Project African Integration for the
Sustainable Genetic Improvement of Cotton

Cotton varieties grown

in Africa and Brazil

ABC
BRAZILIAN COOPERATION AGENCY
MINISTRY OF FOREIGN AFFAIRS

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FEDERATIVE REPUBLIC OF BRAZIL

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Fact Sheet

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Contents

Foreword

These two publications present the data available on the cotton sector and cotton varieties found in 15 African countries and in Brazil, as well as the outcome and results achieved in the activities carried out under the Technical Cooperation Project "African Integration for the Sustainable Genetic Improvement of Cotton"," signed on January 26, 2021. This project is part of the Brazilian Program in Support of the Cotton Initiative in Africa, which started in 2009 under the initiative known as the Cotton-4 Project "Supporting the Development of the Cotton Sector in the C-4 countries" for the benefit of Benin, Burkina Faso, Chad and Mali.

By strengthening capacities in the development of genetic material, which constitutes the heart and starting point of cotton growing and cotton production, the African regional integration project is expected to complement the other bilateral and regional projects of the Brazilian Programme in Support of the Cotton Sector, and thereby ultimately contribute to increasing cotton crop productivity on the African continent. The Brazilian interaction with African countries will, in turn, allow Brazilian researchers to have access to technical knowledge on the dynamics of infestations of pests and diseases in cotton crops in Africa and thereby enable countries to prepare for possible new challenges that cotton farming may be faced with in the future.

The information contained herein is therefore intended to develop research capabilities in the cotton sector; it also provides a foundation for the African and Brazilian

researchers in charge of genetic improvement programmes in their respective countries for decision-making on the characteristics of the genetic material most suitable for use in their research work. Likewise, Brazil will benefit from the compilation of detailed data on the technologies and biodiversity found in the African cotton sector, for the integration of African genetic material in alignment with the Brazilian interests is likely to support future research in this field, right here in Brazil.

ABC takes pride in the work developed in partnership with its African fellow countries, as it is relevant for the future of international cotton farming and will thus contribute to the social and economic progress of this group of cotton producing countries. Moreover, Brazil is also likely to benefit from such exchanges with African countries, as these may result in innovative technology solutions (ITS) for the Brazilian cotton production sector as a whole.

AMBASSADOR RUY CARLOS PEREIRA
Director of the Brazilian Cooperation Agency (ABC)

Cotton, a strategic crop

Cotton is a multi-purpose plant: from clothing to oil production, from paper-making to the chemical industry, just to name a few areas where man has historically used this fundamental input, as the infographic below shows.

Cotton = multi-purpose plant

Marketed in world markets as fiber (lint and linter);
as an oilseed (mankind's sixth most important source of oil);

and **source of high biological value proteins**.

Global cotton consumption in 2021 was **26.6 million tons.**

Global production, in turn, increased in the 2021-2022 period to **25.73 million tons**, *underscoring the importance of the cotton crop to the global economy.*

Source: International Cotton Advisory Committee (ICAC)

Brazil exported **166.4 thousand tons** *in November 2021, totaling a revenue of* **US$ 290.0 million** *from exports.*

In recent years, Brazil has remained among the **top five world producers,** *alongside countries such as China, India, the USA, and Pakistan. It ranks* **first in rainfed yields.**

Brazil has also been among the **world's largest exporters.**
The domestic outlook is promising as the country is among the **world's largest consumers** *of cotton lint.*

Source: ABRAPA

Cotton harvest day in Mozambique

In this market context, international cotton agribusiness is among the most important ones from a social and economic point of view, generating more than 300 billion dollars a year. Exploited in more than 70 countries, more than 30 million hectares are currently planted, being one of the crops that most employ labor in the rural sector and distribute income. According to data from the Food and Agriculture Organization of the United Nations (FAO), growing this fiber involves about 90 million families around the globe.

In regions with few opportunities for crop diversification, growing cotton represents an alternative for income generation in family farming communities.

Therefore, pooling efforts to expand and consolidate cotton growing as a sustainable and competitive economic activity, especially for family-based agriculture, becomes extremely relevant, requiring, when necessary, technical and production organization changes, which entail the adoption of new production systems. These include the use of high-quality seeds, early annual varieties, and substantial changes in crop management practices, such as integrated pest management, as well as greater attention to post-harvest quality control.

Africa's changing reality

Despite the fact that the role of the cotton fiber producer and exporter is reserved to African countries, up until recently production chains were poorly structured and under strong control of foreign and/or state-owned companies. Since the 1990s, this reality has been changing, and the sector is undergoing a process of technological reorganization and modernization. Despite these advances, there is still room for strengthening the cotton sector, by using technologies suited to the different realities of cotton-producing countries. Hence, technical cooperation has been able to contribute to the development of the institutional and personal capacities of the technical teams.

International development organizations and the governments of some of these countries sought to implement institutional changes aimed at increasing the competitiveness of the sector, through a common effort to increasing productivity and the income of smallholder farmers.

With the advance of the Brazilian technical cooperation in these countries, the importance of sharing information about the African cotton crop and the characteristics of the cotton varieties existing in these countries has also become evident. This is the scope of **Project "African Integration for the Sustainable Genetic Improvement of Cotton"**. The availability of varied genetic material, with greater adaptability to the climatic and environmental conditions of the region, using varieties from Brazil and 15 African countries, will ensure that breeding programs - both African and Brazilian - will have ample access to genetic material for research development. This exchange has only been possible thanks to a broad international cooperation program, spearheaded by Brazil, whose results are shown in this publication.

2017-2018 Cotton Season in Africa

1.847.000 tons

Source: Annual Management Report of the Brazilian Association of Cotton Producers - ABRAPA

About the Project

African Integration for the Sustainable Genetic Improvement of Cotton

Project "**African Integration for the Sustainable Genetic Improvement of Cotton**" integrates the Brazilian program of support to the strengthening of cotton production in developing countries in Africa, Latin America, and the Caribbean. The initiative is a response from Brazil to requests for cooperation received from these countries, in search of improvement and adoption of technologies aimed at resuming or revitalizing the cotton sector in these regions.

The program started in 2009 with **Project Cotton-4**, which includes Benin, Burkina Faso, Chad, and Mali, and is implemented under the coordination of the Brazilian Cooperation Agency (ABC), of the Ministry of Foreign Affairs (MRE). Technical implementation is carried out by national public institutions of excellence in the cotton sector, according to the principles of South-South technical cooperation, both bilateral and trilateral with international organizations.

