brazilian Cotton Quality Program: Standard Brazil HVI**

**Speaker:**

**Deninson Lima, ABRAPA, Brasilia (Brazil)**

### **Conference Organization**

**Faserinstitut Bremen e.V., Bremen, Germany. E-Mail: [conference@faserinstitut.de](mailto:conference@faserinstitut.de)**

**Bremer Baumwollbörse, Bremen, Germany. E-Mail: [info@baumwollboerse.de](mailto:info@baumwollboerse.de)**

# Evolution of the Brazilian Cotton Quality Program: Standard Brazil HVI

*Committed to quality, transparency,  
credibility and traceability*

**Deninson Bezerra dos Santos de Lima**  
Abrapa/CBRA (Cotton Quality Specialist)

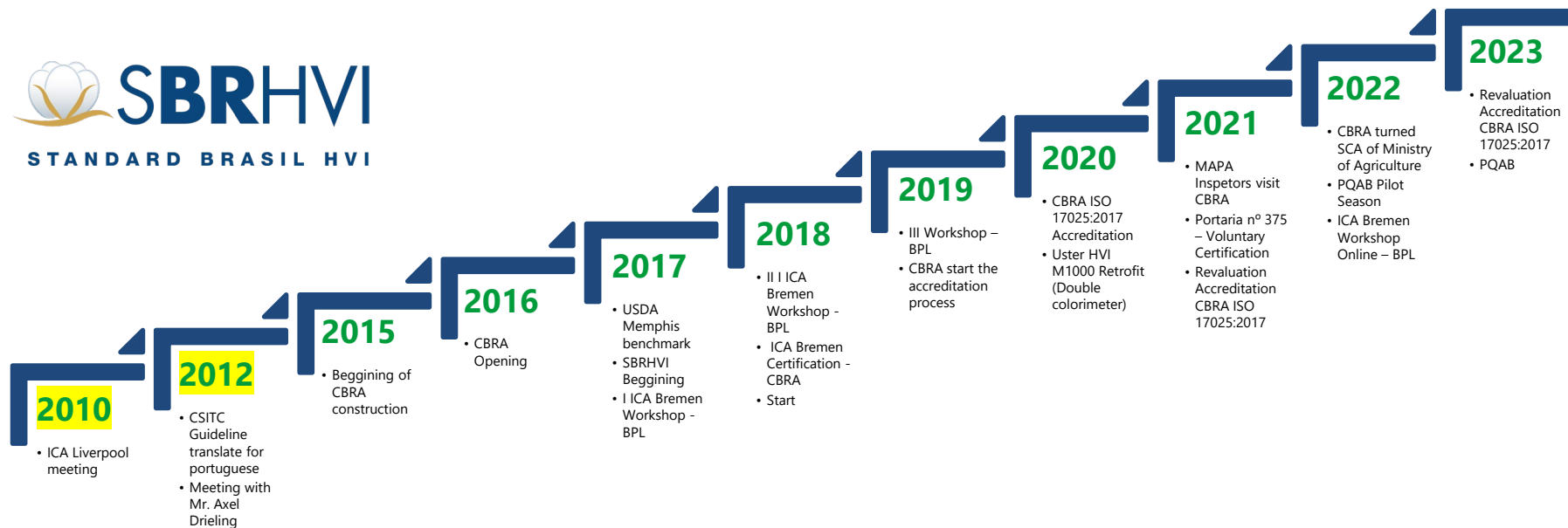


BRAZILIAN COTTON GROWERS ASSOCIATION





# Timeline

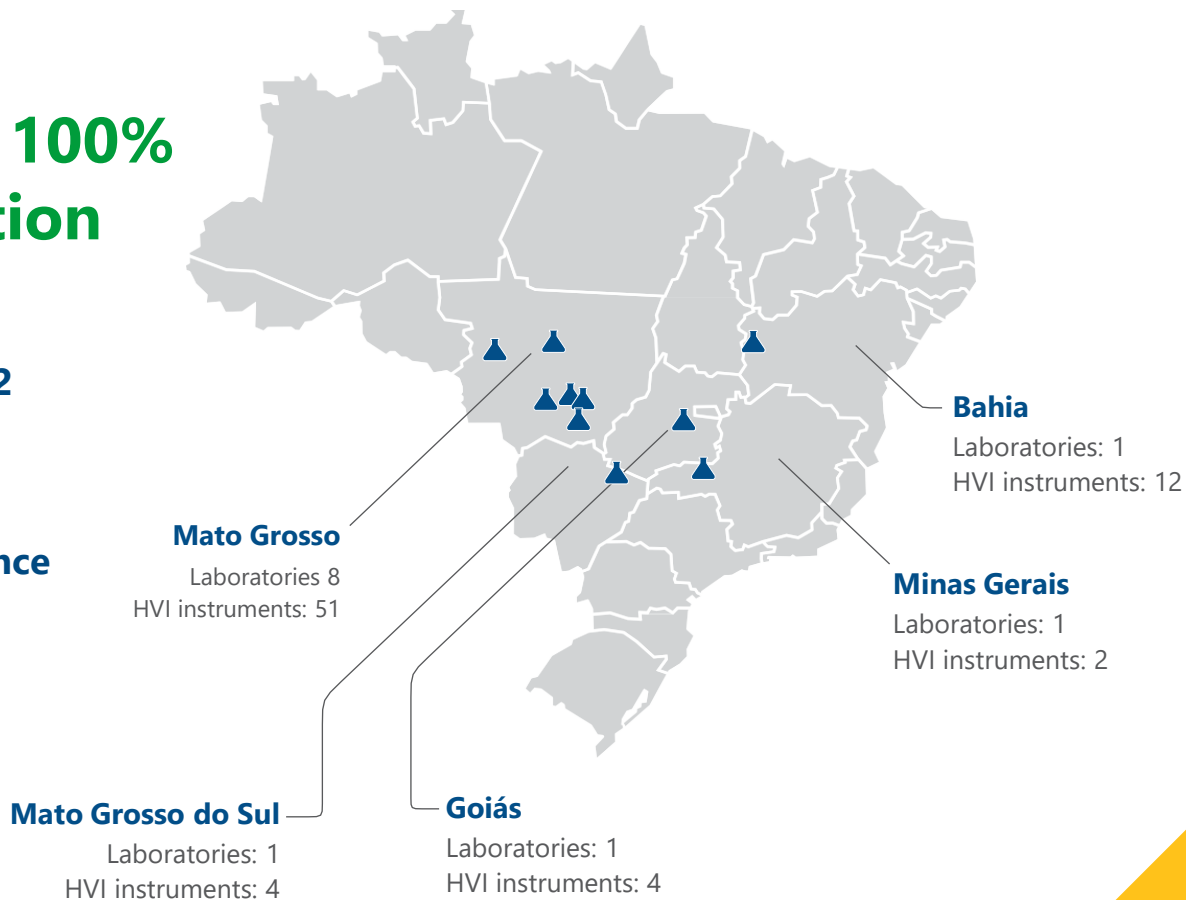




## ▲ HVI Classification Laboratories

**Capacity to analyze 100%  
of Brazilian Production**

- ▲ **Total number of laboratories= 12**
- ▲ **Total HVI numbers= 73**
- ▲ **Brazilian Cotton Analysis Reference Center (CBRA) = 1**







