



# A Catalogue of Some *Musa* ITC Reference Collections Grown in the Philippines

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## INTRODUCTION

Bananas are among the most popular fruit in the world that are being produced as important staple foods and commodities in more than 130 countries and territories across tropical and subtropical regions. Majority of producers are small hold farmers, which accounts less than 15 percent of the global production of more than 144 million metric tonnes (FAOSTAT, 2013).

The International Transit Centre (ITC) otherwise known as Global Musa Germplasm Collection managed by Bioversity International holds the world's largest collection of bananas that represents an extensive proportion of known gene pool. The collection contains more than 1,500 accessions of edible and wild species of banana. The accessions are kept in vitro (tissue culture or cryopreservation) to ensure long-term conservation of the collection.

Characterization is necessary to record distinctly identifiable traits, which are generally important to breeders and researchers for maximum utilization and crop improvement. This is done for an easy and quick discrimination of phenotypes and to distinguish accessions within species. Characterization also facilitates in determining true-to-type samples and detection of mislabelled, misidentified, or duplication that done to important keep a check on the genetic stability of the collections that are susceptible to somaclonal variation. Since these accessions are kept for a long time, field verification should be done to ensure true to typeness of the germplasm in conservation.

Cultivated varieties are of great importance worldwide due to its commercial and nutritional value. Understanding on genetic and morphological relationships and diversity between cultivars would assist in conservation and breeding strategies in order to develop cultivars resistant to biotic and abiotic stresses. Banana cultivars (edible *Musa spp.*) exhibit various levels of ploidy and genomic constitution that originated from two wild diploid subspecies of *Musa acuminata* (A genome) and *Musa balbisiana* (B genome) with their hybrids and polyploids. According to Manzo-Sánchez *et al.* 2015, morphological data have suggested that *Musa* is diverse, with well-defined characters giving a number of indicators of its genome constitution.

In accordance to one of the proposed outputs in the Global Conservation Strategy for Musa developed in 2006 that is: “genetic diversity is comprehensively characterized and documented, taxonomy is harmonised, and collections are rationalized”, a minimum set of descriptors and photos was agreed upon by the Taxonomy Advisory Group (TAG) to field verified accessions from ITC. The minimum set of descriptors for bananas aims to establish a standardized procedure for a routine morphological characterization of banana plants which provides instructions on how to document with photos the most highly discriminating descriptors.

Through the project of Bioversity International entitled “Assessment of Musa Genetic Resources for their Host Reaction to *Fusarium oxysporim f.sp. cubense Tropical Race 4* (Foc TR4), towards Understanding the Genetic Base of Host-Pathogen Interactions”, 42 Musa accessions of different genomes and subgroups from the International Transit Centre (ITC) were requested and mass propagated at Lapanday Foods Corporation, Davao City. These ITC accessions were then planted in the field in Davao City along with varieties of local and Giant Cavendish tissue-culture variant (GCTCV) to investigate Foc TR 4 resistance within the genepool which also gave way to the characterization of these diverse *Musa* accessions.

This catalogue includes 25 ITC Musa accessions from different subgroups. The minimum set of morphological descriptors and photos were utilized with little modification. Supplemental information on the disease reaction of the accessions against Fusarium Wilt (Foc TR4) and Banana Bunchy Top Virus. With the existing characterization data from different researches and institutions, this characterization aims to assist in distinguishing highly heritable characters and the identification of plant descriptors that vary less in all environments.

## METHODOLOGY

Forty-two *Musa* accessions of different genomes and subgroups from the International Transit Centre (ITC) and 17 additional varieties of local and Giant Cavendish tissue-culture variant (GCTCV) from the Institute of Plant Breeding (IPB) and Lapanday Foods Corporation (LFC) were requested and mass propagated at Lapanday Foods Corporation in Davao City for planting and field evaluation. Of these, 25 ITC accessions were characterized in the experimental field of Lapuy, Davao City, Philippines.

However, seven ITC accessions failed to survive during the micropropagation stage namely: Kamaramasenge (AB), Honduras (balbisiana), Pisang Palembang (AAB), Foconah (AAB), Namwa Khom (ABB), and Menei (Fe'i). While varieties Paliama (acuminata), *Musa maclayi* ssp. *maclayi*, and *Tomolo* (AA) showed high mortality in the field. Rooted meriplants were grown and maintained in greenhouse for two months prior to field planting.

Field planting was done between June to October 2014 in an abandoned farm in Lapuy, Davao City. The field has a history of high incidence of *Fusarium oxysporum* f.sp. *Cubense* (*Foc*) TR4. Ten seedlings were planted per plot with 10 replicates for each accession using Randomized Complete Block Design (RCBD). The plants were managed following the recommended agricultural practices such as fertilization, irrigation, pest and disease control and weeding. Chopped *Foc* TR4-infected pseudostem and 250 ml spore suspension with  $7.5 \times 10^4$  spores per ml were incorporated into the soil to ensure uniform *Foc* inoculum. First observation of symptom appearance was done three months after planting and symptomatic plants were then monitored for another three months from the time of first symptom appearance. The *Foc* TR4 resistance of the *Musa* accessions were rated based on six classifications: (1) Highly resistant-0% infection, (2) Resistant-1 to 5%, (3) Moderately Resistant-5 to 15%, (4) Moderately Susceptible- 15 to 50% (5) Susceptible- 50 to 85% and (6) Highly Susceptible- >85% infection. Data on BBTV incidence and percent mortality was also observed and recorded.

Since 10 ITC accessions failed to survive, only 32 accessions were characterized. Plant characterization was conducted from August 2015 to March 2016 with at least two months interval. This is why only 25 ITC accessions were included in this catalogue. The rest of the accessions were not characterize fully using the minimum descriptors list due to the difference in plant stages, seven of the accessions were not in the fruiting or harvesting stage during the field visit and at the time of characterization. The following accessions were not characterized: Pisang Rajah, Pisang Mas, Leite, Petite Naine, Gros Michel, Gran Enano, and Pisang Berangan.

This catalogue was made as complete as possible but some gaps still exist. There were instances that photos were included but characterization data were not available since some of the accessions were harvested days earlier than the time of characterization. For the characterization data such as color of the plant parts (especially the male flower) – this should be taken at the time of harvest for uniform and accurate observation. Some photos without quantitative characters were included in the catalogue. These photos were taken before the characterization period. These accessions had gone fruiting stage and only qualitative characters could be extracted. It should be noted that characterization has been made several times wherein some of the accessions where characterize twice. The characterization data included in every accession were characters that occur predominantly among the plants with the same accession codes. Morphological characterization using the standard descriptors and the minimum descriptors made by TAG was done but with some modifications and revisions.

## PASSPORT DATA

Table 1. List of Characterized ITC Reference Accessions

ITC CODE	ACCESSION NAME	GENOME	SUBGROUP	COLLECTION	DONOR COUNTRY	ACCESSION CODE
ITC 0712	AAcv Rose	AA	-	CIRAD	France	II.04.20.105.025
ITC 1027	Asupina	Fe'l group	-	QDPI	Australia	PNG361
ITC 0361	Blue Java	ABB	Ney Mannan	SOPACOM	Fiji	-
ITC 0253	Borneo	AA	microcarpa	CIRAD	France	II.04.01.006.003
ITC 0249	Calcutta 4	acuminata	burmanicoides	CIRAD	France	II.04.01.003.001
ITC 0767	Dole	ABB	Bluggoe	IRFA	Guadeloupe	II.04.32.001.005
ITC 0769	FiguePommeGeante	AAB	silk	IRFA	Guadeloupe	II.04.31.007.001
ITC 0081	Igitsiri (Intuntu)	AAAh	Mutika-Lujugira	IRAZ	Burundi	BIZ 095
ITC 0662	Khai Thong Ruang	AAA	Ibota	CIRAD	France	II.04.30.005.002
ITC 0084	Mbwazirume	AAAh	Mutika-Lujugira	IRAZ	Burundi	BIZ 090
ITC 1483	Monthan	ABB	Monthan	CIRAD-FLHOR	Guadeloupe	II.04.32.003.001
ITC 0109	Obino L'Ewai	AAB	Plantain	IITA	Nigeria	NGA-59
ITC 0672	Pa (Rayong)	acuminata	siemea	CIRAD	France	II.04.01.001.002
ITC 0609	Pahang	acuminata	malaccensis	IRFA	Guadeloupe	II.04.01.005.001
ITC 0472	Pelipita	ABB	Pelipita	FHIA	Honduras	FHIA II-93; 331
ITC 1441	PisangCeylan	AAB	Mysore	CIRAD	Guadeloupe	-
ITC 0312	PisangJariBuaya	AA	Pisang Jari Buaya	FHIA	Honduras	FHIAII-320; 91
ITC 1121	Pisang Lilin	AA		IRFA	Guadeloupe	II.04.20.001.003
ITC 0962	Prata Ana	AAB	Pome	IRFA	Guadeloupe	II.04.31.009.013
ITC 0575	Red Dacca	AAA	Red/Green Red	QDPI	Australia	MHRS TC code 30.25; banana register N C32
ITC 0245	Safet Veichi	AB	Ney Poovan	CIRAD	France	II.04.21.001.001
ITC 0123	Simili Radjah	ABB	Peyan	IITA	Nigeria	CIV-132
ITC 1120	Tani	balbisiana	IND bal 101	IRFA	Guadeloupe	II.04.02.101.001
ITC 0825	Uzakan	AAB	Iholena	QDPI	Australia	PNG196
ITC 1177	Zebrina	acuminata	zebrina	IRFA	Guadeloupe	II.04.01.007.001