Cotton Field Training Day in Tanzania

2007 *Signing of the Technical Cooperation Agreement between the Government of the Federative Republic of Brazil and the African Union*

2008 *Entry into force of the Technical Cooperation Agreement*

2009 *Beginning of the Brazilian Cotton Program, with Project Cotton-4*

2010-2018 *Program extended to 15 countries*

2018 *A researchers' meeting, in Mali, coordinated by ABC, is the starting point for the Project "African Integration for the Sustainable Genetic Improvement of Cotton"*

2021 *Launch of Project "African Integration for the Sustainable Genetic Improvement of Cotton"*

2022 *Online seminar that will bring together representatives of ABC, Brazilian cooperating institutions from the public and private sectors, institutions of 15 African countries that are Brazil's partners in technical cooperation, and other players that are part of the cotton supply chain in Brazil and abroad.*

In this context, in October 2018, ABC coordinated a meeting at the Sotuba Regional Agronomic Research Center in Bamako, Mali, with Malian researchers and those from the Cotton Victoria and Shire-Zambezi Projects, implemented within the scope of the Brazilian Cotton Program. The meeting was aimed at creating an opportunity for the exchange of ideas on issues related to cotton production, such as exchange of plant genetic material, exchange of research protocols and reports, and creation of opportunities for the exchange of research proposals, protocols, and/or the results of studies carried out individually or collectively.

As a result, and to create the means for interaction and exchange among the countries that are part of the Brazilian Program to Support Cotton Farming in Africa, the Regional **Project African Integration for the Sustainable Genetic Improvement of Cotton** was signed in January 2021. The initiative establishes a partnership between Brazil and 15 African countries that have already benefited from Brazilian bilateral and regional technical cooperation projects in cotton farming: Benin, Burkina Faso, Burundi, Cameroon, Chad, Cote d'Ivoire, Ethiopia, Malawi, Mali, Mozambique, Kenya, Senegal, Tanzania, Togo, and Zimbabwe.

This project's primary objective is to promote cooperation among partner countries in the field of cotton breeding, thus contributing to the increase of competitiveness and efficiency of the African cotton sector, by having at its core information sharing, knowledge improvement, and exchange of genetic materials through relations that are being forged among such countries.

The Project
in numbers

Total investment
US$ 1.204.322,00

Duration 18 months,
extendable, starting in January 2021

17 partner institutions

+20 researchers mobilized

+40 cotton varieties brought together in this publication

PLANNED ACTIVITIES

2 publications on seed varieties

2 alignment seminars among participating countries

5 technical visits: Brazil, Benin and Mali

2 workshops to share knowledge and exchange best practicess

Installation of 15 Technical Demonstration Units (TDUs)

Capacity building cycle in Brazil and partner countries

Creation of an information sharing platform

Exchange of genetic material among African countries and Brazil

STAKEHOLDERS

DIRECT PARTNERS:

- National institutions dedicated to the research of cotton genetic material and to technical assistance and technology dissemination actions;
- Seed service researchers and inspectors;
- Farmers' associations;
- Civil servants of Ministries of Agriculture;
- Cotton Farmers.

INDIRECT PARTNERS:

- Families involved in cotton production and trade;
- Cotton marketing companies;
- Textile Industry.

Cooperating institutions
in 16 participating countries

Benin

National Institute of Agricultural Research of Benin (INRAB)

Brazil

Coordinating institution:
Brazilian Cooperation Agency (ABC)
Ministry of Foreign Affairs (MRE)

Burkina Faso

National Institute of Agricultural and Environmental Research (INERA)

Burundi

Institut of Agronomical Sciences of Burundi (ISABU)

Cameroun

Regional Delegation for Agriculture and Rural Development of the Far North (MINADER)

Chad

Chadian Institute of Agricultural Research for Development (ITRAD)

Côte d'Ivoire

Ministry of Agriculture and Rural Development

Ethiopia

Ethiopian Institute of Agricultural Research (EIAR)

Malawi

Ministry of Agriculture, Irrigation and Water Development - Department of Agricultural Research

Mali (Cotton Soils)

Malian Textile Development Company(CMDT)

Mali (Cotton-4)

Mali's Institute of Rural Economy (IER)

Mozambique

Cotton and Oilseeds Institute of Mozambique (IAOM)

Kenya

Kenya Agricultural and Livestock Research Organization (KALRO)

Senegal

Agricultural Research Institute (ISRA)

Tanzania

Tanzania Agricultural Institute (TARI)

Togo

Togolese Agricultural Research Institute (ITR)

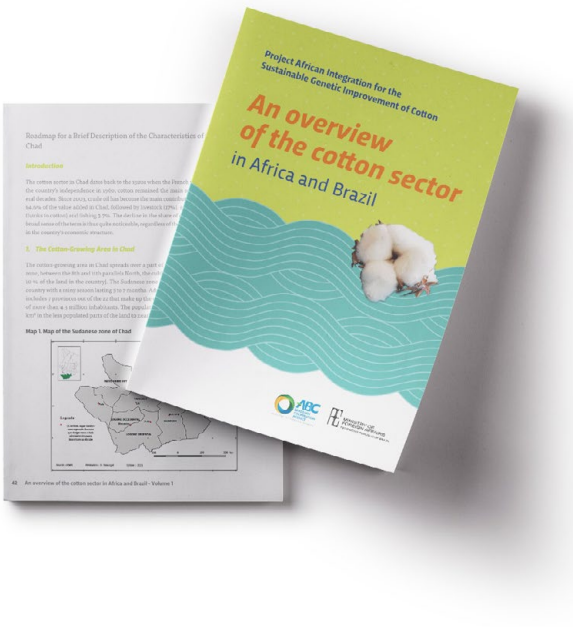
Zimbabwe

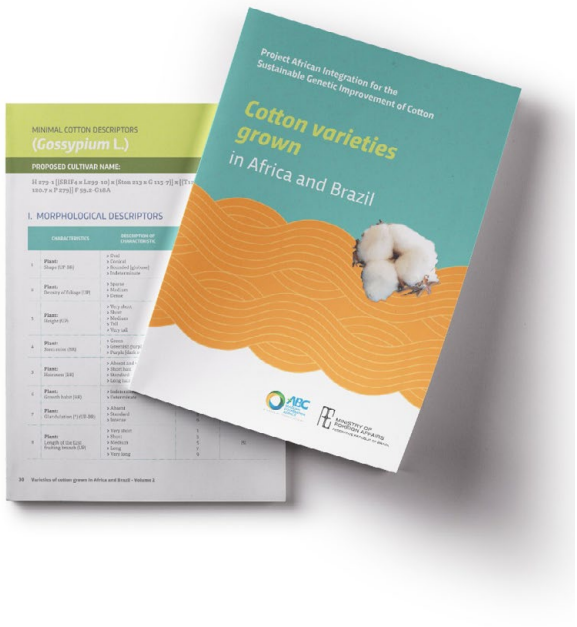
Cotton Research Institutions

About the publications

The publications **Overview of the Cotton Sector in Africa and Brazil" and "Cotton Varieties Grown in Africa and Brazil** are the result of the collective effort of 15 African countries and Brazil, under the coordination of the Brazilian Cooperation Agency (ABC).