# ▲ Laboratories in Brazil that are part of the SBRHVI/Brazilian Cotton Quality Program

State associations



Private



Empresa do Grupo Bureau Veritas





## What is SBRHVI?

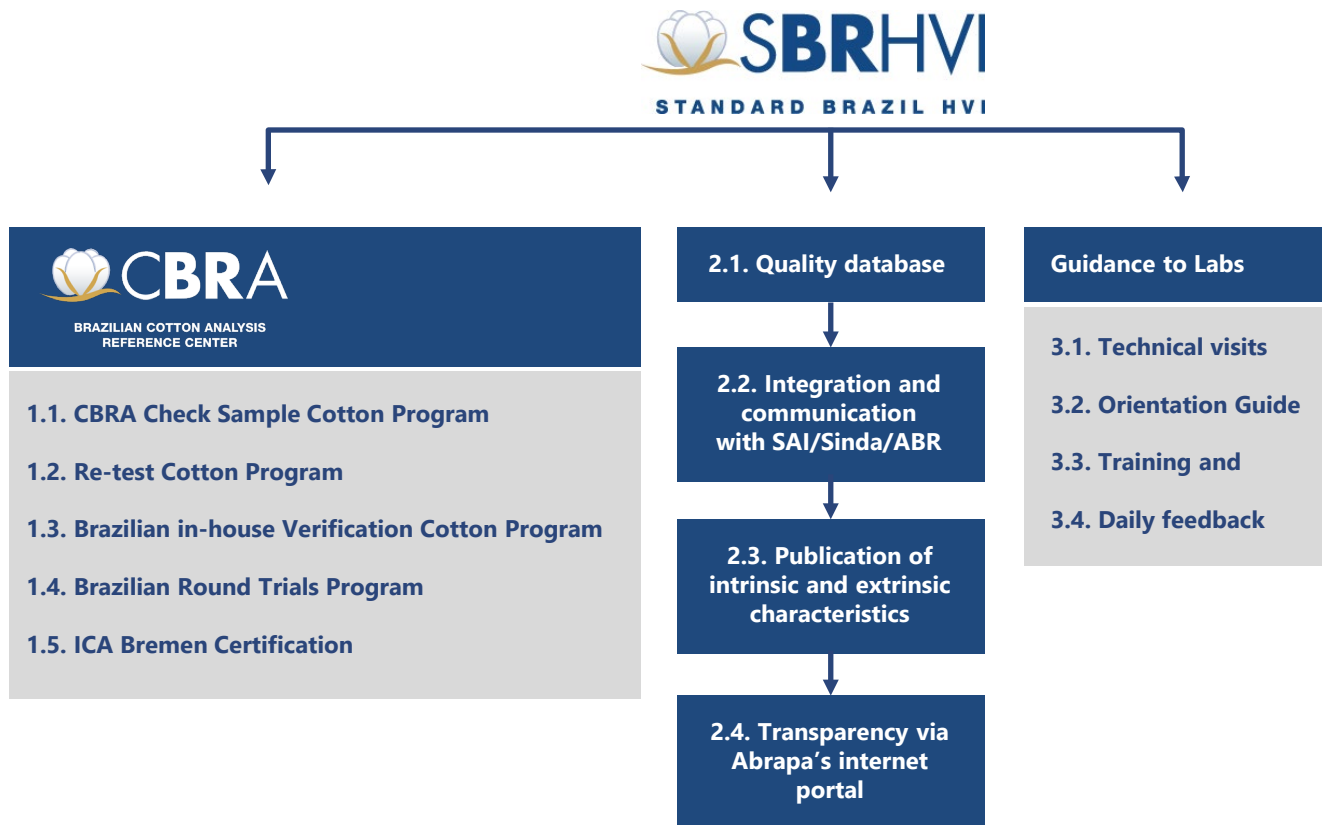


Standard Brazil HVI (SBRHVI) is a program designed to ensure the validity of original results and, therefore, grant credibility and transparency to HVI tests performed by instrumental classification laboratories in Brazil.



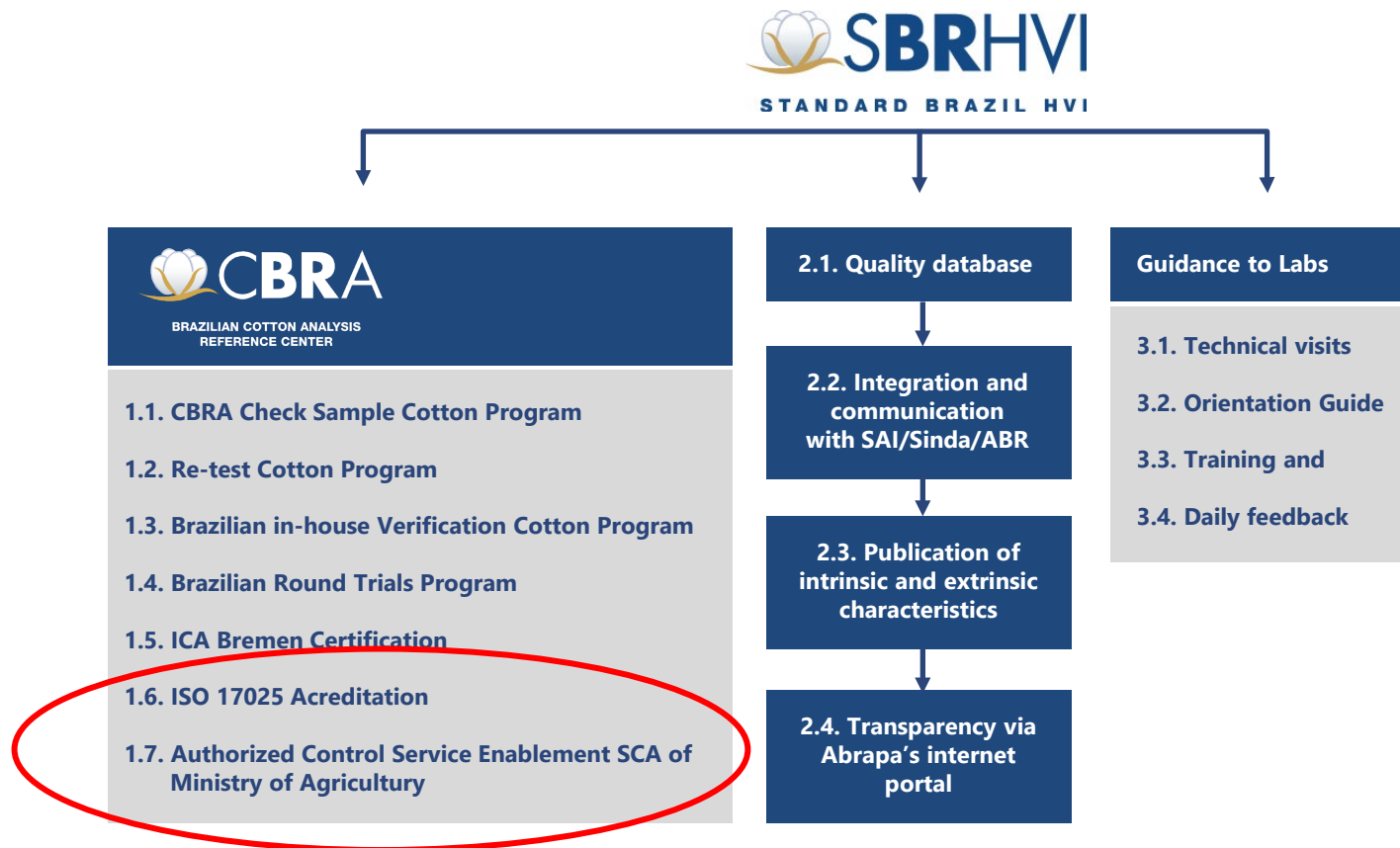


## First year (Season 2016/2017)





## Nowadays...



## ▲ Pillar 1 | 1.1. CBRA Check Sample Cotton Program

- The laboratories request the check samples following the season production
- Every 200 tests
- Latest season bales
- ASTM D5867-12 (20)
- ≈250 grams

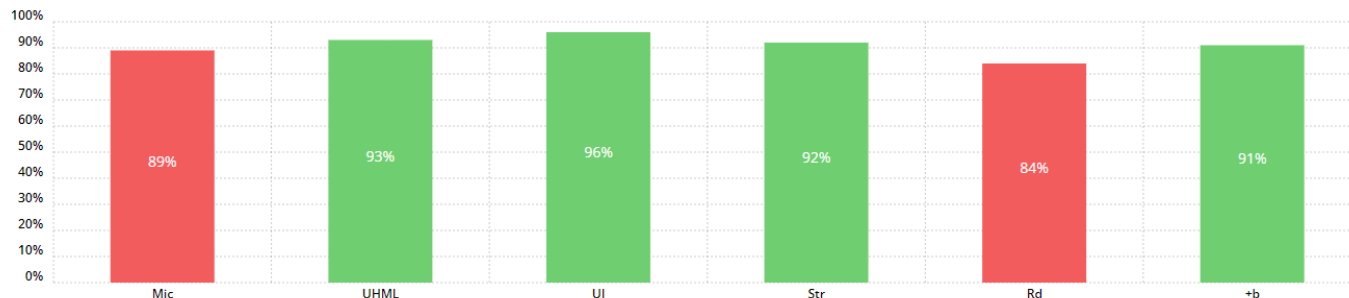
	Mic	UHML	UI	Str	Rd	+b
Internal tolerances (standard deviation)	0,07	0,45	0,84	1,00	0,45	0,30





# ▲ Pillar 1 | 1.1. CBRA Check Sample Cotton Program

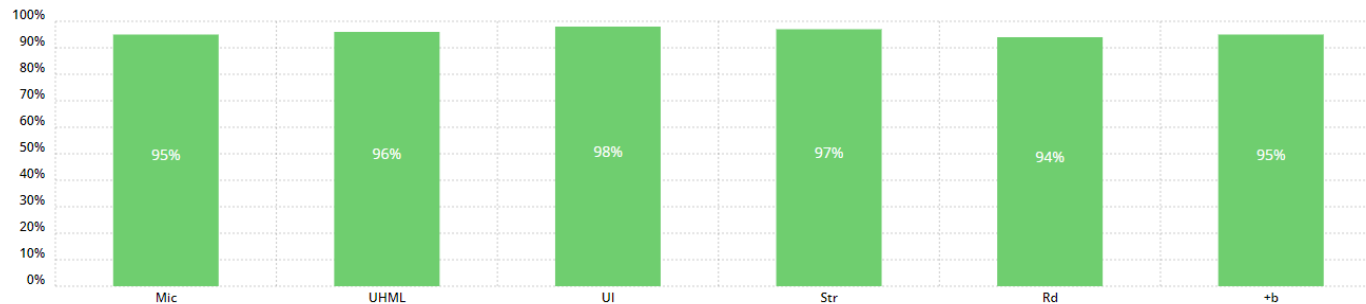
## Reliability Index Season 2016/2017 (Pilot)



Tolerances					
Mic	UHML	UI	Str	Rd	+b
0,20	0,78	1,54	1,49	0,50	0,24

Reliability rate referring to 11,649 checking samples, which is equivalent to 2,329,800 producer bales.