# AACV ROSE

ITC-code: ITC0712

Genome: AA

Subgroup: \*

Collection-Donor Country: CIRAD-France

Accession Code: CIRAD II.04.20.105.025

Remarks: Pink purple to red pseudostem and petiole margin; Lengthily pointed fruit apex

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 3.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 308 cm

Pseudostem girth: 33 cm

Pseudostem color(exposed): Pink-purple

Pseudostem color(unexposed): Pink-purple

Sap Color: Milky

Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching

Blotches color petiole base: Black

Petiole canal of the third leaf :Straight w/ erect margins

Petiole margin(winged): Winged

Petiole margin(clasping): Not Clasping

Petiole margin color: Pink-purple

Edge of petiole margin: With color line along

Leaf blade length: 204 cm

Leaf blade width: 44 cm

Petiole length: 58 cm

Shape of leaf blade base: Both sides pointed

Midrib ventral surface (color) : Medium Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One

Peduncle color: Green

Peduncle hairiness: Hairless

Bunch position: Hanging at 45° angle

Bunch shape: Asymmetrical

Bunch Appearance: Lax

Rachis position: With a curve

Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare

Male bud shape: Skinny

Male bud size at harvest: L-18.08 cm; W-5.82 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder

Bract base apex (flatten): Pointed

Bract imbrication: Moderately imbricated

Bract external face (color): Red-purple

Bract internal face (color): Orange red

Male bract shoulder: High (0.19)

Male bract lifting: Lifting two or more at a time

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream

Compound tepal Lobe color: Bright Yellow

Anther color: Yellow

### CROP CYCLE

Bunch weight: 6.6 kg

Peduncle Weight: 1.45 kg

Number of hands: 14

Number of fruits: 147

Functional leaves at harvest: 6

### FRUIT CHARACTERISTICS

Fruit shape: Curved shaped

Fruit apex: Lengthily pointed

Transverse section: Slightly ridged

Flower relicts at fruit apex: Persistent flower relicts

Fruit pedicel length: ≥21 mm

Fruit pedicel width: 5-10 mm

Fusion of the pedicels: No visible sign of fusion

Ripe fruit peel color: Yellow

Unripe fruit peel color: Medium Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.65	17	10.05	2.45	3.03	1.85
2	0.55	15	10.97	2.22	3.35	0.83
3	0.55	15	10.40	2.32	3.05	0.95
4	0.45	12	11.05	2.54	1.93	0.86
5	0.4	11	10.60	2.50	3.02	0.82
6	0.4	10	10.05	2.30	2.85	0.75
7	0.4	10	10.56	2.52	3.05	0.83
8	0.35	10	10.70	2.35	2.55	0.85
9	0.3	9	10.38	2.25	3.09	0.81
10	0.3	9	10.05	2.42	2.25	0.82
11	0.3	10	9.42	2.22	2.35	0.82
12	0.25	9	9.92	2.23	2.39	0.92
13	0.2	8	9.22	2.12	0.98	0.78
14	0.05	2+6(a)	7.49	2.20	1.92	0.92
Total	5.15	147+6(a)				
Mean	0.37	11	10.06	2.33	2.56	0.92

\*-no data available  
a-aborted



# AACV ROSE



# ASUPINA

ITC-code: ITC1027

Genome: Fe'i

Subgroup: \*

Collection-Donor Country: QDPI-Australia

Accession Code: PNG361

Remarks: Orange-red ripe fruit peel; yellow bract; beige-pink pulp color at maturity; 4 anther

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 30.00 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Drooping

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 234 cm  
Pseudostem girth: 28 cm  
Pseudostem color(exposed): Light Green  
Pseudostem color(unexposed): Watery green  
Sap Color: Milky  
Wax on leaf sheaths: No visible sign

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
Blotches color petiole base: Light brown  
Petiole canal of the third leaf :Open with margins spreading  
Petiole margin(winged): Winged  
Petiole margin(clasping): Not Clasping  
Petiole margin color: Green  
Edge of petiole margin: Without color line along  
Leaf blade length: 195 cm  
Leaf blade width: 53 cm  
Petiole length: 40 cm  
Shape of leaf blade base: Both sides rounded  
Midrib ventral surface (color) : Light Green  
Cigar leaf outer surface(color): Light Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
Peduncle color: Green  
Peduncle hairiness: Hairless  
Bunch position: Erect  
Bunch shape: Truncated  
Bunch Appearance: Lax  
Rachis position: With a curve  
Male rachis appearance: Bare  
Male bud shape: Skinny  
Male bud size at harvest: L=24.50 cm; W=7.00 cm

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
Bract base apex (flatten): Intermediate  
Bract imbrication: Moderately imbricated  
Bract external face (color): Yellow to geen  
Bract internal face (color): Yellow with orange shade  
Male bract shoulder: Large (0.30)  
Male bract lifting: Lifting two or more at a time  
Bract behavior before falling: Not Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow  
Compound tepal Lobe color: Yellow  
Anther color: Cream

### CROP CYCLE

Bunch weight: 1.80 kg  
Peduncle Weight: 0.80 kg  
Number of hands: 4  
Number of fruits: 23  
Functional leaves at harvest: 1

### FRUIT CHARACTERISTICS

Fruit length: ≤15 cm (11.00 cm)  
Fruit width: 4.00 cm  
Fruit shape: Straight  
Fruit apex: Blunt-tipped  
Transverse section: Pronounced ridges  
Flower relicts at fruit apex: Without flower relicts  
Fruit pedicel length: ≥21 mm (37mm)  
Fusion of the pedicels: No visible sign of fusion  
Ripe fruit peel color: Orange-red  
Unripe fruit peel color: Dark Green  
Pulp color at maturity: Beige-pink

\*-no data available

# ASUPINA



# BLUE JAVA

ITC-code: ITC0361  
 Genome: ABB  
 Subgroup: Ney Mannan  
 Collection-Donor Country: SOPACOM-Fiji  
 Accession Code: \*

Remarks: Silvery unripe fruit peel color  
 Reaction to diseases:  
 •FOC TR4 : Susceptible  
 •BBTV : 0.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 423 cm  
 Pseudostem girth: 72 cm  
 Pseudostem color(exposed): Medium Green  
 Pseudostem color(unexposed): Light green  
 Sap Color: Milky  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Black  
 Petiole canal of the third leaf: Straight with erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: With color line along  
 Leaf blade length: 266 cm  
 Leaf blade width: 72 cm  
 Petiole length: 69 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Falling vertically  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare  
 Male bud shape: Medium  
 Male bud size at harvest: L=24.85 cm; W=9.30 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Red  
 Male bract shoulder: Medium (0.29)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Red purple  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 13.8 kg  
 Peduncle Weight: 1.30 kg  
 Number of hands: 8  
 Number of fruits: 94  
 Functional leaves at harvest: 10

### FRUIT CHARACTERISTICS

Fruit shape: Straight  
 Fruit apex: Lengthily pointed  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Silvery

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	2.00	12	15.62	4.32	3.32	1.15
2	1.70	12	14.93	4.32	4.62	1.15
3	1.80	12	15.25	4.76	3.88	1.32
4	1.90	14	13.62	4.40	3.35	1.14
5	1.95	14	12.28	4.32	3.40	1.15
6	1.55	14	12.35	4.29	2.72	1.03
7	1.35	14+1(a)	11.38	4.22	2.71	1.01
8	0.25	2+11(a)	9.09	3.50	2.49	0.95
Total	12.50	94+12(a)				
Mean	1.56	12	13.07	4.27	3.31	1.11

\*-no data available  
 a-aborted

# BLUE JAVA



# BORNEO

ITC-code: ITC0253  
 Genome: Acuminata  
 Subgroup: microcarpa  
 Collection-Donor Country: CIRAD-France  
 Accession Code: CIRAD II.04.01.006.003

Remarks: Horizontal bunch position  
 Reaction to diseases:  
 •FOC TR4 : Resistant  
 •BBTV : 1.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 346 cm  
 Pseudostem girth: 43 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Medium green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very few