In this second volume, the context of this production sector in each participating country is detailed, bringing together a set of descriptions of the cotton sector prepared by the cooperating institutions themselves. In the second volume, fact sheets describing the characteristics of the cotton varieties available in each partner country are made available.





Country Roadmaps

Published in the Brazilian Federal Government Official Gazette on 11/07/1997

CLARIFICATIONS FOR ASSESSMENT OF SOME CHARACTERISTICS *(MORPHOLOGICAL CHARACTERISATION UNDER FIELD CONDITIONS)*

Note: Inform the sampling, as well as the regions and environmental conditions in which the evaluations were carried out.

A) PLANT CHARACTERISTICS:

Item 1. Shape:

General aspect of the plant at the time of fruit opening in Standard experimental spacing (approximately 1.00 × 0.20 m for the annual variety and 1.00 × 0.50 m in the perennial variety).

- ✓ **Oval:** with no or few short vegetative branches;
- ✓ **Conical:** with two to three mediumly developed vegetative branches, forming acute angles with the stem;
- ✓ **Rounded [globose]:** with three or more well-developed vegetative branches, forming relatively open angles with the stem;
- ✓ **Indeterminate:** none of the previous conformations.

Item 4. Stem color:

predominant color of the stems at the onset of flowering.

Item 5. Hairs (trichomes) [pubescence]:

Predominant state of pubescence observed on the stems and leaves at the onset of flowering.

Item 6. Growth habit:

- ✓ **Indeterminate:** when the cycle is over and environmental conditions are favorable, the plants resume vegetative growth;
- ✓ **Determinate:** when, even in favorable environmental conditions, most plants do not resume average vegetative growth and rather tend to dry and die.

Item 7. Glandulation:

Intensity and size of endocrine glands in the leaves and stem.

- ✓ **Absent;**
- ✓ **Standard:** standard-size glands, and in a quantity comparable to that of the species G. *hirsutum*;
- ✓ **Intense:** large glands, and in a quantity comparable to that of the species G. *barbadense* L.

B) CHARACTERISTICS OF THE LEAF (OBSERVED IN THE FIRST MONTH OF FLOWERING):

Item 11. Number of lobes:

Predominant number in most plants.

Item 14. Nectaries:

Presence of nectaries at the base of the midrib and secondary veins and on the dorsal (abaxial) side of the leaf:

C) CHARACTERISTICS OF REPRODUCTIVE ORGANS (OBSERVED WITHIN 30-40 DAYS AFTER THE ONSET OF FLOWERING):

Item 15. Bract dentation:

Average number of teeth in bracts at the opening of the flower:

Item 16. Bracts shape:

Ratio of the width and length of the bracts that are visually assessed at the onset of flowering.

- ✓ **Narrow;**
- ✓ **Standard:** Standard size of the G. *hirsutum* L species;
- ✓ **Broad:** common in the G. *barbadense* L. species;
- ✓ **"Frego"** (very narrow and twisted).

Item 17. Internal nectaries between the bracts:

Presence of nectaries in the bract insertions on the flower peduncle.

Item 18. Color of the corolla:

hue on the day of flowering:

Item 19. Petal spots:

presence of internal red spot at the base of the petals on the day of flowering.

Item 20. Imbrication of petals - Aestivation:

Irregular overlapping of the petals in the open corolla.

Item 21. Stigma position:

Prominence of stigma in relation to anthers, in most plants, on the day of flowering.

Item 22. Length of filaments:

Filament size on the day of flowering.

- ✓ **Short:** like G. *barbadense L.;*
- ✓ **Standard:** like G. *hirsutum* L.;
- ✓ **Long:** like G. *hirsutum* L. r. *marie galante* (Moco type).

Item 23. Color of pollen:

In comparison with most plants, on the day of flowering:

Item 26. Fruit shape:

Predominant shape of formed fruit (square) before the onset of dehiscence.

Item 27. Number of locules in fruit:

Predominant number of locules in the fruit at first harvest:

Item 36. Seed coating:

Linter (fuzz) presence and density after ginning.

GENERAL GUIDELINES FOR DISTINCTIVENESS, HOMOGENEITY AND STABILITY (DHS) TRIALS

A) MATERIAL REQUIRED TO DESCRIBE CULTIVARS:

1. As per provisions set forth under Item 22, paragraph 1 of Law 9,456/97, the plant protection request applicant shall submit two seed lot samples of the cultivar applying for protection, that is:
   - ✓ One seed lot sample: 1 kg; and
   - ✓ One seed lot sample for germplasm bank: 1 kg.

2. Such seeds must comply with the established minimum germination, purity, and moisture content requirements for commercial seeds. The applicant must inform the current germination capacity of the material; the germination capacity must be the highest possible and is to be stated on the packaging.

3. The seeds must not have undergone any type of treatment likely to affect the subsequent plant growth unless official authorities request or requires such treatment. If they have been treated, full information on the treatment must be disclosed.

B) REQUIREMENTS FOR CULTIVAR DESCRIPTION TRIALS:

1. The trials should span at least two cultivation periods.

2. Field evaluations should be made under situations that ensure standard plant growth. Plot size must be such that plants or plant segments can be picked for measurement and tally, without prejudice to the assessments that shall be made at the close of cultivation period. Each trial should include at least 40 plants, which can be divided into two or more replicates. Any assessment and measurement plots must be set up under similar environmental conditions.