## Reliability Index Season 2022/2023



Tolerances					
Mic	UHML	UI	Str	Rd	+b
0,13	0,60	1,20	1,60	1,00	0,50

Reliability rate referring to 66,842 checking samples, which is equivalent to 13,368,400 producer bales.



## ▲ Pillar 1 | 1.2. Re-test Cotton Program

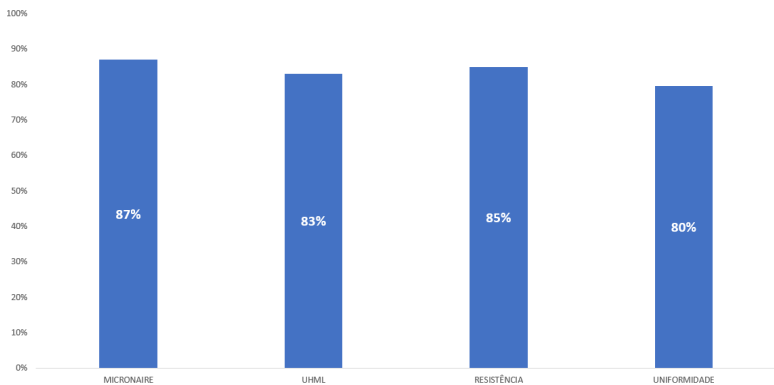
- Besides checking, the SBRHVI Program calls for growers' samples to be re-tested at the CBRA;
- IN 24 Ministry of Agriculture (MAPA)
- 32 random samples per instrument during the current season
- CG/Trash portion
- Rd and +b are not evaluated





# ▲ Pillar 1 | 1.2. Re-test Cotton Program

## Reliability Index Season 2016/2017 (Pilot)



Tolerances			
Mic	UHML	UI	Str
0,19	0,91	1,50	2,10

A total of 2,016 growers' samples were retested at the CBRA

## Reliability Index Season 2022/2023



Tolerances			
Mic	UHML	UI	Str
0,20	0,76	2,00	2,00

A total of 2,652 growers' samples were retested at the CBRA

## ▲ Pillar 1 | 1.3. Brazilian In-house Verification Cotton Program

- CBRA provides Brazilian cotton for labs to use for internal verification purposes
- ICA Bremen Certification Manual
- 120 tests per bale

	Mic	UHML	UI	Str	Rd	+b	TrArea	TrCount
ICA Bremen tolerances (standard deviation)	0,10	0,36	1,00	1,00	0,70	0,30	0,10	5

### In-house Verification Cotton

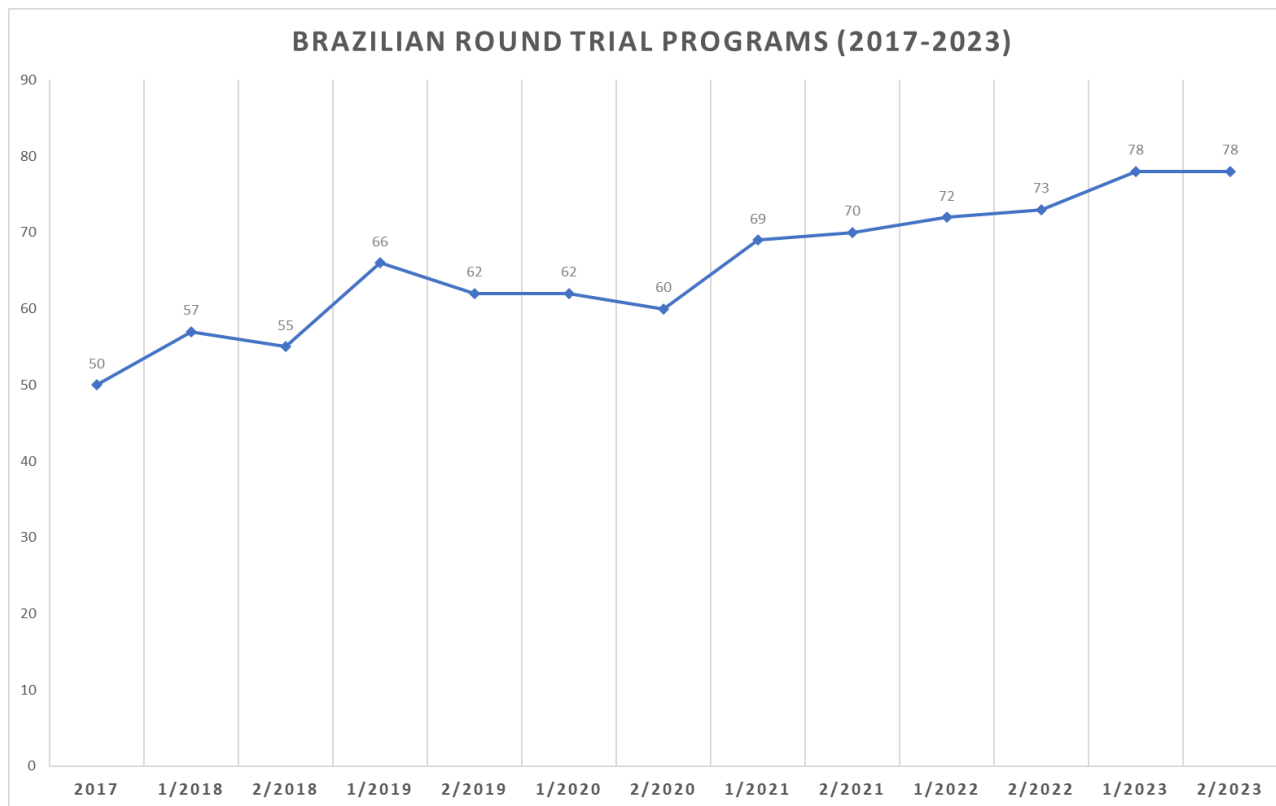
Season	Package	Weight (Kg)
2018/19	82	410
2022/23	91	637





## ▲ Pillar 1 | 1.4. Brazilian Round Trials Program

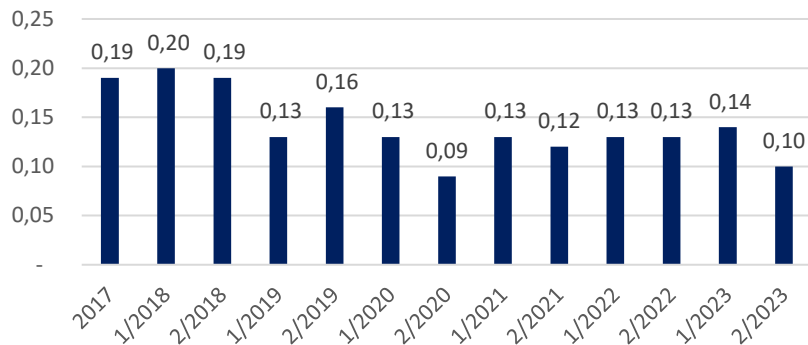
Besides participating in the CSITC\* Round Trials, labs also take part in the Brazilian round trials



