



Research Institute for Fruits Central Research Institute for Horticulture



of Banana and Plantain

THE EXPLORATION OF *Musaceae* IN MALUKU ISLANDS

18 November – 14 December 1996





BACKGROUND

Germplasm as genetic resources collection is a key of plant breeding to improve cultivars. The germplasm might be collected by importation or exploration for the wild species.

According to the exploration done by Nasution (1982) and Hambali (1986), some species had been collected such as *Musa lolodensis* Cheesman from Halmahera and the variegated *Musa* sp. from Teluk Bintuni, Irian Jaya and also *Musa ingen*, the highest herb in the world, from Papua Nuginea, the close area from Irian Jaya (Anonym, 1993).

As a native area of *Musa*, Indonesia has great amount of genetic diversity of *Musa* and its pest. At least, there were found four important banana diseases, such as fusarial wilt (Panama disease), bacterial wilt (Moko and blood disease), Sigatoka leaf spot and bunchy top disease. Concerning fusarial disease, Moore *et al.* (1995) said that fifteen of 21 VCGs of *Foc* were in Asia, including eight Indonesian-VCGs.

In the Eastern Indonesia, especially Maluku, Irian Jaya and Sulawesi islands were believed as a native area of the *Musa* diseases (Moore *et al.*, 1995; Eden-Green, 1994 and Jones, 1990). The agent of banana blood disease is named *Pseudomonas celebensis* because the disease was found in Sulawesi (Celebes) in the first time. By the prediction of dissemination speed of the disease 25 km. per year, it came out in South Sulawesi in 1990s and currently the disease in Northern Maluku. In the same case, Sigatoka leaf spot disease was found in Halmahera and Irian Jaya islands in 1970 (Stover, 1978 *in* Jones, 1990).

The aim of the exploration was to get the information, to collect the commercial and wild *Musa* in Maluku (Ambon district and Central Maluku District) as a germplasm resource and to get the information of the diseases.

METHODOLOGY

The exploration was carried out at the central area of banana, the local market for commercial banana and at the forest for wild *Musa*. Under the information from The Assessment Institute for the Agriculture Technology (AIAT)

Ambon, the locations were chosen in the Islands that have various genetic diversity of *Musa* such as Ambon District and Central Maluku Region. The accessions were collected in RIF as an *in vitro* and *in vivo* collection.

Beside collection of *Musa* activity, agronomical characters and its diseases were observed. The activities of agronomical characters observations were:

- 1. Identification of accessions according the reference or information in the native area
- 2. Samples documentation by equipment (camera, stationery, etc.)
- 3. Taking parts of the plant such as corm, suckers and seeds

The observations of Musa diseases were including:

- 1. Recording the data of main *Musa* diseases, such as:
 - a. Fusarial wilt disease (Moore et al., 1995)
 - b. Bacterial wilt disease (Eden-Green, 1994)
 - c. Banana Bunchy Top Disease (Thomas, 1994)
 - d. Sigatoka Disease (Jones and Mourichon, 1993)
- 2. Documentation and description of the diseases