FORM FILLING INSTRUCTIONS

1. Descriptor codes are designed to support the assessment of diverse characteristics. Standard value codes from 1 to 9 must be entered next to each descriptor parameter. The standard value codes must be understood as follows:

   a) For sequential descriptor codes, that is, when there is no leap between different standard values, the option that describes the characteristic must be one of the listed standard values. Example: the "growth habit" descriptor gives standard value 1 for "indeterminate" and 2 for "indeterminate". Only these two standard values shall be accepted to fill in the form.

   b) For non-sequential descriptor codes, that is, when there is one or more leaps between the proposed standard values, the option that describes the characteristic must be one of the listed standard values, and, in addition, intermediate variations should be considered by the evaluator: For instance: "Leaf: color" gives standard value 1 for "light green"; 3 for "Standard green" and 5 for "dark green". In this case, standard value 2 may be chosen for a cultivar with leaves that are slightly lighter than the standard color, or standard value 4 can be stated for leaf colors that range from standard green to dark green. Since the standard value range is limited between 1 and 5, in this case descriptor standard values 6, 7, 8 and 9 cannot be used (when the range begins with standard value 1, this means that the first standard value and the last standard value are respectively the commencing and closing descriptor standard values). When the options are 3 - 5 - 7, for example, any standard value from 1 to 9 can be used, since both the first and the last descriptor standard values show that there may be standard values before and beyond the ones that are stated.

2. Any particular characteristic will not be assessed, for any relevant technical reason, shall be entered as 0 (zero).

3. Quantitative characteristics with a numerical description (mm, cm, g, kg/ha, etc.) shall be entered using the unit of measurement that is given in that particular space in the questionnaire, which may be preceded by Code 1 (one). If this measurement was not made, the standard value shall be entered as 0 (zero).

4. The following acronyms are shown with every characteristic only as guidelines for evaluators:

   BR a characteristic that is specific for Brazil;
   UP: a UPOV convention standard or international standard, including Brazil;
   UP-BR: meets international standard with specific modifications for Brazil.

5. The questionnaire must be appropriately filled in. It must be forwarded along with the specific Ministry of Agriculture and Supplies protection request form for the cultivar in question.

Published in the Brazilian Federal Government Official Gazette on 11/07/1997

Benin

Cultivated varieties:

ANG 956 • H 279 • KET 782 • OKP 768

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Benin

PROPOSED CULTIVAR NAME:

ANG 956 (bred from A12 and Stam F (genetic background: Ivory Coast and Togo)

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|7|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|1|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|5|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|3|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|1|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (60 days)	| |
38	Plant height	> Measured in centimeters	1 (170 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (120 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,5 g)	| |
42	100-seed weight	> Measured in grams	1 (8,5 g)	| |
43	Fiber percentage	> Measured in %	1 (44 %)	| |
44	Lint Index		1 (6,7)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	| |
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Benin

PROPOSED CULTIVAR NAME:

H 279-1 [(SRIF4 x L299-10) x (Ston 213 x G 115-7)] x [(T120.7 x U 585-12) x (T 120.7 x P 279)] F 59.2-G18A

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|1|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|1|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|1|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|3|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|1|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1350 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (62 days)	| |
38	Plant height	> Measured in centimeters	1 (160 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (180 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4,4 g)	| |
42	100-seed weight	> Measured in grams	1 (8,2 g)	| |
43	Fiber percentage	> Measured in %	1 (43,2 %)	| |
44	Lint Index		1 (6,2)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Benin

PROPOSED CULTIVAR NAME:

KET 782 (G 165 x CR 92-534)

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|1|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|1|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|3|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|1|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1412 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (63 days)	| |
38	Plant height	> Measured in centimeters	1 (180 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (180 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4,7 g)	| |
42	100-seed weight	> Measured in grams	1 (8,9 g)	| |
43	Fiber percentage	> Measured in %	1 (44,3 %)	| |
44	Lint Index		1 (7,1)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Benin

PROPOSED CULTIVAR NAME:

OKP 768 (F 145-2 x F 244-1)

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|1|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|3|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|3|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|1|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1796 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (63 days)	| |
38	Plant height	> Measured in centimeters	1 (170 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (120 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,7 g)	| |
42	100-seed weight	> Measured in grams	1 (8,7 g)	| |
43	Fiber percentage	> Measured in %	1 (45,5 %)	| |
44	Lint Index		1 (7,3)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

Brazil

Cultivated varieties:

BRS 286 • BRS 335 • BRS 336 • BRS 416

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Brazil

PROPOSED CULTIVAR NAME:

BRS 286

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|1|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|3|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (5226 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (54 days)	| |
38	Plant height	> Measured in centimeters	1 (113 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (115 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\%\ lint \times weight\ of\ 100\ seeds}{(1 - \%\ of\ lint)}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (6 g)	| |
42	100-seed weight	> Measured in grams	1 (10 g)	| |
43	Fiber percentage	> Measured in %	1 (40 %)	| |
44	Lint Index		1 (7 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|0|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|0|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|0|

SIMILAR CULTIVARS AND THE DIFFERENCE BETWEEN THEM AND THE CULTIVAR TO BE PROTECTED

1) For comparison, more than one cultivar may be used, provided that: the cultivar denomination is clearly indicated; the characteristic(s) that set(s) it apart from the cultivar to be protected are identified; and the difference regarding the chosen characteristic is clearly expressed.

2) Indicate, preferably, as distinguishing characteristic between the two cultivars, some characteristic from the descriptor table.

3) If, in differentiating between the two cultivars, an important characteristic appears that is not mentioned in the table, indicate it, identifying the type of characteristic (physiological, phonological, biochemical, etc.) and specify in clear terms the difference between the cultivars.

4) Cultivar(s) that are more similar should preferably be protected cultivar(s), or alternatively, if not protected, they should be registered in the National Registry of Cultivars - RNC, or be included in the national list in the country of origin.

DIFFERENCE(S) BETWEEN THE MOST SIMILAR CULTIVAR(S) AND THE CULTIVAR BEING DESCRIBED

DENOMINATION OF THE MOST SIMILAR CULTIVAR(S)	CHARACTERISTIC(S) THAT DIFFERENTIATE(S) THEM	EXPRESSION OF THE CHARACTERISTIC IN THE MOST SIMILAR CULTIVAR(S)	EXPRESSION OF THE CHARACTERISTIC IN THE CULTIVAR BEING DESCRIBED
BRS IPÊ	Angular leaf spot resistance	SUSCEPTIBLE (2)	RESISTENT
BRS Camaçari e BRS Ipê	% Fiber	38.4 % e 38.1 %	40.7 %
BRS Camaçari e BRS Ipê	Plant height	123 and l30cm	113 cm
FM 966	Resistance to viruses	SUSCEPTIBLE (1)	RESISTENT

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Brazil

PROPOSED CULTIVAR NAME:

BRS 335

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|3|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (4780±2200 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (55 days)	| |
38	Plant height	> Measured in centimeters	1 (110 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (140 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (6 g)	| |
42	100-seed weight	> Measured in grams	1 (9,9 g)	| |
43	Fiber percentage	> Measured in %	1 (43 %)	| |
44	Lint Index		1 (7,4 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|1|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|0|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|0|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Brazil

PROPOSED CULTIVAR NAME:

BRS 336

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|5|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (4518±2000 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (61 days)	| |
38	Plant height	> Measured in centimeters	1 (125 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (155 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (6,6 g)	| |
42	100-seed weight	> Measured in grams	1 (12,6 g)	| |
43	Fiber percentage	> Measured in %	1 (39,5 %)	| |
44	Lint Index		1 (8,2 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|0|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|0|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Brazil

PROPOSED CULTIVAR NAME:

BRS 416

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|3|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|3|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|3|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (4938 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (55-60 days)	| |
38	Plant height	> Measured in centimeters	1 (117 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (85-90 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (6 g)	| |
42	100-seed weight	> Measured in grams	1 (9,9 g)	| |
43	Fiber percentage	> Measured in %	1 (43 %)	| |
44	Lint Index		1 (7,4 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|1|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	| |

Burkina Faso

Cultivated varieties:

FK 37 • FK 64

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Burkina Faso

PROPOSED CULTIVAR NAME:

FK37

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|3|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2-3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|9|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2600±400 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (65±5 days)	|1|
38	Plant height	> Measured in centimeters	1 (140±10 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (115±5 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,5±1 g)	|1|
42	100-seed weight	> Measured in grams	1 (9±2 g)	|1|
43	Fiber percentage	> Measured in %	1 (43 %)	| |
44	Lint Index		1 (6,78 g)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|0|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|0|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|0|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|0|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|0|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|0|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Burkina Faso

PROPOSED CULTIVAR NAME:

FK64

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|3|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|0|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|1|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2-3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|9|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2600±500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (65±5 days)	|1|
38	Plant height	> Measured in centimeters	1 (140±10 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (115±5 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,8±1 g)	|1|
42	100-seed weight	> Measured in grams	1 (9±2 g)	|1|
43	Fiber percentage	> Measured in %	1 (44,10 %)	|1|
44	Lint Index		1 (7,10g)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|0|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|0|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|0|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|0|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|0|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|0|

Cameroun

Cultivated variety:
IRMA Q302

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Cameroun

PROPOSED CULTIVAR NAME:

IRMA Q302

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|1|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	(1500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	(60 days)	|1|
38	Plant height	> Measured in centimeters	(130 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	(110 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\%\ lint \times weight\ of\ 100\ seeds}{(1 - \%\ of\ lint)}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	(5 g)	|1|
42	100-seed weight	> Measured in grams	(9 g)	|1|
43	Fiber percentage	> Measured in %	(45 %)	|1|
44	Lint Index		(-9.2 g)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|2|

Chad

Cultivated variety:

A51

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Chad

PROPOSED CULTIVAR NAME:

A51

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	||
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|5|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|1|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|3|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|5|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|7|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|3|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|1|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (kg/ha)	|1707|
37	Cotton cycle up to flowering	> Measured in days	1 (days)	|65|
38	Plant height	> Measured in centimeters	1 (cm)	|110|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (days)	|114|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4,9 g)	| |
42	100-seed weight	> Measured in grams	1 (8,2 g)	| |
43	Fiber percentage	> Measured in %	1 (41,24 %)	| |
44	Lint Index		1 (8,45 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

Ethiopia

Cultivated varieties:

Deltapina-90 • Weyto-07 • Werer-50

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Ethiopia

PROPOSED CULTIVAR NAME:

Deltapina-90

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|1|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|1|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|3|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|1|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (3860 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (57.6 days)	|1|
38	Plant height	> Measured in centimeters	1 (107.4 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (43.5 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5.2 g)	|1|
42	100-seed weight	> Measured in grams	1 (- g)	|-|
43	Fiber percentage	> Measured in %	1 (36.6 %)	|1|
44	Lint Index		1 (-)	|-|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|2|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Ethiopia

PROPOSED CULTIVAR NAME:

Weyto-07

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|2|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|1|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|1|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|3|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|1|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (4618 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (50.0 days)	|1|
38	Plant height	> Measured in centimeters	1 (115.87 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (78.5 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4.54 g)	|1|
42	100-seed weight	> Measured in grams	1 (- g)	|-|
43	Fiber percentage	> Measured in %	1 (38.20 %)	|1|
44	Lint Index		1 (-)	|-|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|2|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Ethiopia

PROPOSED CULTIVAR NAME:

Werer-50

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|1|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|1|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|3|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|1|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (4304 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (55.2 days)	|1|
38	Plant height	> Measured in centimeters	1 (122.73 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (41.6 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5.04 g)	|1|
42	100-seed weight	> Measured in grams	1 (- g)	|1|
43	Fiber percentage	> Measured in %	1 (38.92 %)	|1|
44	Lint Index		1 (-)	|-|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|2|

Compiled by: - National Cotton Research Project team

Malawi

Cultivated variety:
RASAM17

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Malawi

PROPOSED CULTIVAR NAME:

RASAM17

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	||

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|5|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|2|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|5|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|4|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|4|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	| |
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2500 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (66 days)	| |
38	Plant height	> Measured in centimeters	1 (140 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	| |
40	Early ripening	> Measured in days	1 (days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,5 g)	| |
42	100-seed weight	> Measured in grams	1 (11 g)	| |
43	Fiber percentage	> Measured in %	1 (37,8 %)	| |
44	Lint Index		1 (59 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

Mali

Cultivated variety:
RASAM17

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Mali

PROPOSED CULTIVAR NAME:

RASAM17

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	||

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|5|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|2|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|5|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|4|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|4|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	| |
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2500 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (66 days)	| |
38	Plant height	> Measured in centimeters	1 (140 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	| |
40	Early ripening	> Measured in days	1 (days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,5 g)	| |
42	100-seed weight	> Measured in grams	1 (11 g)	| |
43	Fiber percentage	> Measured in %	1 (37,8 %)	| |
44	Lint Index		1 (59 g)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	| |

Mozambique

Cultivated varieties:

ALBAR SZ 9314 • CA 324 • CIMSAN 1 • CIMSAN 2

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Mozambique

PROPOSED CULTIVAR NAME:

ALBAR SZ9314

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2000 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (50 days)	|1|
38	Plant height	> Measured in centimeters	1 (100 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (90 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (39 %)	|1|
44	Lint Index		1 (-10.49)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|2|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Mozambique

PROPOSED CULTIVAR NAME:

CA 324

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2000 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (50 days)	|1|
38	Plant height	> Measured in centimeters	1 (100 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (9041 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (41 %)	|1|
44	Lint Index		1 (-10.49)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|2|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Mozambique

PROPOSED CULTIVAR NAME:

CIMSAN 1

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|7|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (140 days)	|1|
38	Plant height	> Measured in centimeters	1 (150 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (80 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5 g)	| |
42	100-seed weight	> Measured in grams	1 (10 g)	| |
43	Fiber percentage	> Measured in %	1 (44 %)	| |
44	Lint Index		1 (-10.23)	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|2|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Mozambique

PROPOSED CULTIVAR NAME:

CIMSAN 2

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (12500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (40 days)	|1|
38	Plant height	> Measured in centimeters	1 (100 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (65 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (44 %)	|1|
44	Lint Index		1 (-11.25)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|2|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|2|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|2|

Kenya

Cultivated variety:

KSA81M

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Kenya

PROPOSED CULTIVAR NAME:

KSA81M

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	| |
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|1|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|9|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2000 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (61 days)	| |
38	Plant height	> Measured in centimeters	1 (130 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (126 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams. ...4.8g

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams. ...10.2g

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage. 36.3%

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4,9 g)	| |
42	100-seed weight	> Measured in grams	1 (10,2 g)	| |
43	Fiber percentage	> Measured in %	1 (36 %)	| |
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|4|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant Moderate resistance Data not available	1 2	|3|
48	Susceptibility to nematodes	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|4|

49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|3|
50	Susceptibility to viral diseases	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|4|
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant Moderate resistance Data not available	1 2 3 4	|1|

III. CLARIFICATIONS FOR ASSESSMENT OF SOME CHARACTERISTICS *(MORPHOLOGICAL CHARACTERISATION UNDER FIELD CONDITIONS)*

Nota: Inform the sampling, as well as the regions and environmental conditions in which the evaluations were carried out.

Sampling: *The data was collected for two seasons. Ten (10) plants were tagged per plot for agronomic data. For boll parameters data was taken from 50 bolls per plot from the second harvest. For fibre quality 1kg of lint from each plot was used from analysis. The plot measurement was 40m2 and plants were spaced at 90 by 30 cm, 2 plants per hill. The yield data is an average from six counties in the of the Lake Victoria and the Rift Valley regions (Busia, Bungoma, Siaya, Kisumu, Homa Bay and Baringo)*

Environmental conditions: *The soils range from very heavy clay soils, to sandy clays, loamy soils and sandy loams. Annual rainfall average range from 700 to 1100mm. The elevation is from 700 to 1385m above sea level, 700m (Baringo) 1140m (Siaya), 1146m (Kisumu), 1227m (Busia), 1330m (Homa Bay and 1345m (Bungoma). Annual rainfall is ranging from 2291 to 1025mm, 1025m (Baringo), 1102mm (Bungoma), 1646mm (Homa Bay), 1966mm (Kisumu)2155mm (Siaya) and 2291mm (Busia).The rainfall is bimodal with main rains falling between March and July and the short rains between September and November. In some years there are no shorts rains while in some it rains continuously without a break. Annual mean temperatures are 24.7oc (Baringo), 21.4oc (Siaya), 23.1oc (Kisumu), 21.8oc (Busia), 20.3oc (Bungoma) and 22.5oc (Homa Bay)*

Senegal

Cultivated variety:
ISCO-PG

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Senegal

PROPOSED CULTIVAR NAME:

ISCO-PG

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|Normal|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|Average = 5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|Average = 5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	| Brown |
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	| Hairy =5 |
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	| |
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|Intense =9 |
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	| |

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Palmate > Digitate > Lanceolate	1 2 3	| Standard |
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	| Average =5 |
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	| |
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	| |
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	| Green |
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	| Present on the midrib = 1 |
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	| many |
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	| Present =3 |
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	| |
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	| |
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	| |
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	| |
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	| |

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	| |
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	| Oval =3 |
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	| |
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	| Pointy |
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	| |
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	| |
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	| White =1 |
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	| |
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	| |
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	| |
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	| |

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	| |
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	| |
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	| |

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (52 days)	|1|
38	Plant height	> Measured in centimeters	1 (120 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|1|
40	Early ripening	> Measured in days	1 (120 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (3,6 g)	|1|
42	100-seed weight	> Measured in grams	1 (360 g)	|1|
43	Fiber percentage	> Measured in %	1 (43,9 %)	|1|
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	| |
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	| |
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

Tanzania

Cultivated varieties:

UK 08 • UK 171 • UK 173 • UKM 08

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Tanzania

PROPOSED CULTIVAR NAME:

UK 08

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	| |
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|4|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|3|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	| |
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	| |
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|2|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	| |
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|5|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2000 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (63-70 days)	|1|
38	Plant height	> Measured in centimeters	1 (140 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (165 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,1 g)	|1|
42	100-seed weight	> Measured in grams	1 (10,5 g)	|1|
43	Fiber percentage	> Measured in %	1 (40,1 %)	|1|
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|2|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	|1|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Tanzania

PROPOSED CULTIVAR NAME:

UK 171

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	| |
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|4|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|3|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	| |
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	| |
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	| |
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2800-3000 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (56-63 days)	|1|
38	Plant height	> Measured in centimeters	1 (80 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (160 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (4,9 g)	|1|
42	100-seed weight	> Measured in grams	1 (8,9 g)	|1|
43	Fiber percentage	> Measured in %	1 (43,3 %)	|1|
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|1|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|1|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Tanzania

PROPOSED CULTIVAR NAME:

UK 173

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	| |
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|4|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|3|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	| |
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2500-2800 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (56-63 days)	|1|
38	Plant height	> Measured in centimeters	1 (85 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (180 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,1 g)	|1|
42	100-seed weight	> Measured in grams	1 (10,5 g)	|1|
43	Fiber percentage	> Measured in %	1 (40,1 %)	|1|
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|1|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to "reddish leaf withering"	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Tanzania

PROPOSED CULTIVAR NAME:

UKM 08

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|3|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|4|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|1|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	| |
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	| |
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	| |
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2500 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (56-63 days)	|1|
38	Plant height	> Measured in centimeters	1 (135 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (135 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,1 g)	|1|
42	100-seed weight	> Measured in grams	1 (10,4 g)	|1|
43	Fiber percentage	> Measured in %	1 (42,3 %)	|1|
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	|1|
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|1|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|1|