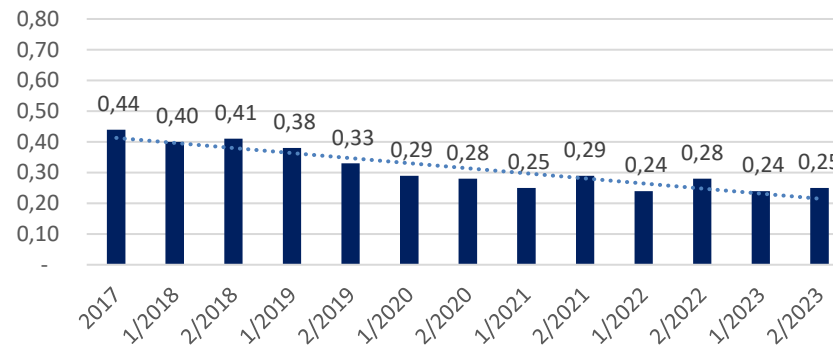


## ▲ Pillar 1 | 1.4. Brazilian Round Trials Program

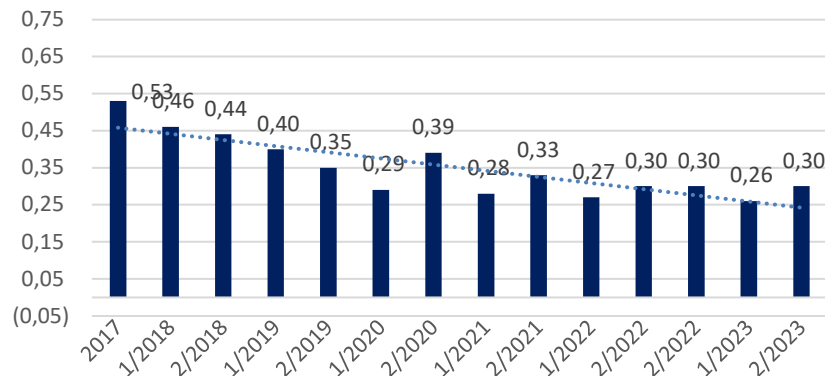
Best instrument evolution



Median evolution

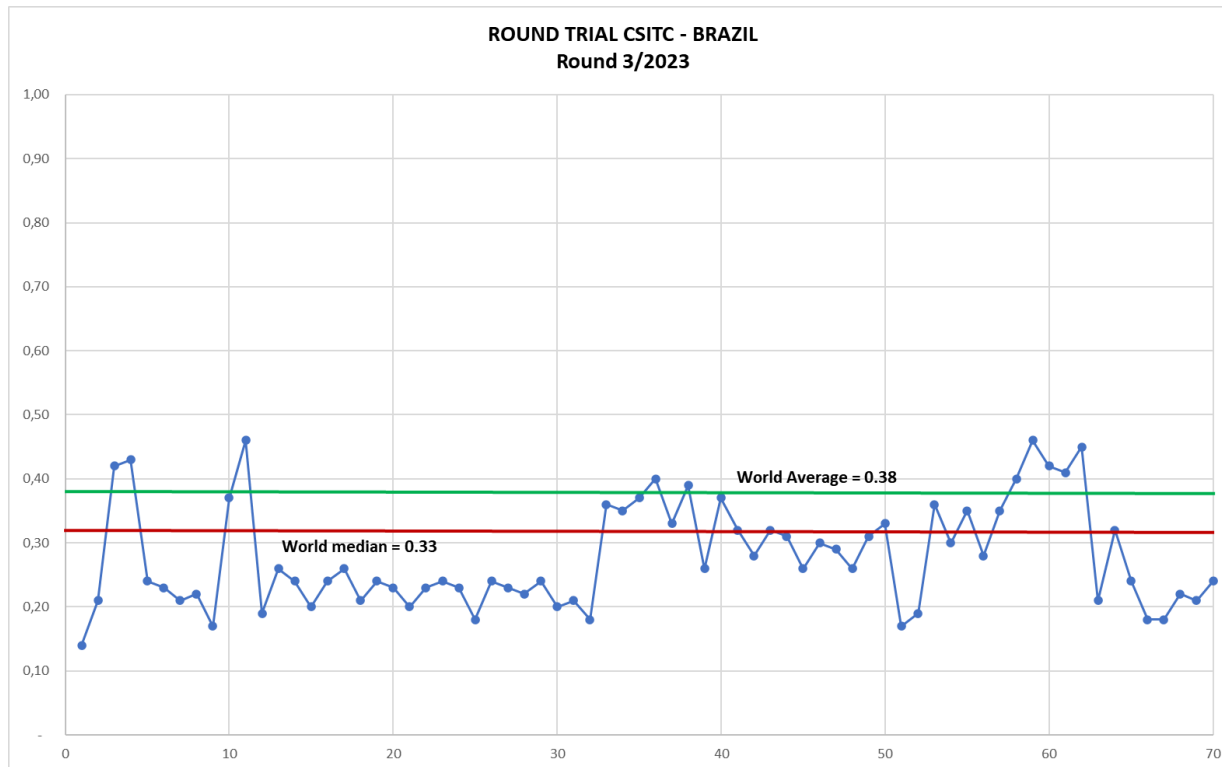


Average Evolution





# ▲ Pillar 1 | 1.4. Brazilian Round Trials Program



**Brazil has been participated with 70 instruments and all results were under 0.50**

	Instruments	Average	Median	Best	Worst
<b>World</b>	158	0.38	0.33	0.14	2.00
<b>Brazil</b>	70	0.28	0.24	0.14	0.46





# Pillar 1 | 1.5. ICA Bremen Certification

## CBRA is certified by ICA Bremen since 2018

**Which laboratories are certified?**

The following laboratories are currently certified and can be classed as a 'laboratory of choice' to resolve quality disputes in line with the ICA Bylaws & Rules, as well as providing a service to the cotton industry.

ICA Bremen	Certified since 2018
Cotton South Africa	Certified since 2010
KONSTANTINOS V. MANIOU S.A	Certified since 2014
Auscott Limited	Certified since 2016
ProClass Pty Ltd - Goodland	Certified since 2016
Quality Assurance Laboratory USDA Memphis	Certified since 2017
The Cotton Testing Laboratory at the Technical Center of Ibelei Entry-Exit Inspection & Quarantine Bureau	Certified since 2017
CBRA Laboratory of ABRAPA	Certified since 2018
ProClass Pty Ltd - Griffith	Certified since 2019
Shanghai Institute of Quality Inspection and Technical Research Institute	Certified since 2019
ASOCIACION PARA LA PROMOCION DE LA PRODUCCION (APPA)	Certified since 2022
Thyaka Biocontrol SA	Certified since 2023
Waikarite Inspection Services (India) Pvt. Ltd. Mumbai	Certified since 2023

Laboratory Certification  
awarded to

**Centro Brasileiro de Referência em Análise de Algodão**  
Sociedade Industrial Algodão Sudoeste (SIBAL) - Quadra 01, Conjunto B, Lote 02,  
Edifício Abrapa, Núcleo Bandeirante CEP 72736-202, Brasília - DF, Brazil

ICA Bremen GmbH certifies that the above laboratory has been verified and found to be in accordance with the quality assurance standards and scope of the ICA Bremen International Laboratory Certification Scheme.

Original approval date: 4 December 2018  
Subject to the continuous satisfactory operation of the laboratory's quality performance, this certificate will remain valid until:  
4 December 2023.  
Certificate no: 012-2018  
Issue date: 4 December 2022

*Bill Kingdon*  
Managing Director  
The International Cotton Association Quality and Research Centre Bremen GmbH  
Wahlstrasse 17-21, 20250 Bremen, Germany  
www.ica-bremen.org

## In 2022 CBRA turned an Authorized Control Service of government

**Certificado**

**ABRAPA**  
Associação Brasileira dos Produtores de Algodão  
SMPQ W 1 - Núcleo Bandeirante, Brasília - DF, 70297-400

O Departamento de Inspeção de Produtos de Origem Vegetal - DIPOV/SDA certifica a habilitação de **Serviço de Controle Autorizado - SCA** à associação acima identificada, no endereço citado, segundo os requisitos estabelecidos na Portaria SDA 375/2021 e o que consta no processo 21000.007454/2022-03. Esta habilitação constitui a expressão formal do reconhecimento de sua competência em realizar as atividades de intermediárias de certificação do Programa Nacional de Classificação de Algodão (Brazilian Cotton Cladding Program).

Brasília, 04 de Agosto de 2022.

**GLAUCO BERTOLDO**  
Diretor

Ministério da Agricultura, Pecuária e Abastecimento

Instituto Nacional de Metrologia, Qualidade e Tecnologia - Inmetro  
**Coordenação Geral de Acreditação**

Signatário dos Acordos de Reconhecimento Mútuo da International Laboratory Accreditation Cooperation (ILAC), da Interamerican Accreditation Cooperation (IAC) e International Accreditation Forum (IAF).

**Certificado de Acreditação**  
Acreditação nº CRL 1495 Acreditação Inicial: 24/04/2020

**Centro Brasileiro de Referência em Análise de Algodão - CBRA**  
Associação Brasileira dos Produtores de Algodão  
Quadra 1 Conjunto B, 21.Lote 2 - Setor de Indústrias Bernardo - Brasília - DF

A Coordenação Geral de Acreditação do Inmetro (Cgcre) concede acreditação ao Organismo de Avaliação da Conformidade acima identificado, no endereço citado, segundo os requisitos estabelecidos na ABNT NBR ISO/IEC 17025:2017. Esta acreditação constitui a expressão formal do reconhecimento de sua competência para realizar atividades de ensaios, conforme Escopo de Acreditação.