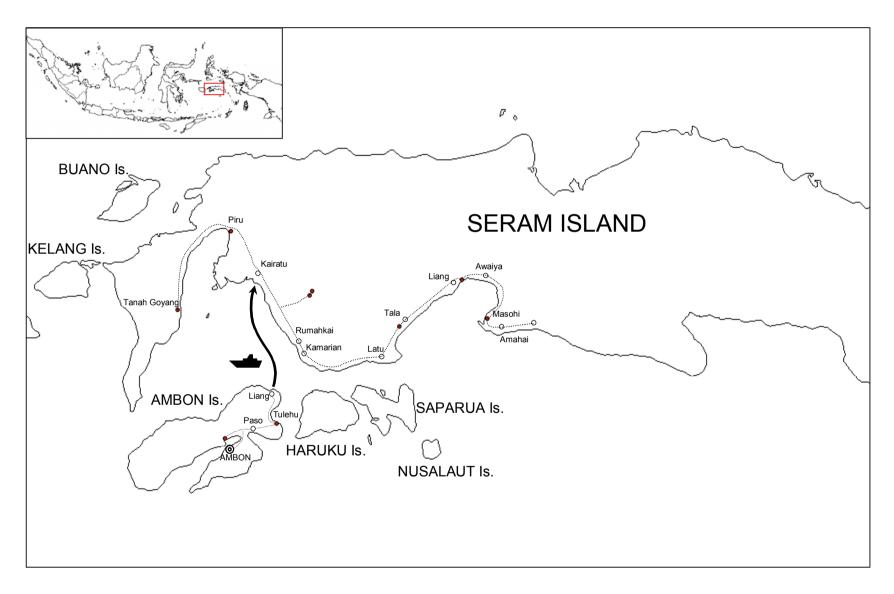


Figure 1. Sites visited during the exploration

RESULT

The activities were started by the coordination with AIAT Ambon. According to the letter of Director of RIF No.Lb.120.611.8.2.1005, AIAT Ambon issued the letter No. Lb.610.5.8.577 to the Province Staple Food Service, Province Forest Service and the Branch of Forestry Agency of Maluku.

The searching of *Musa* was begun in the Ambon island and part of Central Maluku district by visiting local market to get the information regarding commercial banana. Some cultivars sold in the market, such as: Pisang Abuabu (Kepok, ABB/BBB), Pisang Dewaka/ Jawaka (ABB/BBB), Pisang Jarum (AA), Pisang Susu Putih, Pisang Susu Hitam (Silk, AAB) and Pisang Tongkat Langit. Under the seller information, the searching of *Musa* was continued to Telaga Pange (5 km from the main road) and we found Pisang Tongkat Langit, but the plant was no fruit anymore. The best Pisang Tongkat Langit was found in Hunut, subdistrict of Baguala. Inflorescence, young fruits and mature fruits were observed. Beside P. Tongkat Langit, we obtained P. Dewaka. Pisang Susu Ternate was found in Tulehu, subdistrict of Salahutu.

Looking for *Musa* was continued to Seram Island. We started to visit BPP Waimital, subdistrict of Kairatu. The detail information of distribution and varieties of *Musa* was found in this office. Under the guidance of Mr. Ucuk (one of the official of BPP Waimital), searching of *Musa* was carried out to Honitetu (Kairatu km 23). In this location we found P. Mulu Bebe/Gaba-gaba Putih in the home garden and P. Hutan-1 (Wild *Musa*/WM-1 at Kairatu km 20) in the forest near from the road. Another cultivars were P. Nenek Tua (Dwarf Cavendish), P. Raja, P. 40 Hari and P. Jawaka/Dewaka. Pisang Mas was found in Sokowati.

The exploration was continued to Kowatu, Rumberu. We got P. Kulit Bawang, P. Omol, P. Gaba-gaba/P. Bitu, P. Bodo Masak, P. Ekor Kusu, P. Jarum, P. Gabu, P. Abu-abu (kepok) and P. Raja. Besides bananas we found Horn Plantain in this area. This plantain was called P. Tanduk Rusa.

In the subdistrict of Piru, the exploration was started from Neniari. In this location, we discovered P. Langsat (P. Mas), P. Makasar Merah (P. Udang/Red Banana), P. Setan (P. Hutan-2/WM-2), P. Anim-1 and P. Anim-2 (Red Green Banana-like). P. Ternate, Pisang Haruku Gunung and the bacterial wilt disease-infected of P. Dewaka and P. Raja were found at Tanah Goyang. Another bananas were Pisang Haruku (P. Raja), P. Saba (Bluggoe), P. 40 hari, P. Bulan Terang (P. Mas) and P. Tanduk (Horn Plantain).

The searching of *Musa* was continued to subdistrict of Amahai (Masohi district), in the middle part of Seram Island. Two kinds of wild *Musa* (P. Hutan-3 and P. Hutan-4) were discovered along the way to Amahai. At the housing shelters garden of Makariki research station, some officials grew bananas brought from Sulawesi such as P. Sepatu Amora (P. Kepok with no male bud flower), P. Gapi (P. Barangan), P. Batu Sangir and P. Goroho Matahari.

In this exploration, we got twenty-eight accessions included wild *Musa*, cooking, dessert and plantain-like banana. At least three suckers per accessions were brought for collection.