Togo

Cultivated varieties:

STAM 129A • STAM 190

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Togo

PROPOSED CULTIVAR NAME:

UK 171

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|2|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1-3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|7|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|7|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5-7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2-3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|5|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1551 ± 900 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (55 ± 5 days)	| |
38	Plant height	> Measured in centimeters	1 (140 ± 20 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (55 ± 10 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,4 ± 0,8 g)	| |
42	100-seed weight	> Measured in grams	1 (8,7 ± 0,6 g)	| |
43	Fiber percentage	> Measured in %	1 (44 ± 2 %)	| |
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|1|

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Togo

PROPOSED CULTIVAR NAME:

STAM 190

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|1|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|2|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|3|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|1-3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|7|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|7|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5-7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|1|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|3|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|3|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2-3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|3|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|5|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1419 ± 900 kg/ha)	| |
37	Cotton cycle up to flowering	> Measured in days	1 (62 ± 10 days)	| |
38	Plant height	> Measured in centimeters	1 (140 ± 20 cm)	| |
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (60 ± 10 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,4 ± 0,8 g)	| |
42	100-seed weight	> Measured in grams	1 (8,7 ± 0,6 g)	| |
43	Fiber percentage	> Measured in %	1 (46,52 ± 1,6 %)	| |
44	Lint Index		1 ( )	| |

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	| |
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	|1|
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	|1|
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	|1|

Zimbabwe

Cultivated varieties:

CRI MS 1 • CRI MS 2 • CRI MS 3 • CRI MS 4

SZ 9314

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Zimbabwe

PROPOSED CULTIVAR NAME:

CRI MS 1

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|3|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|2|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|3|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|1|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|2|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|3|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2600 - 4300 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (65 days)	|1|
38	Plant height	> Measured in centimeters	1 (150 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (130 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5 g)	|1|
42	100-seed weight	> Measured in grams	1 (10 g)	|1|
43	Fiber percentage	> Measured in %	1 (43 %)	|1|
44	Lint Index		1 ( )	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Zimbabwe

PROPOSED CULTIVAR NAME:

CRI MS 2

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	| |
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|2|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|2|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	| |
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|2|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	| |
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	| |
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|3|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|5|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|1|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|2|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|3|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|5|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2300 - 4200 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (75 days)	|1|
38	Plant height	> Measured in centimeters	1 (150 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (120 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5,5 g)	|1|
42	100-seed weight	> Measured in grams	1 (12 g)	|1|
43	Fiber percentage	> Measured in %	1 (43 %)	|1|
44	Lint Index		1 (9.1)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	N/A
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	N/A
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	N/A
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	N/A
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	N/A

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Zimbabwe

PROPOSED CULTIVAR NAME:

CRI MS 3

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|3|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|1|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|3|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

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Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2300 - 3900 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (60 days)	|1|
38	Plant height	> Measured in centimeters	1 (165 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|2|
40	Early ripening	> Measured in days	1 (130 days)	| |

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5.8 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (42 %)	|1|
44	Lint Index		1 ( )	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|2|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Zimbabwe

PROPOSED CULTIVAR NAME:

CRI MS 4

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|5|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|5|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|2|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|5|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|1|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|1|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|3|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|1|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|1|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|5|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|5|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|5|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

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1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (1800 - 4200 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (65 days)	|1|
38	Plant height	> Measured in centimeters	1 (120 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|1|
40	Early ripening	> Measured in days	1 (120 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (6,4 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (43 %)	|1|
44	Lint Index		1 (8.3)	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

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- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	N/A
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	N/A
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|2|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	N/A
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	N/A
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	N/A

MINIMAL COTTON DESCRIPTORS

(*Gossypium* L.)

Zimbabwe

PROPOSED CULTIVAR NAME:

SZ9314

I. MORPHOLOGICAL DESCRIPTORS

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
1	**Plant:** Shape (UP-BR)	> Oval > Conical > Rounded [globose] > Indeterminate	1 2 3 4	|2|
2	**Plant:** Density of foliage (UP)	> Sparse > Medium > Dense	3 5 7	|7|
3	**Plant:** Height (UP)	> Very short > Short > Medium > Tall > Very tall	1 3 5 7 9	|7|
4	**Plant:** Stem color (BR)	> Green > Greenish purple (sun red) > Purple [dark red]	1 2 3	|2|
5	**Plant:** Hairiness (BR)	> Absent and very weak > Short hair > Standard > Long hair	1 3 5 7	|5|
6	**Plant:** Growth habit (BR)	> Indeterminate > Determinate	1 2	|1|
7	**Plant:** Glandulation (*) (UP-BR)	> Absent > Standard > Intense	1 5 9	|5|
8	**Plant:** Length of the first fruiting branch (UP)	> Very short > Short > Medium > Long > Very long	1 3 5 7 9	|7|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
9	**Leaf:** Shape (*) (UP)	> Entire > Lobed > Lanceolate	1 2 3	|2|
10	**Leaf:** Size (UP)	> Small > Medium > Large	3 5 7	|7|
11	**Leaf:** Number of lobes (BR)	> Three > Five > Seven	1 2 3	|2|
12	**Leaf:** Depth of lobe (lobe length) (BR)	> Standard > Median > Okra shape > Super okra shape > Laciniate	1 2 3 4 5	|2|
13	**Leaf:** Color (BR)	> Light green > Standard green > Dark green	1 3 5	|2|
14	**Leaf:** [Presence of] Nectaries (*) (UP-BR)	> Present in the midrib > Present on the midrib and secondary veins > Absent	1 2 3	|1|
15	**Flower:** Bract dentation (bract "teeth") (BR)	> Less than 7 > From 7 to 12 > More than 12	1 2 3	|2|
16	**Flower:** Floweral nectaries at the base of the bracts (BR)	> Absent > Incipient > Present	1 2 3	|2|
17	**Flower:** Color of the corolla [Intensity of the yellow color] (*) (UP-BR)	> Cream [white] > Yellow [medium] > Sulphurine yellow [dark]	1 2 3	|1|
18	**Flower:** Petal spot (BR)	> Absent > Present	1 2	|2|
19	**Flower:** Imbrication of petals (irregular overlapping) - Aestivation (BR)	> Slightly imbricated > Imbricated > Very imbricated	1 3 5	|1|
20	**Flower:** Position of stigma (anther-stigma distance) (BR)	> At anther opening [Same level] > Above the anthers > Far above the anthers	1 3 5	|3|
21	**Flower:** Length of filaments (BR)	> Short > Medium > Long	3 5 7	|5|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
22	**Flower:** Color of pollen (BR)	> Cream [white] > Yellow [medium yellow] > Sulphurine yellow [dark yellow]	3 5 7	|3|
23	**Boll:** Shape (lengthwise section) (*) (UP)	> Round > Oval > Conical	1 2 3	|2|
24	**Boll:** Length of peduncle (*) (UP)	> Short > Medium > Long	3 5 7	|5|
25	**Boll:** Fruit shape cal (BR)	> Conical > Oval > Round > Elongated > Oval	1 2 3 4 5	|2|
26	**Boll:** Number of locules per fruit (BR)	> Three > Four > Five	1 2 3	|2|
27	**Capsule (open cotton boll):** Level of plume retention (inside the capsule) (BR)	> Low > Standard > Strong	3 5 7	|5|
28	**Ripe cotton boll:** Lint color (BR)	> White > Cream hue > Green hue > Brown hue	1 3 5 7	|1|
29	**Ripe cotton boll:** Fiber Color (BR)	> White > Cream > Brown	1 3 5	|1|
30	**Ripe cotton boll:** Length of Fiber [elongation] (*) (UP)	> Very short Short > Standard > Long > Very long	1 3 5 7 9	|3|
31	**Ripe cotton boll:** Tensile strength Fiber (*) (UP)	> Weak > Standard > Strong	3 5 7	|7|
32	**Ripe cotton boll:** Fiber fineness (UP)	> Very fine > Fine > Standard > Coarse > Very coarse	1 3 5 7 9	|3|