*Aldoney Freire Costa*  
Assinado de forma digital por ALDONEY FREIRE COSTA54879590730  
Dados: 2020.04.30 11:04:00 -03'00'

**Aldoney Freire Costa**  
Coordenador Geral de Acreditação

A validade atual da acreditação e seu escopo devem ser verificadas no endereço eletrônico <http://www4.inmetro.gov.br/acreditaacao/gestao/informacao-de-validade-da-conformidade-acreditaado>

MOD-CGCRE-024 - Rev. 06 - Apr. MAR19 - Pg. 01/01

**ESCOPO DA ACREDITAÇÃO - ABNT NBR ISO/IEC 17025 - ENSAIO**

Norma de Origem: NT-DICLA-016 Folha: 1 Total de Folhas: 1

**RAZÃO SOCIAL/DESIGNAÇÃO DO LABORATÓRIO**  
Associação Brasileira dos Produtores de Algodão - ABRAPA / Centro Brasileiro de Referência em Análise de Algodão - CBRA

ACREDITAÇÃO Nº	TIPO DE INSTALAÇÃO
CRL 1495	INSTALAÇÃO PERMANENTE

ÁREA DE ATIVIDADE/ PRODUTO	CLASSE DE ENSAIO / DESCRIÇÃO DO ENSAIO	NORMA E/OU PROCEDIMENTO
Fibras, Vestuário e Artigos Afins	<b>ENSAIOS MECÂNICOS.</b>	
Fibras têxteis	Determinação do comprimento, índice de uniformidade, resistência à ruptura, finura (índice micronear) , grau de reflexão e grau de amarelamento utilizando o equipamento tipo IVH.	ASTM D5867 - 12 (reaprovada 2020)

## CBRA is accredited since 2020 The last revaluation was in 2023



## **CBRA Structure**

### **Brazilian Cotton Analysis Reference Center**

Setor Industrial Bernardo Sayão  
Quadra 1, Conjunto B, Lote 2  
CEP: 71736-102, Brasília-DF  
Telefone: +55 61 3771-2190



## Sample preparation room



## Fast conditioning room





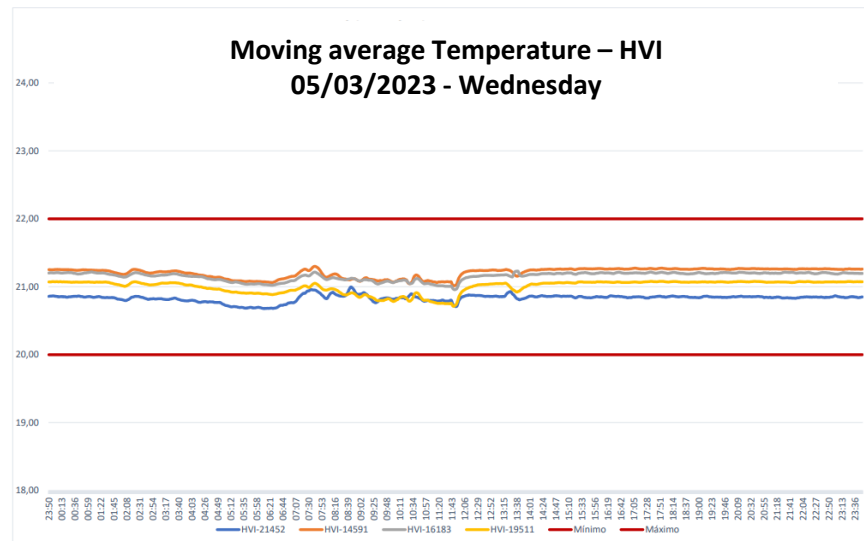
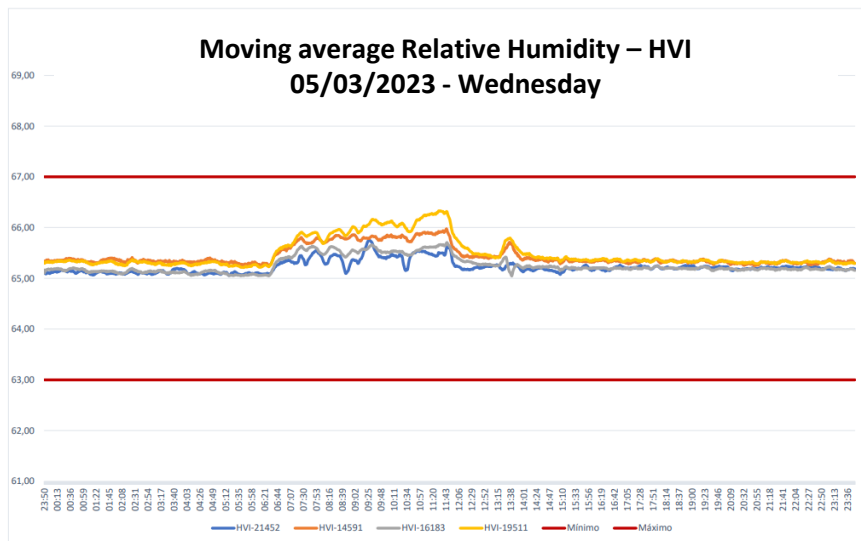


## HVI room





## Temperature and Humidity Monitoring



Source: CBRA - 05.23

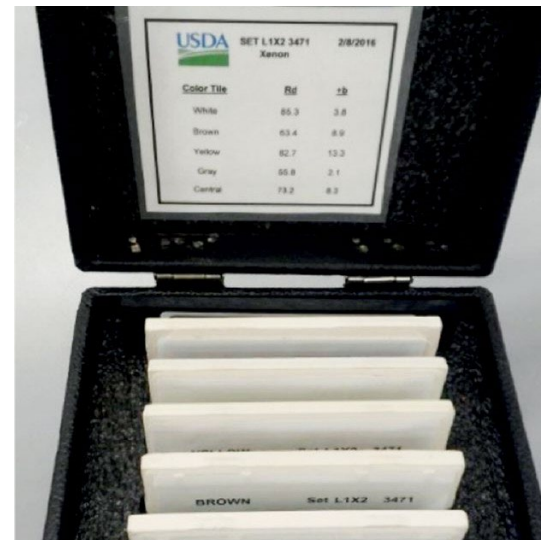
### ASTM D1776

Relative humidity =  $65\% \pm 2\%$

Temperature =  $21^{\circ}\text{C} \pm 1^{\circ}\text{C}$



## Calibration Cotton







# ASTM D7410 Validation Cotton





## ▲ Pillar 2 | Quality Database of Brazilian Cotton

2.1. Quality database



2.2. Integration and communication with SAI/Sinda ABR



2.3. Publication of intrinsic and extrinsic characteristics



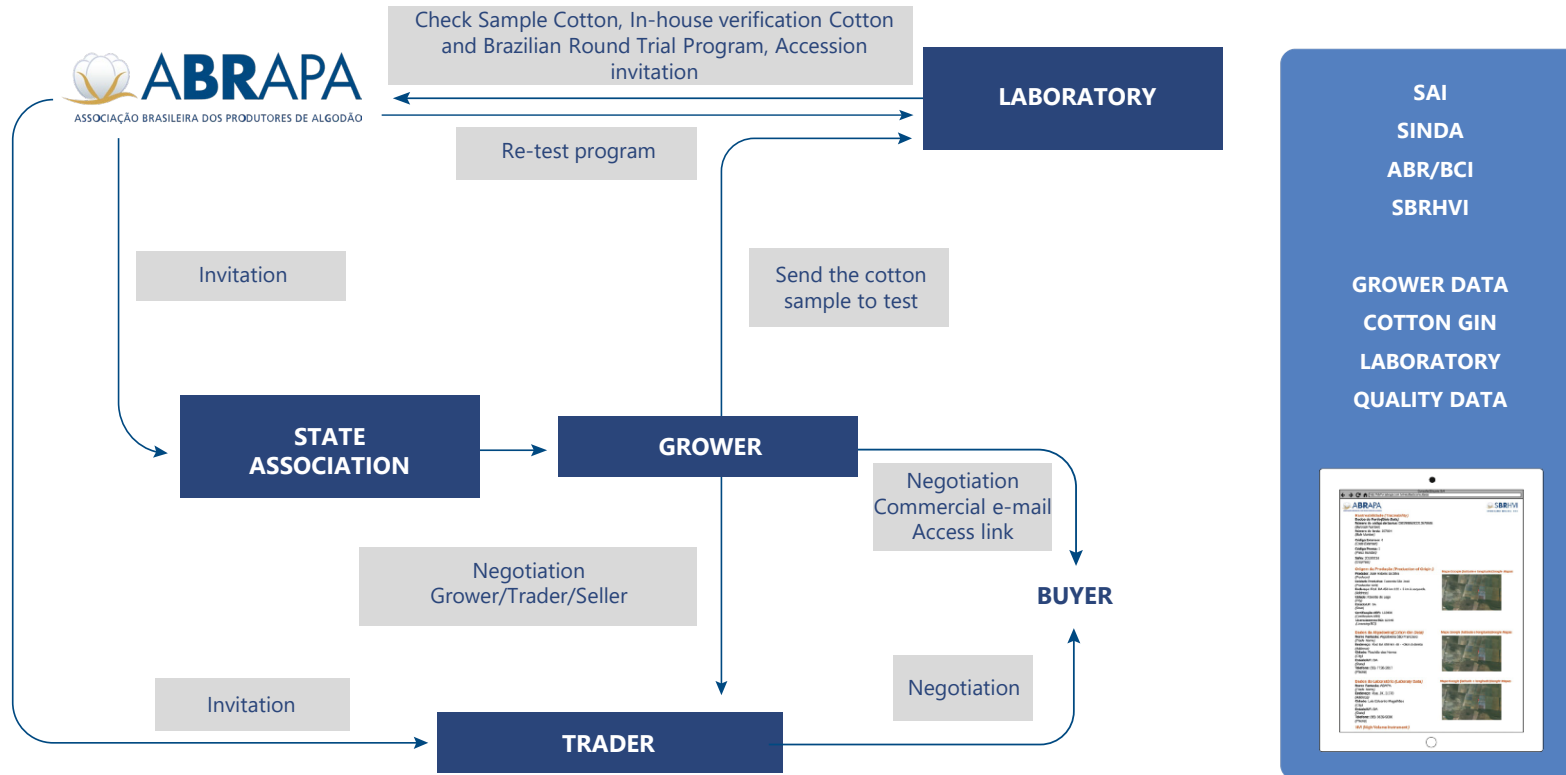
2.4. Transparency via a consultation link provided directly by the grower or by the trader