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive pigmentation  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf :Wide with erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: With color line along  
 Leaf blade length: 255 cm  
 Leaf blade width: 66 cm  
 Petiole length: 65 cm  
 Shape of leaf blade base: One side rounded; one pointed  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairy  
 Bunch position: Horizontal  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Lax  
 Rachis position: At an angle  
 Male rachis appearance: Bare  
 Male bud shape: Skinny  
 Male bud size at harvest: L=16.01 cm; W=7.05 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder  
 Bract base apex (flatten): Pointed  
 Bract imbrication: Convolute  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Orange red  
 Male bract shoulder: High (0.22)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 2.21 kg  
 Peduncle Weight: 0.67 kg  
 Number of hands: 11  
 Number of fruits: 221  
 Functional leaves at harvest: 5

### FRUIT CHARACTERISTICS

Fruit shape: Slightly curved  
 Fruit apex: Bottle-necked  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Without flower relicts  
 Fruit pedicel length: ≤10 mm  
 Fruit pedicel width: 5-10 mm  
 Fusion of the pedicels: No visible sign of fusion  
 Unripe fruit peel color: Medium Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.15	25	6.94	1.34	0.62	0.58
2	0.20	28	6.76	1.48	1.17	0.56
3	0.20	24	6.91	1.41	1.14	0.61
4	0.15	24	6.54	1.36	1.02	1.18
5	0.15	22	7.00	1.45	0.87	0.69
6	0.15	20	6.11	1.52	1.01	0.64
7	0.11	20	6.24	1.32	1.03	0.61
8	0.16	20	6.20	1.52	1.05	0.65
9	0.10	15+4(a)	6.60	1.53	1.12	0.63
10	0.12	16+4(a)	5.88	1.46	0.84	0.66
11	0.05	7+8(a)	5.43	1.51	0.98	0.60
Total	1.54	221+16(a)				
Mean	0.14	20	6.42	1.44	0.98	0.67

\*-no data available  
 a-aborted

# BORNEO



# CALCUTTA 4

ITC-code: ITC0249  
 Genome: Acuminata  
 Subgroup: burmaniccoides  
 Collection-Donor Country: CIRAD-France  
 Accession Code: CIRAD II.04.01.003.001

Remarks: Horizontal bunch position  
 Reaction to diseases:  
 •FOC TR4 : Moderately resistant  
 •BBTV : 4.00 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 350 cm  
 Pseudostem girth: 39 cm  
 Pseudostem color(exposed): Green yellow  
 Pseudostem color(unexposed): Cream  
 Sap Color: Milky  
 Wax on leaf sheaths: No visible sign

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Open with margins spreading  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 246 cm  
 Leaf blade width: 63 cm  
 Petiole length: 84 cm  
 Shape of leaf blade base: One side rounded; one pointed  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairy  
 Bunch position: Horizontal  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Compact  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Skinny  
 Male bud size at harvest: L=21.00 cm; W=8.19 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder  
 Bract base apex (flatten): Pointed  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Orange red  
 Male bract shoulder: High (0.18)  
 Male bract lifting: Lifting two or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 3.7 kg  
 Peduncle Weight: 2.20 kg  
 Number of hands: 8  
 Number of fruits: 132  
 Functional leaves at harvest: 9

### FRUIT CHARACTERISTICS

Fruit shape: Curved  
 Fruit apex: Bottle-necked  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≤10 mm  
 Fruit pedicel width: 5 to 10 mm  
 Fusion of the pedicels: Partially fused  
 Ripe fruit peel color: Bright yellow  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.23	20	6.03	1.78	0.74	1.03
2	0.20	18	5.75	1.80	0.85	0.79
3	0.10	7	5.13	1.82	0.99	0.85
4	0.23	18	5.29	1.88	0.80	0.84
5	0.24	18	6.56	1.78	0.78	0.86
6	0.15	16	6.15	1.94	0.66	0.84
7	0.20	18	5.42	1.73	0.73	0.80
8	0.15	17	5.82	1.80	0.76	0.78
Total	1.50	132				
Mean	0.19	16	5.77	1.82	0.79	0.85

\*-no data available



# CALCUTTA 4



# DOLE

ITC-code: ITC0767  
 Genome: ABB  
 Subgroup: Bluggoe  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.32.001.005

Remarks: Lax (bunch appearance)  
 Reaction to diseases:  
 •FOC TR4 : Susceptible  
 •BBTV : 4.00 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 324 cm  
 Pseudostem girth: 37 cm  
 Pseudostem color(exposed): Medium Green  
 Pseudostem color(unexposed): Light green  
 Sap Color: Milky  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Margins curved inward  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Light Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 154 cm  
 Leaf blade width: 50 cm  
 Petiole length: 33 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Three  
 Peduncle color: Light Green  
 Peduncle hairiness: Hairless  
 Bunch position: Hanging vertically  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare  
 Male bud shape: Fat  
 Male bud size at harvest: L=22.00 cm; W=11.00 cm

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Red  
 Male bract shoulder: Medium (0.28)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 3.04 kg  
 Peduncle Weight: 0.50 kg  
 Number of hands: 3  
 Number of fruits: 23  
 Functional leaves at harvest: 5

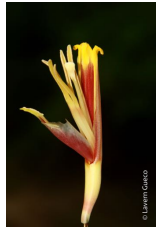
### FRUIT CHARACTERISTICS

Fruit shape: Straight  
 Fruit apex: Blunt-tipped  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: No sign of fusion  
 Unripe fruit peel color: Silvery

Hand No.	Hands		Middle Fruit	
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)
1	1.10	8	12.10	4.50
2	1.15	9	11.00	5.00
3	0.65	6+1(a)		
Total	2.90	23+1(a)		
Mean	0.97	8	11.50	4.75

\*-no data available  
 a-aborted

# DOLE



# FIGUE POMME GEANTE

ITC-code: ITC0769  
 Genome: AAB  
 Subgroup: Silk  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.31.007.001

Remarks: Pink purple petiole margin (like Latundan)  
 Reaction to diseases:  
 •FOC TR4 : Moderately resistant  
 •BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 405 cm  
 Pseudostem girth: 53 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Black  
 Petiole canal of the third leaf: Straight with erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Pink-purple  
 Edge of petiole margin: With a color line along  
 Leaf blade length: 268 cm  
 Leaf blade width: 69 cm  
 Petiole length: 61 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Green  
 Peduncle hairiness: Hairless  
 Bunch position: Slightly angled  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Medium  
 Male bud size at harvest: L=22.30 cm; W=8.21 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder  
 Bract base apex (flatten): Intermediate  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Red-purple  
 Male bract shoulder: Medium (0.28)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 8.45 kg  
 Peduncle Weight: 1.9 kg  
 Number of hands: 8  
 Number of fruits: 111  
 Functional leaves at harvest: 6

### FRUIT CHARACTERISTICS

Fruit shape: Straight  
 Fruit apex: Blunt-tipped  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.00	15	9.38	3.15	1.65	1.05
2	0.95	16	8.92	2.80	1.60	1.09
3	0.90	16	8.90	2.75	2.02	1.05
4	0.75	15	8.02	3.05	2.06	1.10
5	0.90	16	8.30	3.06	2.92	1.02
6	0.80	16	8.62	2.93	2.52	1.03
7	0.75	16	7.82	2.93	2.83	0.94
8	0.50	1+10(a)	6.30	2.52	2.62	1.05
Total	6.55	111+10(a)				
Mean	0.82	14	8.28	2.90	2.28	1.04

\*-no data available  
 a-aborted

# FIGUE POMME GEANTE



# IGITSIRI (INTUNTU)

ITC-code: ITC0081

Genome: AAAh

Subgroup: Mutika-Lujugira

Collection-Donor Country: IRAZ-Burundi

Accession Code: BIZ 095

Remarks: Black (exposed pseudostem); Yellow (male flower); Light green with purple (bract)

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 10.59 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 246 cm

Pseudostem girth: 35 cm

Pseudostem color(exposed): Black

Pseudostem color(unexposed): Light Green

Sap Color: Watery

Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive pigmentation

Blotches color petiole base: Black-purple

Petiole canal of the third leaf: Straight with erect margins

Petiole margin(winged): Winged

Petiole margin(clasping): Clasping

Petiole margin color: Green

Edge of petiole margin: With a color line along

Leaf blade length: 142 cm

Leaf blade width: 48 cm

Petiole length: 33 cm

Shape of leaf blade base: One side rounded; one pointed

Midrib ventral surface (color) : Medium Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: None

Peduncle color: Green

Peduncle hairiness: Hairy

Bunch position: Slightly angled

Bunch shape: Asymmetrical

Bunch Appearance: Lax

Rachis position: At an angle

Male rachis appearance: Neutral flowers/male flowers and presence of withered bracts on the entire stalk