During the exploration, we found the bacterial wilt disease widespread in all location visited. The susceptible varieties were P. Dewaka, P. Abu-abu, P. Raja and P. Susu Ternate. Beside of bacterial wilt disease, banana leaf streak was present at almost all varieties, but we did not recognize the diseases exactly yet. Some of them were Sigatoka disease, Cordana leaf streak disease, black cross disease and unknown leaf streak disease. Twelve leaf specimens and three fruit specimens of infected plant were brought for further characterization. The one of all varieties discovered that resistent to bacterial wilt disease is P. Sepatu Amora. In all of locations explored, Banana Buncy Top Virus did not exist.

CONCLUSION

In all visited location (the district of Ambon, Kairatu, Piru and Amahai), P. Raja, P. 40 Hari, P. Jawaka and P. Abu-abu is always existing. There were some various of characters and potential usages of banana, such as high

potential of yield (P. Haruku Gunung, P. Sepatu Amora, Jawaka Obie, P. Bodo Masak), resistant to bacterial disease (P. Sepatu Amora, for dessert bananas: P. Nona/Mas, P. Kulit Bawang, P. Omol, P. Batu Sangir, P. Susu Ternate, P. Jarum, P. Asam, P. Gapi), for cooking bananas (P. Jawaka, P. Gaba-gaba, P. Mulu Bebe, P. Kulit Bawang, P. Ekor Kusu, P. Raja, P. Gabu, P. Makasar Merah, P. Sepatu Amora, for a medicine: P. Tongkat Langit) and as a staple food (P. Goroho Matahari).

SUGGESTION

In the end of exploration, we had the information that there are some genetic variations in Buru and Saparua Islands, but we did not have time any more, so the next exploration should be carried out at Buru and Saparua Islands. The terms of descriptor list should be added, especially the fruit description.

ACKNOWLEDGMENT

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TONGKAT LANGIT

Accession code: IIE Date of collecting: 26 November 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: *Musa* Spesies/group: Fe'i

Subspesies/subgroup: Local name: Pisang Tongkat Langit

Genom: Synonym:
Origin: Hunut Village District: Baguala
Elevation: Soil pH: 6,2

Longitude: E 128.1833° Latitude: S 3.6443°

Plant discriptors Petiol/midrib/leaf

Leaf habit: intermediate Petiol canal leaf III: Wide with erect margins Pseudostem height: 5.24m Colour of midrib dorsal surface: light green Pseudostem circumference: 82 cm Colour of cigar leaf dorsal surface: green

Pseudostem aspect: Robust Pseudostem colour: Green

Pseudostem colour: Green
Pseudostem appearance: Shiny

Pigmentation of the underlying

pseudostem: green
Sap colour: watery
Number of suckers: 8

Bract apex shape:

Male flower Bract imbrication:

Compund tepal basic colour:

Compound tepal pigmentation:

Colour of the bract external face:

Colour of the bract internal face:

Lobe colour of compound tepal: Bract scars on rachis:

Free tepal appearance: Fading of colour on bract base: Style shape: Bract behaviour before failing: Stigma colour: Wax on the bract:

Ovary basic colour: Ovary pigmentation:

Fruit

Fruit position: Curved toward stalk

Number of hands per bunch: 5-8 Number of fruits per hand:: 10-12 Fruits length: 22-24 cm

Transverse section of fruits: Blunt-tipped Fruit pedicel length: 2.5 cm

Remains of flower relicts at fruit

Blotches on leaf of water suckers:

Inflorenscence/male bud

Peduncle length:

Bunch position:

Peduncle hairness:

none

hairless

No male bud

base of the style prominent

erect

red

with pulp

orange

apex: Mature fruit peel colour:

Pulp in fruit: Pulp colour in maturity:

Presence of seed with source of

pollen: Seed shape: -



Complementary information:

Fruits are boiled or burned before eaten, for diabetes therapy

JAWAKA

Accession code: IIIE Date of collecting: 26 November 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Jawaka Subspesies/subgroup: Genom: ABB/BBB Synonym: Pisang Dewaka

District: Baguala Origin: Hunut Village Elevation: Soil pH: 6.2 Longitude: E 128.1833° Latitude: \$3.6443°