- Participating labs connected through a network;
- Laboratory verification through the use of check samples;
- Verification of the cotton sent by growers through automatic, random selection by each participating HVI machine;
- Access keys provided exclusively for each user level (laboratory, state, grower, and trading companies).



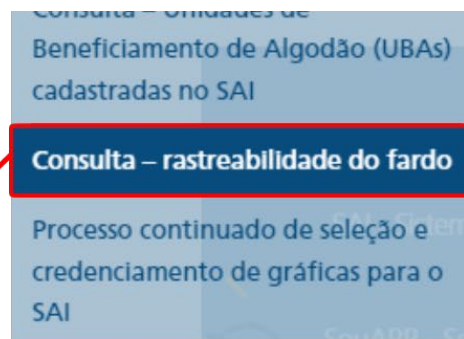
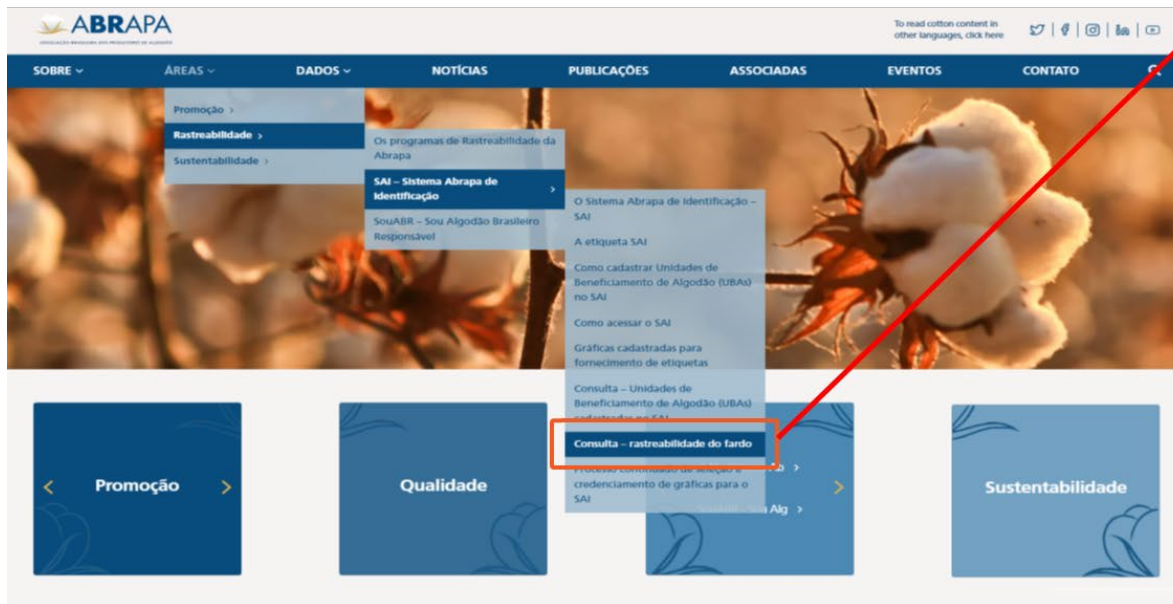
## ▲ Pillar 2 | Quality Database of Brazilian Cotton

Understanding the ABRAPA's system



## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### ▲ Traceability



Homepage do portal Abrapa, clique em:

- > ÁREAS
- > Rastreabilidade
- > SAI - Sistema Abrapa de Identificação
- > Consulta - rastreabilidade do fardo

<https://abrapa.com.br/rastreamento-de-fardo-consulta-traceability-verification-of-brazilian-cotton-bales/>



## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### ▲ Traceability

The screenshot shows the ABRAPA website interface. At the top, there is the ABRAPA logo and a navigation menu with items: SOBRE, ÁREAS, DADOS, NOTÍCIAS, PUBLICAÇÕES, ASSOCIADAS, EVENTOS, and CONTATO. The main heading is "Rastreamento de fardo – Consulta / Traceability" and "Verification of Brazilian Cotton Bales". Below this, there is a paragraph in Portuguese and an English translation. A central image shows a yellow cotton bale label with a barcode and QR code. The barcode number "55 3652635289 88985665" is highlighted with a red box. At the bottom, there is a search form with a text input field, a "consultar" button, and a QR icon.

**ABRAPA**  
ASSOCIAÇÃO BRASILEIRA DOS PRODUTORES DE ALGODÃO

To read cotton content in other languages, click here

SOBRE ▾ ÁREAS ▾ DADOS ▾ NOTÍCIAS PUBLICAÇÕES ASSOCIADAS EVENTOS CONTATO 🔍

### Rastreamento de fardo – Consulta / Traceability

#### Verification of Brazilian Cotton Bales

A cadeia brasileira de algodão possui um sistema para rastrear cada fardo produzido no País. A etiqueta SAI possui um número de identificação/código de barras e um código QR exclusivos. Para verificar as informações de rastreabilidade de um fardo de algodão produzido no Brasil, basta digitar no campo abaixo o número do código de barras.

*The Brazilian cotton industry has a system in place to trace each bale of cotton produced in the country. Each bale of Brazilian cotton is labelled with a unique bale identification number/barcode identifier and QR Code. To verify the traceability information of a Brazilian cotton the bale, simply key in on the field below the bale barcode number.*

#### Consulta de fardo pela digitação do código de barras

Cotton Bale Traceability with Barcode

O código de barras é composto por 20 dígitos

**consultar**

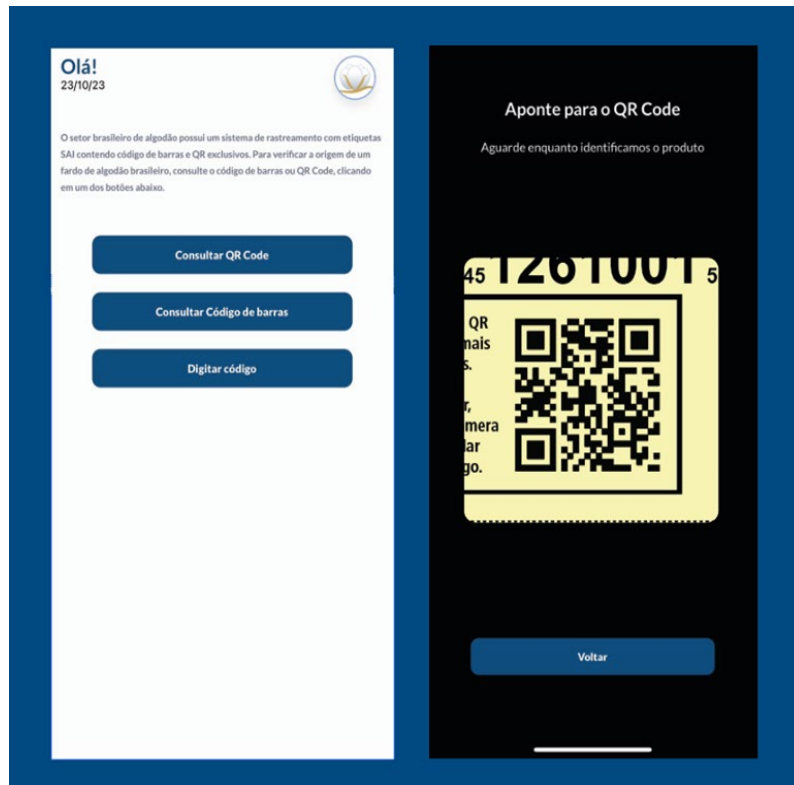
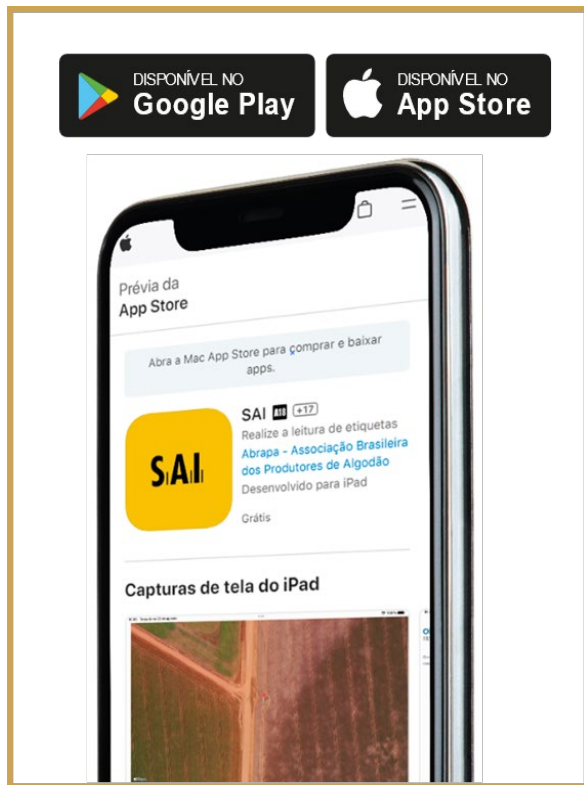
**Homepage do portal  
Abrapa, com link de acesso  
ao rastreamento de fardos.**