Male bud shape: Skinny

Male bud size at harvest: L=15.36 cm; W=5.15 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder

Bract base apex (flatten): Obtuse

Bract imbrication: Moderately imbricated

Bract external face (color): Light Green w/ purple

Bract internal face (color): Light Green

Male bract shoulder: High (0.23)

Male bract lifting: Lifting 2 or more at a time

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow

Compound tepal Lobe color: Yellow

Anther color: Yellow

### CROP CYCLE

Bunch weight: 2.34 kg

Peduncle Weight: 0.20 kg

Number of hands: 4

Number of fruits: 44

Functional leaves at harvest: 5

### FRUIT CHARACTERISTICS

Fruit shape: Straight

Fruit apex: Blunt-tipped

Transverse section: Rounded

Flower relicts at fruit apex: Persistent flower relicts

Fruit pedicel length: 11 to 20 mm

Fruit pedicel width: >10 mm

Fusion of the pedicels: Partially fused

Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.79	17	8.82	3.03	1.52	
2	0.50	10	7.60	3.23	1.20	
3	0.50	11	6.82	3.20	0.83	
4	0.35	10	6.70	2.82	0.91	
Total	2.14	48				
Mean	0.54	12	7.49	3.07	1.12	

\*-no data available

# IGITSIRI (INTUNTU)



# KHAI THONG RUANG

ITC-code: ITC0662

Genome: AAA

Subgroup: Ibota

Collection-Donor Country: CIRAD-France

Accession Code: CIRAD II.04.30.005.002

Remarks: With a color line along (edge of petiole margin)

Reaction to diseases:

•FOC TR4 : Moderately resistant

•BBTV : 1.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 415 cm

Pseudostem girth: 53 cm

Pseudostem color(exposed): Green Yellow

Pseudostem color(unexposed): Green Yellow

Sap Color: Milky

Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive pigmentation

Blotches color petiole base: Black-purple

Petiole canal of the third leaf: Straight with erect margins

Petiole margin(winged): Winged

Petiole margin(clasping): Clasping

Petiole margin color: Green

Edge of petiole margin: With a color line along

Leaf blade length: 268 cm

Leaf blade width: 67 cm

Petiole length: 67 cm

Shape of leaf blade base: Both sides pointed

Midrib ventral surface (color) : Medium Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One

Peduncle color: Medium Green

Peduncle hairiness: Hairy

Bunch position: Hanging at 45<sup>0</sup> angle

Bunch shape: Asymmetrical

Bunch Appearance: Compact

Rachis position: Asymmetrical

Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch rest of the stalk is bare

Male bud shape: Medium

Male bud size at harvest: L=16.85 cm; W=7.35 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder

Bract base apex (flatten): Obtuse

Bract imbrication: Moderately imbricated

Bract external face (color): Pink-purple

Bract internal face (color): Orange-red

Male bract shoulder: High (0.24)

Male bract lifting: Lifting one at a time

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow

Compound tepal Lobe color: Yellow

Anther color: Cream

### CROP CYCLE

Bunch weight: 13.25 kg

Peduncle Weight: 1.65 kg

Number of hands: 11

Number of fruits: 189

Functional leaves at harvest: 7

### FRUIT CHARACTERISTICS

Fruit shape: Straight/slightly curved

Fruit apex: Blunt-tipped

Transverse section: Rounded

Flower relicts at fruit apex: Persistent flower relicts

Fruit pedicel length: 11 to 20 mm

Fruit pedicel width: >10 mm

Fusion of the pedicels: Partially fused

Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.80	12	9.70	3.25	2.28	1.28
2	1.55	24	10.70	3.18	1.45	1.05
3	1.35	24	10.69	3.15	1.22	1.08
4	1.15	20	10.15	2.60	1.41	1.08
5	1.05	18	9.82	3.00	1.18	1.21
6	1.00	18	9.02	3.12	1.35	1.22
7	0.95	18	9.85	2.72	1.35	1.32
8	0.90	17	9.80	2.65	1.31	1.09
9	0.90	18	9.45	2.90	0.82	1.09
10	0.85	18	8.99	2.51	1.15	1.12
11	0.10	2+10(a)	7.12	2.65	0.92	1.01
Total	11.60	189				
Mean	1.05	17	9.57	2.88	1.31	1.14

\*-no data available  
a-aborted



# KHAI THONG RUANG



# MBWAZIRUME

ITC-code: ITC0084  
 Genome: AAAh  
 Subgroup: Mutika-Lujugira  
 Collection-Donor Country: IRAZ-Burundi  
 Accession Code: BIZ 090

Remarks: Black edge of petiole margin; white (ovary; tepal; anther); pink pollen sac; curved style  
 Reaction to diseases:  
 •FOC TR4 : Moderately resistant  
 •BBTV : 6.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 229 cm  
 Pseudostem girth: 50 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light Green  
 Sap Color: \*  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate pigmentation  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf: Open w/ margins spreading  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: With a color line along  
 Leaf blade length: 152 cm  
 Leaf blade width: 55 cm  
 Petiole length: 19 cm  
 Shape of leaf blade base: One side rounded; one pointed  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairy  
 Bunch position: Slightly angled  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Compact  
 Rachis position: At an angle  
 Male rachis appearance: Neutral/male flowers and presence of withered bracts on the entire stalk.  
 Male bud shape: Fat  
 Male bud size at harvest: L=18.35 cm; W=10.82 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Obtuse and split  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Green Yellow  
 Bract internal face (color): Orange-red  
 Male bract shoulder: Large (0.32)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: White  
 Compound tepal Lobe color: Cream  
 Anther color: White

### CROP CYCLE

Bunch weight: 2.77 kg  
 Peduncle Weight: 1.00 kg  
 Number of hands: 4  
 Number of fruits: 44  
 Functional leaves at harvest: 7

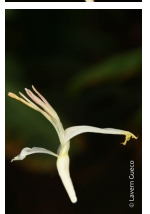
### FRUIT CHARACTERISTICS

Fruit shape: Slightly curved  
 Fruit apex: Lengthily pointed  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: 11 to 20 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: No visible sign of fusion  
 Unripe fruit peel color: Medium Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.85	16	10.92	2.50	1.75	1.18
2	0.62	14	12.01	2.52	1.85	1.16
3	0.25	13	7.35	2.11	1.60	0.95
4	0.05	1+13(a)	5.65	2.41	1.48	0.98
Total	1.77	44+13(a)				
Mean	0.44	11	8.98	2.39	1.67	1.07

\*-no data available  
 a-aborted

# MBWAZIRUME



# MONTHAN

ITC-code: ITC1483  
 Genome: ABB  
 Subgroup: Monthan  
 Collection-Donor Country: CIRAD-FLHOR-Guadeloupe  
 Accession Code: II.04.32.003.001

Remarks: Susceptible to freckles; very waxy male bud;  
 red purple male flower  
 Reaction to diseases:  
 •FOC TR4 : Susceptible  
 •BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 388 cm  
 Pseudostem girth: 43 cm  
 Pseudostem color(exposed): Green Yellow  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf: Straight w/ erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Light Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 168 cm  
 Leaf blade width: 58 cm  
 Petiole length: 52 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Slightly angled  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Medium  
 Male bud size at harvest: L=20.55 cm; W=8.60 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Red  
 Male bract shoulder: Large (0.30)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Red-purple  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 9.05 kg  
 Peduncle Weight: 0.95 kg  
 Number of hands: 5  
 Number of fruits: 52  
 Functional leaves at harvest: 7

### FRUIT CHARACTERISTICS

Fruit shape: Slightly curved  
 Fruit apex: Strongly bottle-necked  
 Transverse section: Pronounced ridges  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≥ 21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: No visible sign of fusion  
 Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	2.25	12	17.35	4.26	3.69	1.19
2	1.65	10	14.19	4.19	4.11	1.15
3	1.55	10	14.50	4.06	3.00	1.09
4	1.70	12	14.20	3.95	2.92	1.05
5	0.95	8+3(a)	10.24	3.05	3.20	0.85
Total	8.10	52				
Mean	1.62	10.40	14.10	3.90	3.38	1.07

\*-no data available  
 a-aborted

# MONTHAN



# OBINO I'EWAI

ITC-code: ITC0109  
 Genome: AAB  
 Subgroup: Plantain  
 Collection-Donor Country: IITA-Nigeria  
 Accession Code: NGA-59

Remarks: Plantain type  
 Reaction to diseases:  
 •FOC TR4 : Moderately resistant  
 •BBTV : 4.00 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 320 cm  
 Pseudostem girth: 52 cm  
 Pseudostem color(exposed): Green Yellow  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: No visible sign of fusion