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
33	**Ripe cotton boll:** Lint content (UP)	> Very low > Low > Standard > High > Very high	1 3 5 7 9	|7|
34	**Seed:** Size (UP)	> Small > Standard > Large	3 5 7	|7|
35	**Seed:** Presence of cotton linters after ginning [Fuzz density] (BR)	> Naked > Scant > Sparse fuzz > Standard fuzz > Fuzzy	1 3 5 7 9	|7|

(*) All characteristics marked with an asterisk are UPOV minimum requirements. All added descriptors answering specific requirements are up to member states. Nevertheless, the purpose of these guidelines is to avoid substantial differences between descriptors from different countries to foster genetic material exchange for protection purposes.

II. ADDITIONAL INFORMATION

1. AGRONOMIC CHARACTERISTICS

Agronomic characteristics should be detailed following the road map below:

A) YIELD:

Quantity of seed cotton produced, expressed in kg/ha; the overall mean and range of variation is to be informed for all the trials.

C) PLANT HEIGHT:

Average distance in centimetres from the ground level to the stem terminal shoot at the time of the first harvest (approximately 2/3 of open bolls), determined in 10 plants per plot.

B) COTTON CYCLE UP TO FLOWERING:

Average number of days from the seedling emergence to the first flower opening.

D) COTTON CYCLE UP TO HARVEST:

Number of days from emergence to boll opening of at least 90% of the squares.

E) EARLY RIPENING:

Average number of days from the first flowers to dehiscence of 2/3 of the squares formed.

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
36	Yield	> Measured in kg/ha	1 (2000 - 4000 kg/ha)	|1|
37	Cotton cycle up to flowering	> Measured in days	1 (64 days)	|1|
38	Plant height	> Measured in centimeters	1 (180 cm)	|1|
39	Cotton cycle up to harvest	> Early (less than 130 days) > Standard (between 130 and 150 days) > Late (more than 150 days)	1 2 3	|3|
40	Early ripening	> Measured in days	1 (160 days)	|1|

2. FIBER PRODUCTION COMPONENTS AND TECHNOLOGICAL CHARACTERISTICS:

A) BOLL WEIGHT:

Average weight of seed cotton found in a bol. Given in grams.

B) 100 SEED WEIGHT:

Average weight of 100 seeds after ginning. Given in grams.

C) FIBER PERCENTAGE:

Fiber and seed-cotton weight ratio. Given as a percentage.

D) LINT INDEX (LI):

Weight of lint from 100 seeds:

$$LI = \frac{\% \text{ lint x weight of 100 seeds}}{(1 - \% \text{ of lint})}$$

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
41	Boll weight	> Measured in grams	1 (5.5 g)	|1|
42	100-seed weight	> Measured in grams	1 (11 g)	|1|
43	Fiber percentage	> Measured in %	1 (40 %)	|1|
44	Lint Index		1 ( )	|1|

Nota: Refer to the determination methods and units used to assess: Fiber maturity; Fiber length; Fiber length uniformity; Fiber fineness and Fiber strength.

3. SUSCEPTIBILITY TO ADVERSE CONDITIONS

THIS IS VERY IMPORTANT INFORMATION, THAT SHOULD BE USED AS:

(i) An element to support assessment of identity differences between cultivars in comparison with the records in the plant variety protection system; and

(ii) A descriptor in the National Register of Approved Basic Material for marketing cultivar seeds.

APPROPRIATELY IDENTIFY THE CULTIVAR SUSCEPTIBILITY TO:

- ✓ Ramulosis
- ✓ Fusariosis
- ✓ Verticillium wilt
- ✓ Nematodes
- ✓ Angular leaf spot or cotton bacterial blight (bacteriosis)
- ✓ Viral diseases
- ✓ Reddish leaf withering

	CHARACTERISTICS	DESCRIPTION OF CHARACTERISTIC	DESCRIPTION CODE	CODE THAT BEST DESCRIBES THE CULTIVAR
45	Susceptibility to ramulosis *(Colletotichium gossypii)*	Susceptible Resistant	1 2	| |
46	Susceptibility to fusariosis *(Fusarium sp)*	Susceptible Resistant	1 2	|1|
47	Susceptibility to *Verticillium* wilt	Susceptible Resistant	1 2	|1|
48	Susceptibility to nematodes	Susceptible Resistant	1 2	| |
49	Susceptibility to angular leaf spot *(Xanthomonas malvacearum)*	Susceptible Resistant	1 2	|2|
50	Susceptibility to viral diseases	Susceptible Resistant	1 2	| |
51	Susceptibility to “reddish leaf withering”	Susceptible Resistant	1 2	| |


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Volume 1

An overview of the cotton sector in Africa and Brazil

Volume 2

Cotton varieties grown in Africa and Brazil

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