<https://abrapa.com.br/rastreamento-de-fardo-consulta-traceability-verification-of-brazilian-cotton-bales/>





## ▲ Pillar 2 | Quality Database of Brazilian Cotton







## ▲ Pillar 2 | Quality Database of Brazilian Cotton

Screen with the  
traceability data

**ABRAPA**

**Rastreabilidade / Traceability**

**Dados do fardo / Bale Information**

Número do código de barras / Barcode Number: 000789023471881235

Número do Fardo / Bale Number: 881131

Código extensor / Check Digit: 0

Código planta / Gin Piece number: 1

Ano de Imprensa de etiqueta S&E / Year the S&E label was printed: 2021

Safras / Crop Year: 2020/2021

**Origem da Produção / Production Origin**

Produto, Grupo / Farmer: S.C. AgriLife

Unidade Produtora / Farmer: Fazenda Páramos

Endereço / Address: BR 416, KM 27 + 05, Zona Rural

Cidade / City: SARDENEGUÁ

Estado / State: SA

Certificação ABR / ABR Certification: 01C30000-2021

Licenciamento IBC / IBC License: 08-04-02

**Dados da Algodoeira / Cotton Gin Information**

Nome Fantasia / Cotton Gin Name: Fazenda Páramos

Número da Algodoeira / Cotton Gin Number: 078902347

Endereço / Address: Rod.br 416, Km 27 + 05km A Distrito - Zona Rural

Cidade / City: SARDENEGUÁ

Estado / State: SA

Certificação ABR, UBA / ABR, UBA Certification: -

**Classificação de Algodão / Cotton Classification**

Nome do Laboratório / Name of Lab: 00000

Endereço / Address: RUA RUIZ DE ALCAZAR, 3270 - Jardim Paulista

Cidade / City: 05512-000 SÃO PAULO/SP

Estado / State: SP

Telefone / Telephone: (11) 3039-9000

**Resultados de HVI**

Mo	Mid	UPLM (g/l)	UPLM (med)	SP (B/S)	UP (%)	St (g/l)	Eq (%)	Ref	wh	C-Grd	T-Coc	Tsh (N)	T-Grd	SD
3.02	0.85	1.164	29.56	8.9	82.1	32.3	6.5	79.9	7.5	10.1	41	0.36	3	144



## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### Rastreabilidade / Traceability

*Dados do fardo / Bale information*

**Número do código de barras / Barcode**

**Number: 00078985394718897375**

**Número do fardo / Bale Number: 889737**

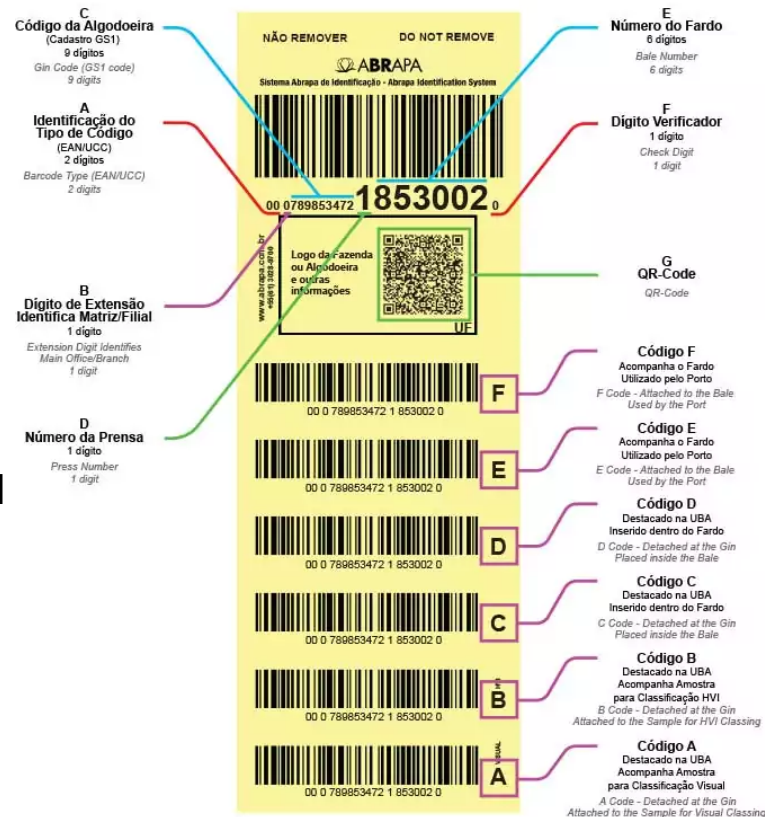
**Código extensor / Check Digit: 0**

**Código prensa / Gia Press number: 1**

**Ano de impressão de etiqueta SAI / Year the SAI**

**label was printed: 2021**

**Safra / Crop Year: 2020/2021**



## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### Origem da Produção / Production Origin

**Produtor, Grupo / Farmer:** SLC Agrícola

**Unidade Produtiva / Farm:**

Fazenda Palmares

**Endereço / Address:**

BA 459, KM 27 + 05 Zona Rural

**Cidade / City:** BARREIRAS

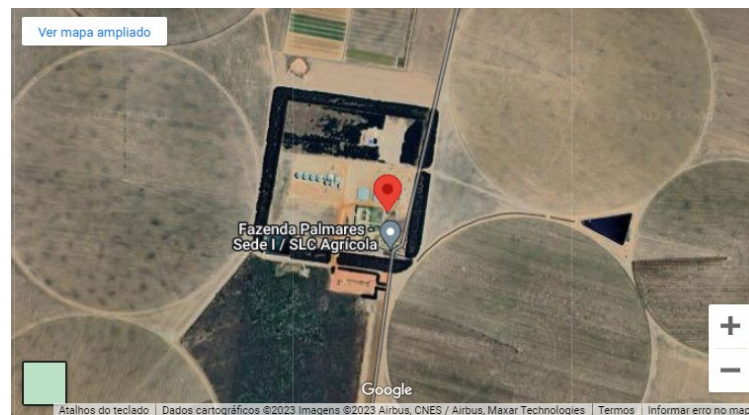
**Estado / State:** BA

**Certificação ABR / ABR Certification:**

BVCB0005-2021

**Licenciamento BCI / BCI License:**

BR-BA-02





## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### Dados da Algodoeira / Cotton Gin Information

#### Nome Fantasia / Cotton Gin Name:

Fazenda Palmares

#### Número da Algodoeira / Cotton Gin

Number: 0789853947

#### Endereço / Address:

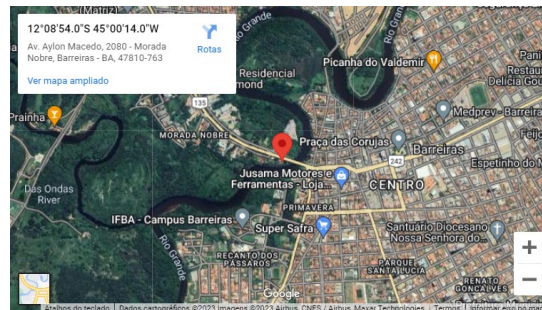
Rod Ba 459, Km 27 - +5km À Direita - Zona Rural

**Cidade / City:** Barreiras

**Estado / State:** BA

**Certificação ABR\_UBA / ABR\_UBA**

**Certification:** --







## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### Classificação de Algodão / Cotton Classification