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf: Straight w/ erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Medium Green  
 Edge of petiole margin: With color line along  
 Leaf blade length: 161 cm  
 Leaf blade width: 72 cm  
 Petiole length: 44 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Hanging vertically  
 Bunch shape: Truncated  
 Bunch Appearance: Compact  
 Rachis position: Falling vertically  
 Male rachis appearance: Neutral/male flowers and presence of withered bracts on the entire stalk  
 Male bud shape: Skinny  
 Male bud size at harvest: L=11.88 cm; W=4.35 cm

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Pink-purple  
 Male bract shoulder: Large (0.35)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 10.70 kg  
 Peduncle Weight: 1.10 kg  
 Number of hands: 8  
 Number of fruits: 91  
 Functional leaves at harvest: 6

### FRUIT CHARACTERISTICS

Fruit shape: Straight in the distal part  
 Fruit apex: Lengthily pointed  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.85	13	15.32	3.92	3.88	1.42
2	1.45	12	15.95	3.82	3.28	1.25
3	1.15	9	14.91	3.45	3.79	1.41
4	1.15	11	14.39	3.69	3.95	1.52
5	1.10	11	14.05	3.32	1.23	1.15
6	1.15	12	13.72	3.45	2.98	1.12
7	1.00	11	11.52	3.01	3.18	1.17
8	0.75	12	10.15	2.88	3.55	1.25
Total	9.60	91				
Mean	1.20	11	13.75	3.44	3.23	1.29

\*-no data available

# OBINO I'EWAI



# PAHANG

ITC-code: ITC0609  
 Genome: acuminata  
 Subgroup: malaccensis  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.01.001.002

Remarks: Horizontal bunch and rachis position  
 Aborted fruits on 1-2 hands  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 0.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 395 cm  
 Pseudostem girth: 47 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive blotching  
 Blotches color petiole base: Black  
 Petiole canal of the third leaf: Margins curved inward  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Not Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 236 cm  
 Leaf blade width: 54.5 cm  
 Petiole length: 87 cm  
 Shape of leaf blade base: One side rounded; one pointed  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: None  
 Peduncle color: Green  
 Peduncle hairiness: Hairy  
 Bunch position: Horizontal  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Horizontal  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch rest of the stalk is bare  
 Male bud shape: Skinny  
 Male bud size at harvest: L=14.05 cm; W=6.95 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Pointed  
 Bract imbrication: Convolute  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Orange red  
 Male bract shoulder: High (0.19)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 3.12 kg  
 Peduncle Weight: 0.30 kg  
 Number of hands: 10  
 Number of fruits: 64  
 Functional leaves at harvest: 11

### FRUIT CHARACTERISTICS

Fruit shape: Curved  
 Fruit apex: Blunt-tipped  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≤10 mm  
 Fruit pedicel width: 5 to 10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.10	21(a)	5.30	1.50	1.00	0.50
2	0.10	20(a)	6.50	1.50	1.10	0.70
3	0.10	18(a)	6.50	1.00	1.00	0.50
4	0.80	19(a)	6.70	1.10	0.50	0.50
5	0.15	7+11(a)				
6	0.16	16				
7	0.11	8+9(a)				
8	0.20	17				
9	0.60	16(a)				
10	0.50	16+1(a)				
Total	2.82	64+115(a)				
Mean	0.28	6.4	6.25	1.28	0.90	0.55

\*-no data available  
 a-aborted



# PAHANG



# PA RAYONG

ITC-code: ITC0672  
 Genome: acuminata  
 Subgroup: siamea  
 Collection-Donor Country: CIRAD-France  
 Accession Code: CIRAD II.04.01.005.001

Remarks: Horizontal bunch position  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 411 cm  
 Pseudostem girth: 38 cm  
 Pseudostem color(exposed): Light green  
 Pseudostem color(unexposed): Light green  
 Sap Color: Watery  
 Wax on leaf sheaths: No visible sign

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Open w/ margins spreading  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 250 cm  
 Leaf blade width: 56 cm  
 Petiole length: 68 cm  
 Shape of leaf blade base: Both sides pointed  
 Midrib ventral surface (color) : Green yellow  
 Cigar leaf outer surface(color): Green yellow

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One  
 Peduncle color: Light Green  
 Peduncle hairiness: Hairless  
 Bunch position: Horizontal  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Fat  
 Male bud size at harvest: L=15.70 cm; W=8.00 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Intermediate  
 Bract imbrication: Moderate imbrication  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Orange red  
 Male bract shoulder: High (0.22)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: White

### CROP CYCLE

Bunch weight: 1.45 kg  
 Peduncle Weight: 0.40 kg  
 Number of hands: 10  
 Number of fruits: 114  
 Functional leaves at harvest: 3

### FRUIT CHARACTERISTICS

Fruit shape: Straight/Slightly Curved  
 Fruit apex: Bottle-necked  
 Transverse section: Slightly ridged  
 Flower relicts at fruit apex: Without any flower relicts  
 Fruit pedicel length: ≤10 mm  
 Fruit pedicel width: 5 to 10 mm  
 Fusion of the pedicels: No visible sign of fusion  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.25	22	6.14	2.03	0.81	0.85
2	0.20	20	5.36	1.73	0.96	0.86
3	0.20	18	5.83	2.13	0.74	0.97
4	0.15	18	5.20	1.97	0.82	1.03
5	0.15	18	4.77	1.72	0.66	0.94
6	0.10	18	4.83	1.80	0.70	0.98
Total	1.05	114				
Mean	0.18	19.00	5.35	1.90	0.78	0.94

\*-no data available

# PA RAYONG



# PELIPITA

ITC-code: ITC0472

Genome: ABB

Subgroup: Pelipita

Collection-Donor Country: FHIA-Honduras

Accession Code: FHIA II-93; 331

Remarks: Red purple compound tepal basic color;

Bright yellow compound tepal lobe color

Reaction to diseases: Highly resistant to FOC TR4

•FOC TR4 : Highly resistant

•BBTV : 5.88 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 440 cm

Pseudostem girth: 56 cm

Pseudostem color(exposed): Medium Green

Pseudostem color(unexposed): Light Green

Sap Color: Milky

Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching

Blotches color petiole base: Black-purple

Petiole canal of the third leaf: Straight with erect margins

Petiole margin(winged): Not Winged

Petiole margin(clasping): Clasping

Petiole margin color: Green

Edge of petiole margin: Without color line along

Leaf blade length: 200 cm

Leaf blade width: 73 cm

Petiole length: 61 cm

Shape of leaf blade base: Both sides rounded

Midrib ventral surface (color) : Medium Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two

Peduncle color: Green

Peduncle hairiness: Hairless

Bunch position: Hanging vertically

Bunch shape: Cylindrical

Bunch Appearance: Compact

Rachis position: At an angle

Male rachis appearance: Neutral/male flowers and presence of withered bracts on the entire stalk

Male bud shape: Skinny

Male bud size at harvest: L=26.40 cm; W=10.41 cm

### BRACT/ MALE FLOWER CHARACTERISTICS

Bract base shape: Small shoulder

Bract base apex (flatten): Obtuse

Bract imbrication: Moderate imbrication

Bract external face (color): Purple-brown

Bract internal face (color): Red

Male bract shoulder: Large (0.33)

Male bract lifting: Lifting two or more at a time

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Red purple

Compound tepal Lobe color: Bright Yellow

Anther color: Yellow

### CROP CYCLE

Bunch weight: 15.66 kg

Peduncle Weight: 1.70 kg

Number of hands: 11

Number of fruits: 133

Functional leaves at harvest: 10

### FRUIT CHARACTERISTICS

Fruit shape: Straight/slightly curved

Fruit apex: Bottle-necked

Transverse section: Pronounced ridges

Flower relicts at fruit apex: Without any flower relicts

Fruit pedicel length: ≥21 mm

Fruit pedicel width: >10 mm

Fusion of the pedicels: Partially fused

Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.31	10	13.90	4.10	5.40	1.45
2	1.50	12	12.09	4.05	5.12	1.45
3	1.51	12	13.20	3.70	4.82	1.45
4	1.49	12	12.80	3.72	4.81	1.41
5	1.35	12	11.49	4.09	3.39	1.48
6	1.30	12	12.08	3.36	3.13	1.52
7	1.40	14	11.36	3.08	2.82	1.38
8	1.20	13	10.45	3.48	1.75	1.29
9	1.25	14	11.81	3.00	2.92	1.32
10	1.05	14	9.95	3.00	2.90	1.16
11	0.60	8+6(a)	8.85	3.45	2.50	1.08
Total	13.96	133+6(a)				
Mean	1.27	12	11.63	3.55	3.60	1.36

\*-no data available  
a-aborted

# PELIPITA



# PISANG CEYLAN

ITC-code: ITC1441  
 Genome: AAB  
 Subgroup: Mysore  
 Collection-Donor Country: CIRAD-Guadeloupe  
 Accession Code: \*

Remarks: Pointed bract base apex  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 487 cm  
 Pseudostem girth: 60 cm  
 Pseudostem color(exposed): Green Yellow  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf :Straight w/ erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Pink  
 Edge of petiole margin: With color line along  
 Leaf blade length: 231 cm  
 Leaf blade width: 77 cm  
 Petiole length: 58 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium green  
 Peduncle hairiness: Hairy  
 Bunch position: Hanging at 45<sup>o</sup> angle  
 Bunch shape: Cylindrical  
 Bunch Appearance: Compact  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Medium  
 Male bud size at harvest: L-14.42 cm; W-6.72 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Pointed  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Red  
 Male bract shoulder: High (0.23)  
 Male bract lifting: Lifting two or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow  
 Compound tepal Lobe color: Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 14.48 kg  
 Peduncle Weight: 2.3 kg  
 Number of hands: 14  
 Number of fruits: 153  
 Functional leaves at harvest: 8

### FRUIT CHARACTERISTICS

Fruit shape: Straight/Slightly curved  
 Fruit apex: Blunt-tipped  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Without flower relict  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10 mm  
 Fusion of the pedicels: Partially fused  
 Ripe fruit peel color: Yellow  
 Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.16	17	9.82	2.82	4.12	1.22
2	1.06	16	10.18	2.85	4.65	1.22
3	1.20	16	10.40	2.20	4.58	1.35
4	1.20	16	10.38	2.98	4.25	1.32
5	1.06	16	9.09	3.15	4.58	1.11
6	0.95	14	10.55	3.29	3.55	1.23
7	0.75	14	9.75	3.18	3.98	1.18
8	0.75	14	9.01	3.29	3.25	1.25
9	0.85	14	9.55	2.92	2.48	1.15
10	0.80	16	8.60	2.92	2.32	1.05
11	0.80	16	8.22	3.05	2.59	1.12
12	0.80	16	8.48	2.80	2.38	0.98
13	0.65	16	6.32	2.80	2.13	0.85
14	0.15	3+10(a)	5.22	3.09	2.15	0.90
Total	12.18	153+10(a)				
Mean	0.87	11	8.97	2.95	3.36	1.16

\*-no data available  
 a-aborted

# PISANG CEYLAN



# PISANG JARI BUAYA

ITC-code: ITC0312

Genome: AA

Subgroup: Pisang jari buaya

Collection-Donor Country: FHIA-Honduras

Accession Code: FHIAII-320; 91

Remarks: Both sides pointed leaf blade;

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 445 cm

Pseudostem girth: 53 cm

Pseudostem color(exposed): Light Green

Pseudostem color(unexposed): Light Green

Sap Color: Milky

Wax on leaf sheaths: Very few

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching

Blotches color petiole base: Black-purple

Petiole canal of the third leaf :Open w/ margins spreading

Petiole margin(winged): Winged

Petiole margin(clasping): Clasping

Petiole margin color: Green

Edge of petiole margin: With a color line along (pink)

Leaf blade length: 245 cm

Leaf blade width: 70 cm

Petiole length: 18 cm

Shape of leaf blade base: Both sides pointed

Midrib ventral surface (color) : Medium Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One

Peduncle color: Green

Peduncle hairiness: Hairy

Bunch position: Slightly angled

Bunch shape: Asymmetrical

Bunch Appearance: Lax

Rachis position: At an angle

Male rachis appearance: Neutral/male flowers and presence of withered bracts on the entire stalk

Male bud shape: Medium

Male bud size at harvest: L=16.85 cm; W=8.40 cm

### BRACT/ MALE FLOWER CHARACTERISTICS

Bract base shape: Medium shoulder

Bract base apex (flatten): Obtuse

Bract imbrication: Convolute

Bract external face (color): Purple

Bract internal face (color): Pink-purple

Male bract shoulder: High (0.24)

Male bract lifting: Lifting two or more at a time

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream

Compound tepal Lobe color: Yellow

Anther color: Cream

### CROP CYCLE

Bunch weight: 14.03 kg

Peduncle Weight: 3.00 kg

Number of hands: 15

Number of fruits: 228

Functional leaves at harvest: 9

### FRUIT CHARACTERISTICS

Fruit shape: Straight in distal part

Fruit apex: Lengthily pointed

Transverse section: Pronounced ridges

Flower relicts at fruit apex: Only base of the style persists

Fruit pedicel length: ≥21 mm

Fruit pedicel width: >10 mm

Fusion of the pedicels: No visible sign of fusion

Ripe fruit peel color: Yellow

Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.28	9	12.12	1.89	3.33	1.09
2	1.03	20	12.28	2.62	2.92	1.33
3	0.90	19	13.11	2.19	2.62	1.39
4	0.78	17	12.22	2.29	2.95	1.22
5	0.80	17	11.28	2.15	2.55	1.25
6	0.80	17	11.90	2.20	2.38	1.28
7	0.85	18	12.09	2.01	2.42	1.21
8	0.85	17	12.22	2.15	2.18	1.28
9	0.70	16	11.65	2.15	2.35	1.32
10	0.73	16	11.60	2.20	2.18	1.23
11	0.76	16	11.85	2.15	2.12	1.22
12	0.65	16	11.15	2.15	2.06	1.22
13	0.65	17	10.45	2.15	2.22	1.22
14	0.50	13+5(a)	9.70	2.12	2.22	1.12
15	0.76	17(a)	7.33	1.70	1.68	0.95
Total	11.03	228+22(a)				
Mean	0.74	15	11.40	2.14	2.41	1.22

\*-no data available

a-aborted



# PISANG JARI BUAYA



# PISANG LILIN

ITC-code: ITC1121  
 Genome: AA  
 Subgroup: \*  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.20.001.003

Remarks: Pink pollen sac and stigma (with a curve);  
 'S' fruit shape  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 3.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 373 cm  
 Pseudostem girth: 45 cm  
 Pseudostem color(exposed): Green-yellow  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Watery  
 Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Margins curved inward  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Light Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 206 cm  
 Leaf blade width: 51 cm  
 Petiole length: 66 cm  
 Shape of leaf blade base: Both sides pointed  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Light Green  
 Peduncle hairiness: Hairless  
 Bunch position: Slightly angled  
 Bunch shape: Asymmetric  
 Bunch Appearance: Lax  
 Rachis position: At an angle  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare  
 Male bud shape: Medium  
 Male bud size at harvest: L=11.50 cm; W=6.00 cm

### BRACT CHARACTERISTICS

Bract base shape: Large shoulder  
 Bract base apex (flatten): Intermediate  
 Bract imbrication: Convolute  
 Bract external face (color): Red  
 Bract internal face (color): Orange-red  
 Male bract shoulder: High (0.27)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Cream

### CROP CYCLE

Bunch weight: 9.25 kg  
 Peduncle Weight: 1.00 kg  
 Number of hands: 8  
 Number of fruits: 131  
 Functional leaves at harvest: 7

### FRUIT CHARACTERISTICS

Fruit shape: Curved in slight 'S' shape  
 Fruit apex: Bottle-necked  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Without any flower relicts  
 Fruit pedicel length: 11-20 mm  
 Fruit pedicel width: 5-10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.20	17	15.00	2.80	2.00	1.20
2	1.45	17	15.40	3.00	3.00	1.20
3	1.00	18	10.85	2.50	1.70	0.74
4	1.05	16	10.72	2.33	1.50	0.70
5	1.00	16	10.54	2.46	1.22	0.72
6	0.95	16	9.36	2.47	1.07	0.80
7	0.95	16	10.44	2.39	1.28	0.80
8	0.65	15	8.73	2.42	1.35	0.73
Total	8.25	131				
Mean	1.03	16	11.38	2.55	1.64	0.86

\*-no data available

# PISANG LILIN



# PRATA ANA

ITC-code: ITC0962  
 Genome: AAB  
 Subgroup: Pome  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.31.009.013

Remarks: Cream with pink shade compound tepal basic color  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 11.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 332 cm  
 Pseudostem girth: 62 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very few waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Black  
 Petiole canal of the third leaf: Straight w/ erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 185 cm  
 Leaf blade width: 70 cm  
 Petiole length: 65 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Horizontal  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Male flowers/bracts above  
 the male bud rest of the stalk is bare  
 Male bud shape: Fat  
 Male bud size at harvest: L=20.21 cm; W=11.38 cm

### BRACT/ MALE FLOWER CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Red  
 Male bract shoulder: Large (0.31)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream with pink shade  
 Compound tepal Lobe color: Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 10.23 kg  
 Peduncle Weight: 1.70 kg  
 Number of hands: 11  
 Number of fruits: 163  
 Functional leaves at harvest: 5