**Nome do Laboratório / Name of Lab:** ABAPA

**Endereço / Address:**

RUA JUSCELINO KUBITSCHKE, 3270 - Jardim Paraiso

**Cidade / City:** LUÍS EDUARDO MAGALHÃES

**Estado / State:** BA

**Telefone / Telephone:** (77) 3639-9000





## ▲ Pillar 2 | Quality Database of Brazilian Cotton

### Resultados de HVI

Mic	Mat	UMHL (pol)	UHML (mm)	SFI (0,5)	UI (%)	Str (g/tex)	Elg (%)	Rd	+b	C Grd	TrCnt	TrAr (%)	Tr Grd	SCI
3.92	0.85	1.164	29.56	8.9	82.1	32.3	6.5	79.9	7.5	31-1	41	0.36	3	144





## ▲ Pillar 3 | Guidance to Labs

### Guidance to Labs

#### 3.1. Technical visits

#### 3.2. Orientation Guide

#### 3.3. Training and

#### 3.4. Daily feedback

- **Brazilian laboratories receive technical visits for verification and guidance.**
- **The program includes training for the technical staff of participating labs.**
- **CBRA give a daily feedback on sample checks.**



## ▲ Pillar 3 | Guidance to Labs

### Principal Trainings (2017 – 2023)

- Workshops of Best Laboratory Practices of HVI Testing
- Uster HVI M1000 Maintenance
- Workshop of Air Conditioning System
- Reading and interpretation of NBR ISO/IEC 17025:2017
- Auditor training NBR ISO 19011
- Cotton tests statistics
- Evaluation of the uncertainty of measurements for HVI
- Cotton gin inspectors
- Laboratory inspectors
- Benchmarking Uster Knoxville and USDA Memphis

## ▲ Pillar 3 | Guidance to Labs

- I Workshop of Best Laboratory Practices



- III Workshop of Uster HVI M1000 Maintenance



- Evaluation of the uncertainty of measurements for HVI





## ▲ Pillar 3 | Guidance to Labs

- Training of MAPA inspectors



- Benchmarking in USDA Memphis





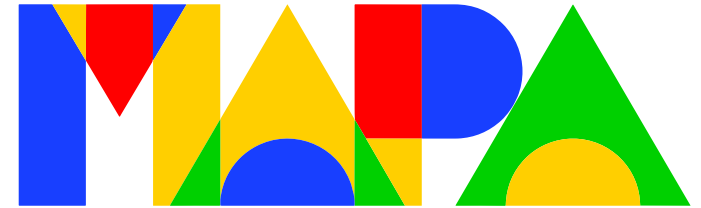


## ▲ Challenge ahead

### Brazilian Cotton Quality Program – Ministry of Agriculture - Brazil

It is a voluntary certification program based on self-monitoring procedures for compliance assessment in one or more stages of the cotton production chain, aiming to ensure correspondence between the information provided and the guarantee that the bales/samples meet the identity and quality requirements.

*Note: Adaptation of article 4 of order 375, of August 12, 2021, by MAPA*



MINISTÉRIO DA  
**AGRICULTURA E PECUÁRIA**



Cotton Gins  
(bale sampling procedures/bale traceability)

Classing Labs  
(quality control, standards, international benchmarks)

Brazilian Cotton Quality Program



- Started in 2023
- Non compulsory
- 254 Cotton Gins
- 500 Auditors

- Started 2017/ From 2022 with bale information online
- CBRA Check Sample Cotton Program since 2017
- 11 Classing Labs in 2022
- 1 Central Quality Control Lab (CBRA)



Ministry of Agriculture and Livestock  
Brazilian Quality Cotton Program

①

**Abrapa SBRHVI Quality Control**

- ICA Bremen Certified ICA
- NBR ISO/IEC 17025
- 1 check for every 200 samples tested
- Online real time verification
- Round Test CSITC CSITC
- Training and technical support to labs

②

**Brazilian Cotton Quality Program**

- Abrapa SBRHVI + sampling certification + auditing
- Monitor and control Abrapa's SBRHVI program Monitor and control sampling procedures
- Procedures for sample wrapping, storage and transportation



REPÚBLICA FEDERATIVA DO BRASIL  
Ministério da Agricultura e Pecuária - MAPA  
Secretaria de Defesa Agropecuária  
Departamento de Inspeção de Produtos de Origem Vegetal

FEDERATIVE REPUBLIC OF BRAZIL  
Ministry of Agriculture and Livestock - MAPA  
Secretary of Agricultural Defense  
Department of Plant Origin Products Inspection Service

PROGRAMA DE QUALIDADE DO ALGODÃO BRASILEIRO  
BRAZILIAN COTTON QUALITY PROGRAM

Certificado nº Certificate nº BR372950492L/2023  
Data de emissão/ Date of Issue 08/21/2023

Certificado Oficial de Classificação do Algodão Brasileiro  
Official Cotton Classification Certificate

Fardo Bale Code	UBA Gin Code	Laboratório Lab Code	Data de Análise MM/DD/AA Date Classified MM/DD/YY	Mic* Index	Str* g/tex	C Grd			Tr %	Ar %	UHML*		UI* Index	Cód. de Certif. do Fardo Certification bale code
						Instrument	Rd*	+b*			Inches	mm		
00078987260510097269	0789872605	5101	08/03/2023	3.88	31.0	21-1	81.9	8.2	0.14	1.131	28.72	80.8	BR1786771435	
00078987260510097283	0789872605	5101	08/03/2023	3.99	28.6	21-1	82.3	8.1	0.16	1.111	28.21	79.1	BR1382671229	
00078987260510097306	0789872605	5101	08/03/2023	4.12	31.6	21-1	81.9	7.7	0.20	1.132	28.75	81.6	BR0366884104	
00078987260510097313	0789872605	5101	08/03/2023	4.12	33.5	21-1	82.0	7.8	0.12	1.113	28.27	81.4	BR0841654509	
00078987260510097337	0789872605	5101	08/03/2023	4.03	31.7	21-1	82.0	7.8	0.10	1.115	28.32	81.4	BR0654770670	
00078987260510097344	0789872605	5101	08/03/2023	4.23	29.6	21-1	81.8	7.8	0.23	1.117	28.36	79.7	BR1077889842	
00078987260510097399	0789872605	5101	08/03/2023	3.94	28.8	21-1	81.6	8.3	0.23	1.119	28.42	80.0	BR1789679698	
00078987260510097405	0789872605	5101	08/03/2023	4.00	29.1	21-1	82.1	8.3	0.11	1.122	28.50	80.9	BR0875550715	
00078987260510097436	0789872605	5101	08/03/2023	4.04	30.7	21-1	81.2	8.4	0.14	1.133	28.77	78.6	BR0751939423	
00078987260510097511	0789872605	5101	08/03/2023	3.62	31.5	21-1	81.6	7.8	0.19	1.113	28.26	82.0	BR0170780598	
00078987260510097528	0789872605	5101	08/03/2023	3.62	32.8	21-1	81.2	8.0	0.15	1.122	28.50	80.9	BR1098805204	
00078987260510097535	0789872605	5101	08/03/2023	3.61	33.5	21-2	81.3	7.7	0.25	1.111	28.21	80.8	BR0593895153	
00078987260510097542	0789872605	5101	08/03/2023	3.62	32.1	21-1	82.5	7.7	0.16	1.130	28.70	80.3	BR0342201162	
00078987260510097559	0789872605	5101	08/03/2023	3.86	31.1	21-1	81.7	7.7	0.16	1.111	28.23	81.0	BR1525249846	
00078987260510097580	0789872605	5101	08/03/2023	3.92	32.8	21-1	82.3	8.0	0.16	1.112	28.25	80.6	BR2005454025	

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Declaração Oficial  
Official Statement

Certifico que os fardos acima descritos foram amostrados e avaliados por instrumento de alto volume sob sistema de identificação, rastreabilidade, controle e monitoramento do Ministério da Agricultura e Pecuária - MAPA (Programa de Qualidade do Algodão Brasileiro).

I hereby certify that the bales described above were sampled and tested by standardized high volume instrument for testing cotton under the identification, traceability, controlling and monitoring system of the Ministry of Agriculture and Livestock of Brazil (Brazilian Cotton Quality Program).

CID ALEXANDRE O. ROZO  
Chief - Government Certification of Vegetable Products  
Department of Plant Origin Products Inspection Service  
MINISTRY OF AGRICULTURE AND LIVESTOCK OF BRAZIL  
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▲ For the Brazilian cotton industry, the present represents a commitment with quality, traceability and sustainability







BRAZILIAN COTTON GROWERS ASSOCIATION

**Deninson Bezerra dos Santos de Lima**

**Abrapa/CBRA (Cotton Quality Specialist)**



**Brazilian Cotton Growers Association**

SIBS Quadra 1 Conjunto B Lote 2

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