### FRUIT CHARACTERISTICS

Fruit shape: Straight/Slightly curved  
 Fruit apex: Blunt-tipped  
 Transverse section: Pronounced ridges  
 Flower relicts at fruit apex: Without any flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: 5-10 mm  
 Fusion of the pedicels: Partially fused  
 Ripe fruit peel color: Yellow  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.95	23	12.55	2.62	3.75	0.78
2	0.80	18	10.38	2.65	3.05	0.80
3	0.80	16	11.98	2.85	2.93	0.78
4	0.90	14	12.05	2.95	2.82	0.80
5	0.85	13	11.06	2.98	3.10	0.82
6	0.85	16	11.15	2.98	2.83	0.78
7	0.85	14	11.33	2.82	3.10	0.74
8	0.80	16	10.62	2.62	2.92	0.72
9	0.88	16	10.30	3.59	2.13	0.83
10	0.75	16	10.10	3.12	2.20	0.78
11	0.10	1+14(a)	7.85	3.98	2.03	0.88
Total	8.53	163+14(a)				
Mean	0.78	15.00	10.85	3.01	2.81	0.79

\*-no data available  
 a-aborted

# PRATA ANA



# RED DACCA

ITC-code: ITC0962

Genome: AAA

Subgroup: Red/Green Red

Collection-Donor Country: QDPI-Australia

Accession Code: MHRS TC code 30.25; banana register N C32

Remarks: Red Banana

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 2.00 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 505 cm

Pseudostem girth: 80 cm

Pseudostem color(exposed): Red-purple

Pseudostem color(unexposed): Pink-purple

Sap Color: Milky

Wax on leaf sheaths: Moderately waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive blotching

Blotches color petiole base: Black-purple

Petiole canal of the third leaf: Open w/ margins spreading

Petiole margin(winged): Winged

Petiole margin(clasping): Clasping

Petiole margin color: Purple-brown

Edge of petiole margin: With a color line along

Leaf blade length: 263 cm

Leaf blade width: 70 cm

Petiole length: 52 cm

Shape of leaf blade base: Both sides pointed

Midrib ventral surface (color) : Green-yellow

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: One

Peduncle color: Purple

Peduncle hairiness: Very hairy; short hairs

Bunch position: \*

Bunch shape: Asymmetrical

Bunch Appearance: Lax

Rachis position: \*

Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch rest of the stalk is bare

Male bud shape: Medium

Male bud size at harvest: L=23.00 cm; W=10.00 cm

### BRACT/ MALE FLOWER CHARACTERISTICS

Bract base shape: Medium shoulder

Bract base apex (flatten): Obtuse

Bract imbrication: Convolute

Bract external face (color): Purple

Bract internal face (color): Red-purple

Male bract shoulder: \*

Male bract lifting: \*

Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream with red-purple shade

Compound tepal Lobe color: Cream

Anther color: Cream

### CROP CYCLE

Bunch weight: 5.05 kg

Peduncle Weight: 2.00 kg

Number of hands: 5

Number of fruits: 82

Functional leaves at harvest: 5

### FRUIT CHARACTERISTICS

Fruit shape: Straight/Slightly curved

Fruit apex: Blunt-tipped

Transverse section: Slightly ridged

Flower relicts at fruit apex: Persistent flower relicts

Fruit pedicel length: 11 to 20 mm

Fruit pedicel width: >10 mm

Fusion of the pedicels: Partially fused

Unripe fruit peel color: Brown/Rusty-brown

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.75	19	9.00	2.30	2.00	1.10
2	0.60	16	9.00	2.10	2.00	1.20
3	0.65	16				
4	0.55	16				
5	0.50	15				
Total	3.05	82				
Mean	0.61	16	9.00	2.20	2.00	1.15

\*-no data available

# RED DACCA



# SAFET VELCHI

ITC-code: ITC0245  
 Genome: AB  
 Subgroup: Ney Poovan  
 Collection-Donor Country: CIRAD-France  
 Accession Code: CIRAD II.04.21.001.001

Remarks: : Pink-purple (edge of petiole margin); Light green pseudostem; cream with pink shade tepal basic color  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 1.33 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 380 cm  
 Pseudostem girth: 39 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very few

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Moderate blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Margins curved inward  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 164 cm  
 Leaf blade width: 50 cm  
 Petiole length: 68 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Light Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Hanging at 45° angle  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare  
 Male bud shape: Skinny  
 Male bud size at harvest: L=23.50 cm; W=7.09 cm

### BRACT CHARACTERISTICS

Bract base shape: Medium shoulder  
 Bract base apex (flatten): Pointed  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Red  
 Male bract shoulder: High (0.21)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream with pink shade  
 Compound tepal Lobe color: Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 3.70 kg  
 Peduncle Weight: 0.56 kg  
 Number of hands: 8  
 Number of fruits: 81  
 Functional leaves at harvest: 6

### FRUIT CHARACTERISTICS

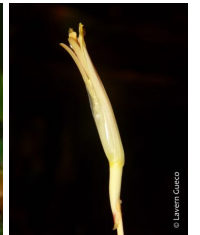
Fruit shape: Straight/Slightly curved  
 Fruit apex: Lengthily pointed  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: 2.26 cm  
 Fruit pedicel width: 0.74 cm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Light Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.30	12	8.05	2.20	2.40	0.85
2	0.30	12	8.15	2.35	2.05	0.72
3	0.29	12	7.02	2.18	1.92	0.70
4	0.25	12	6.82	2.08	2.39	0.65
5	0.20	10	6.72	2.19	2.29	0.75
6	0.20	10	6.25	2.36	2.30	0.71
7	0.80	10	5.88	2.25	2.50	0.85
8	0.80	3+9(a)	5.89	2.13	2.20	0.71
Total	3.14	81				
Mean	0.39	10.13	6.85	2.22	2.26	0.74

\*-no data available  
 a-aborted



# SAFET VELCHI



# SIMILI RADJAH

ITC-code: ITC0123  
 Genome: ABB  
 Subgroup: Peyan  
 Collection-Donor Country: IITA-Nigeria  
 Accession Code: CIV-132

Remarks: Susceptible to freckles; very waxy male bud;  
 red purple male flower  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 0.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 460 cm  
 Pseudostem girth: 59 cm  
 Pseudostem color(exposed): Light Green  
 Pseudostem color(unexposed): Light Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Brown  
 Petiole canal of the third leaf: Straight with erect margins  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 227 cm  
 Leaf blade width: 68 cm  
 Petiole length: 50 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Medium Green  
 Peduncle hairiness: Hairless  
 Bunch position: Hanging vertically  
 Bunch shape: Cylindrical  
 Bunch Appearance: Lax  
 Rachis position: Falling vertically  
 Male rachis appearance: Bare  
 Male bud shape: Skinny  
 Male bud size at harvest (cm): L=20.50; W=7.25

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple-brown  
 Bract internal face (color): Orange-red  
 Male bract shoulder: Medium (0.28)  
 Male bract lifting: Lifting one at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Red-purple  
 Compound tepal Lobe color: Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 17.99 kg  
 Peduncle Weight: 2.85 kg  
 Number of hands: 8  
 Number of fruits: 111  
 Functional leaves at harvest: 8

### FRUIT CHARACTERISTICS

Fruit shape: Straight/Slightly curved  
 Fruit apex: Lengthily pointed  
 Transverse section: Rounded  
 Flower relicts at fruit apex: Only base of the style persists  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: >10mm  
 Fusion of the pedicels: Partially fused  
 Ripe fruit peel color: Bright Yellow  
 Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	2.45	14	14.92	4.45	3.80	1.22
2	2.25	14	14.18	4.32	3.32	1.22
3	2.35	16	13.60	4.35	4.13	1.12
4	1.90	12	13.05	4.00	3.16	1.32
5	2.00	16	12.30	4.05	3.20	1.01
6	1.80	16	12.30	4.01	2.98	1.08
7	1.74	15	11.25	3.98	3.15	1.04
8	0.65	8+10(a)	12.20	3.98	2.82	1.02
Total	15.14	111+10(a)				
Mean	1.89	14	12.98	4.14	3.32	1.13

\*-no data available  
 a-aborted

# SIMILI RADJAH



# TANI

ITC-code: ITC1120  
 Genome: balbiana  
 Subgroup: IND BAL 101  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: CIRAD II.04.02.101.001

Remarks: Compact (bunch)  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 0 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 569 cm  
 Pseudostem girth: 80.00 cm  
 Pseudostem color(exposed): Dark Green  
 Pseudostem color(unexposed): Watery Green  
 Sap Color: Milky  
 Wax on leaf sheaths: Very waxy

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Sparse blotching  
 Blotches color petiole base: Dark Brown  
 Petiole canal of the third leaf: Margins curved inward  
 Petiole margin(winged): Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Medium Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 246 cm  
 Leaf blade width: 77 cm  
 Petiole length: 73 cm  
 Shape of leaf blade base: Both sides rounded  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Three  
 Peduncle color: Light Green  
 Peduncle hairiness: Hairless  
 Bunch position: Hanging vertically  
 Bunch shape: Cylindrical  
 Bunch Appearance: Very compact  
 Rachis position: At an angle  
 Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare  
 Male bud shape: Medium  
 Male bud size at harvest: L=23.00 cm; W=11.00 cm

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderate imbrication  
 Bract external face (color): Rusty-brown  
 Bract internal face (color): Orange-red  
 Male bract shoulder: Large (0.38)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Not Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Yellow  
 Compound tepal Lobe color: Bright Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 18.44 kg  
 Peduncle Weight: 2.05 kg  
 Number of hands: 13  
 Number of fruits: 158  
 Functional leaves at harvest: 15

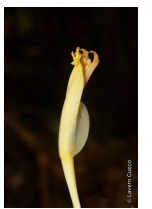
### FRUIT CHARACTERISTICS

Fruit shape: Slightly curved  
 Fruit apex: Bottle-necked  
 Transverse section: Pronounced ridges  
 Flower relicts at fruit apex: Without any flower relicts  
 Fruit pedicel length: ≥21 mm  
 Fruit pedicel width: ≥10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.00	8	14.68	4.15	4.48	1.38
2	1.50	14	15.17	4.17	4.25	1.22
3	1.75	16	14.45	4.02	3.70	1.25
4	1.36	13	14.66	4.01	4.08	1.22
5	1.45	12	13.86	4.21	3.86	1.21
6	1.50	12	13.91	4.41	3.72	1.29
7	0.80	7	12.47	4.17	2.84	1.29
8	1.55	14	12.58	4.32	2.03	1.22
9	1.60	14	13.40	4.43	2.70	1.27
10	1.15	14	11.42	3.79	2.43	1.20
11	1.25	16	11.62	4.29	2.88	1.27
12	1.23	15	11.46	4.04	2.27	1.11
13	0.25	3	11.20	4.29	2.50	1.22
Total	16.39	158				
Mean	1.26	12.15	13.14	4.18	3.21	1.24

\*-no data available

# TANI



# UZAKAN

ITC-code: ITC0825

Genome: AAB

Subgroup: Iholena

Collection-Donor Country: QDPI-Australia

Accession Code: PNG196

Remarks: Perpendicular to the stalk (fruit position)

Reaction to diseases:

•FOC TR4 : Highly resistant

•BBTV : 2.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Intermediate

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 478 cm

Pseudostem girth: 77 cm

Pseudostem color(exposed): Green Yellow

Pseudostem color(unexposed): Light Green

Sap Color: Watery

Wax on leaf sheaths: Very little

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive pigmentation

Blotches color petiole base: Brown

Petiole canal of the third leaf: Wide with erect margins

Petiole margin(winged): Not Winged

Petiole margin(clasping): Clasping

Petiole margin color: Green

Edge of petiole margin: Without color line along

Leaf blade length: 300 cm

Leaf blade width: 71.0 cm

Petiole length: 63 cm

Shape of leaf blade base: One side rounded; one pointed

Midrib ventral surface (color) : Light Green

Cigar leaf outer surface(color): Green

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: None

Peduncle color: Green

Peduncle hairiness: Hairy

Bunch position: Hanging vertically

Bunch shape: Cylindrical

Bunch Appearance: Lax

Rachis position: \*

Male rachis appearance: Neutral flowers on 1 to few hands only near the bunch; rest of the stalk is bare

Male bud shape: \*

Male bud size at harvest (cm):\*

### BRACT CHARACTERISTICS

Bract base shape: \*

Bract base apex (flatten): \*

Bract imbrication: \*

Bract external face (color): \*

Bract internal face (color): \*

Male bract shoulder: \*

Male bract lifting: \*

Bract behavior before falling:\*

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: \*

Compound tepal Lobe color: \*

Anther color: \*

### CROP CYCLE

Bunch weight: 3.12 kg

Peduncle Weight: 0.30 kg

Number of hands: 10

Number of fruits: 80

Functional leaves at harvest: 11

### FRUIT CHARACTERISTICS

Fruit shape: Straight/ Slightly curved

Fruit apex: Lengthily pointed

Transverse section: Slightly ridged

Flower relicts at fruit apex: Without flower relicts

Fruit pedicel length: ≥21mm

Fruit pedicel width: ≥10 mm

Fusion of the pedicels: No visible sign of fusion

Unripe fruit peel color: Yellow Green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	1.75	21	13.50	3.00	2.50	1.00
2	1.45	18	13.00	3.00	3.00	1.10
3	1.35	16				
4	1.20	15				
5	1.10	16				
6	0.90	15				
7	0.90	15				
8	0.80	15				
9	0.65	15				
10	0.40	7				
11	0.55	12				
Total	11.05	165				
Mean	1.00	15	13.25	3.00	2.75	1.05

\*-no data available

# UZAKAN



# ZEBRINA

ITC-code: ITC1177  
 Genome: Acuminata  
 Subgroup: zebrina  
 Collection-Donor Country: IRFA-Guadeloupe  
 Accession Code: II.04.01.007.001

Remarks: Purple banana plant  
 Reaction to diseases:  
 •FOC TR4 : Highly resistant  
 •BBTV : 4.67 % Infection

## MORPHOLOGICAL CHARACTERISTICS

### PLANT GENERAL APPEARANCE

Leaf habit: Erect

### PSEUDOSTEM CHARACTERISTICS

Pseudostem height: 381 cm  
 Pseudostem girth: 29 cm  
 Pseudostem color(exposed): Green yellow  
 Pseudostem color(unexposed): Ivory  
 Sap Color: Milky  
 Wax on leaf sheaths: No visible sign

### PETIOLE/MIDRIB/LEAF CHARACTERISTICS

Blotches at the petiole base: Extensive blotching  
 Blotches color petiole base: Black-purple  
 Petiole canal of the third leaf: Open w/ margins spreading  
 Petiole margin(winged): Not Winged  
 Petiole margin(clasping): Clasping  
 Petiole margin color: Green  
 Edge of petiole margin: Without color line along  
 Leaf blade length: 172 cm  
 Leaf blade width: 35 cm  
 Petiole length: 63.75 cm  
 Shape of leaf blade base: Both sides pointed  
 Midrib ventral surface (color) : Medium Green  
 Cigar leaf outer surface(color): Red-purple

### INFLORESCENCE/MALE BUD CHARACTERISTICS

Empty nodes on peduncle: Two  
 Peduncle color: Purple  
 Peduncle hairiness: Hairy (velvet touch)  
 Bunch position: Horizontal  
 Bunch shape: Asymmetrical  
 Bunch Appearance: Lax  
 Rachis position: At an angle  
 Male rachis appearance: Bare  
 Male bud shape: Skinny  
 Male bud size at harvest: L=12.90 cm; W=6.92 cm

### BRACT CHARACTERISTICS

Bract base shape: Small shoulder  
 Bract base apex (flatten): Obtuse  
 Bract imbrication: Moderately imbricated  
 Bract external face (color): Purple  
 Bract internal face (color): Orange-red  
 Male bract shoulder: High (0.25)  
 Male bract lifting: Lifting 2 or more at a time  
 Bract behavior before falling: Revolute

### MALE FLOWER CHARACTERISTICS

Compound tepal basic color: Cream  
 Compound tepal Lobe color: Yellow  
 Anther color: Yellow

### CROP CYCLE

Bunch weight: 0.92 kg  
 Peduncle Weight: 0.47 kg  
 Number of hands: 8  
 Number of fruits: 112  
 Functional leaves at harvest: 7

### FRUIT CHARACTERISTICS

Fruit shape: Straight  
 Fruit apex: Strongly bottle-necked  
 Transverse section: Pronounced ridges  
 Flower relicts at fruit apex: Persistent flower relicts  
 Fruit pedicel length: ≤10 mm  
 Fruit pedicel width: 5 to 10 mm  
 Fusion of the pedicels: Partially fused  
 Unripe fruit peel color: Purple/green

Hand No.	Hands		Middle Fruit			
	Weight (kg)	No. of fingers	Length (cm)	Width (cm)	Pedicel (cm)	
					L	W
1	0.10	14	5.70	1.49	0.80	0.72
2	0.05	14	5.57	1.65	1.02	0.79
3	0.05	13	6.19	1.56	0.99	0.75
4	0.05	14	4.55	1.33	0.73	0.78
5	0.05	14	4.37	1.32	0.84	0.69
6	0.05	14	4.53	1.30	1.45	0.75
7	0.05	15	5.00	1.30	0.97	0.80
8	0.05	14	5.09	1.34	0.87	0.71
Total	0.45	112				
Mean	0.06	14.00	5.12	1.41	0.96	0.75

\*-no data available  
 a-aborted



# ZEBRINA