Plant discriptors

Leaf habit: Margins curved inward intermediate Petiol canal leaf III: Pseudostem height: 5.30m Colour of midrib dorsal surface: light green

Petiol/midrib/leaf

Inflorenscence/male bud

Pseudostem circumference: 95 cm Colour of cigar leaf dorsal surface: Green Blotches on leaf of water suckers: Pseudostem aspect: robust None

Pseudostem colour: green Pseudostem appearance: shiny

Pigmentation of the underlying

Peduncle length: 65 cm pseudostem: Dark brown Peduncle hairness: hairless Sap colour: Bunch position: watery

hanging at angle 45° Number of suckers: Rachis type: present and male bud may be $^{2}/_{3}$ of the parent degenerate or persistent Development of suckers:

Blotches at the petiol base: small blotches Rachis position: falling vertically

Blotches colour: Dark brown Male bud type: normal Male bud shape: intermediate Bract apex shape: Male flower obtuse and split

Compund tepal basic colour: cream Bract imbrication: young bracts slightly overlap

Compound tepal pigmentation: no pigmentation Colour of the bract external face: red-purple Lobe colour of compound tepal: vellow Colour of the bract internal face: red

Free tepal appearance: simple folding under Bract scars on rachis: very prominent

Fading of colour on bract base: colour homogenous apex Style shape: straight Bract behaviour before failing: revolute

Stigma colour: cream Wax on the bract: very waxy Ovary basic colour: cream

Fruit

Ovary pigmentation:

parallel to the stalk Fruit position: Remains of flower relicts at fruit

no pigmentation

Number of hands per bunch: base of the style prominent apex: yellow Number of fruits per hand: 12 - 14Mature fruit peel colour:

Fruits length: 15 - 18 cmPulp in fruit: with pulp Transverse section of fruits: pronounced ridged Pulp colour in maturity: vellow

Presence of seed with source of Fruit apex: bottle-necked Fruit pedicel length: 20 mm pollen: Seed shape:

Complementary information:

Before eaten fruits are boiled or fried, Kepok-like but bigger, more cosmopolitous than Kepok in Maluku island, but the price is cheaper.

PISANG MULU BEBE/GABA-GABA PUTIH

Accession code: VE Date of collecting: 30 November 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Mulu Bebe Subspesies/subgroup: Genom: AAB Synonym: Pisang Gaba-gaba Putih

Sub district: Kairatu Origin: Honitetu Elevation: 175 asl. Soil pH: 5.0

Longitude: E 128.4333° Latitude: S 3.2333°

Petiol/midrib/leaf Plant discriptors

Leaf habit: Petiol canal leaf III: erect Pseudostem height: 2.7 m Colour of midrib dorsal surface: light green Pseudostem circumference: 55 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal Blotches on leaf of water suckers: None Yellowish green

Pseudostem colour: Pseudostem appearance: dull

Pigmentation of the underlying

pseudostem: brown Sap colour: watery Number of suckers:

Development of suckers: $^{1}/_{4}$ of the parent

Blotches at the petiol base: small blotches Dark brown

Blotches colour:

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: simple folding under

apex

Style shape: straight Stigma colour: cream Ovary basic colour: cream

Ovary pigmentation: no pigmentation

Straight with erect margins

Inflorenscence/male bud

Peduncle length: 65 cm Peduncle hairness: hairy

Bunch position: hanging vertically

present and male bud may be Rachis type:

degenerate or persistent falling vertically

Rachis position: Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate

Bract imbrication: old bracts overlap at apex

bract red-purple

Colour of the bract external face: Colour of the bract internal face: red very prominent

Bract scars on rachis:

Fading of colour on bract base: Bract behaviour before failing:

Wax on the bract:

colour homogenous revolute

Slightly waxy

Fruit

Fruit position:

stalk 6 - 8

10 mm

slightly ridged

Lengthly pointed

Number of hands per bunch: Number of fruits per hand: 14 - 1818 - 20 cm

Fruits length:

Transverse section of fruits:

Fruit apex:

Fruit pedicel length:

perpendicular to the Remains of flower relicts at fruit

apex:

Mature fruit peel colour:

Pulp in fruit: Pulp colour in maturity:

Presence of seed with source of

pollen:

Seed shape:

base of the style prominent

vellow with pulp vellow



Complementary information: Fruits are boiled or fried before eaten

PISANG BITU/GABA-GABA

Accession code: XE Date of collecting: 1 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: *Musa* Spesies/group:

Subspesies/subgroup: Local name: Pisang Bitu
Genom: AAB Synonym: Pisang Gaba-gaba

Origin: Kowatu-Rumberu Sub district: Kairatu Elevation: 70 asl. Soil pH: 5.9

Longitude: E 128.4265° Latitude: S 3.2455°

Plant discriptors Petiol/midrib/leaf

Leaf habit: Straight with erect margins Petiol canal leaf III: erect Pseudostem height: 4 m Colour of midrib dorsal surface: light green Pseudostem circumference: 72 cm Colour of cigar leaf dorsal surface: Green Blotches on leaf of water suckers: Pseudostem aspect: normal None

Pseudostem colour: Pink Pseudostem appearance: Dull

Pseudostem appearance: Dull Inflorenscence/male bud
Pigmentation of the underlying Peduncle length:

Pigmentation of the underlying pseudostem: Peduncle length: 50 cm
pseudostem: Peduncle hairness: Slightly hairy
Sap colour: watery Bunch position: hanging vertically
Number of suckers: 5 Rachis type: present and male bud may be

Development of suckers: $\frac{1}{2}$ of the parent degenerate or persistent

Blotches at the petiol base: small blotches Rachis position: falling vertically

Blotches colour: Dark brown Male bud type: normal Male bud shape: intermediate

Male flower Bract apex shape: intermediate

Compund tepal basic colour: cream Bract imbrication: old bracts overlap at apex Compound tepal pigmentation: no pigmentation bract

Lobe colour of compound tepal: yellow Colour of the bract external face: red-purple
Free tepal appearance: several folding under Colour of the bract internal face: Pink-purple

apex Bract scars on rachis: very prominent
Style shape: straight Fading of colour on bract base: colour homogenous

Style shape: straight Fading of colour on bract base: colour homoge Stigma colour: yellow Bract behaviour before failing: revolute Ovary basic colour: light green Wax on the bract: Slightly waxy

Ovary pigmentation: no pigmentation

Fruit

Fruit position: perpendicular to the stalk apex: base of the style prom

stalk apex: base of the style prominent Number of hands per bunch: 6 - 8 Mature fruit peel colour: yellow

Number of fruits per hand: 12 - 14 Pulp in fruit: with pulp Fruits length: 17 - 20 cm Pulp colour in maturity: yellow

Transverse section of fruits: slightly ridged Presence of seed with source of

Fruit apex: Lengthly pointed pollen: Fruit pedicel length: 26 mm Seed shape:



Complementary information: Fruits are boiled or fried before eaten

PISANG BODO MASAK

Accession code: XI E Date of collecting: 1 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Bodo Masak Subspesies/subgroup:

Genom: AAA? Synonym:

Origin: Kowatu-Rumberu Sub district: Kairatu

Elevation: 70 asl. Soil pH: 5.9

Longitude: E 128.4265° Latitude: S 3.2455°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Straight with erect margins Pseudostem height: 5.64 m Colour of midrib dorsal surface: light green Pseudostem circumference: 87 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal Blotches on leaf of water suckers: None

Pseudostem colour: Pink Pseudostem appearance: Dull

Pigmentation of the underlying

pseudostem: Dark brown Sap colour: watery Number of suckers:

 $^{1}/_{2}$ of the parent Development of suckers:

Blotches at the petiol base: Small blotches

Blotches colour: Dark brown

Male flower

Compund tepal basic colour: Cream Compound tepal pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight

Stigma colour: vellow Ovary basic colour: light green

Ovary pigmentation: no pigmentation

Inflorenscence/male bud

Rachis position:

Peduncle length: 65 cm Peduncle hairness: Slightly hairy Bunch position: hanging vertically Rachis type:

present and male bud may be degenerate or persistent

falling vertically

Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate

Bract imbrication: young bracts slightly overlap

Colour of the bract external face: red-purple Colour of the bract internal face: Pink-purple Bract scars on rachis: very prominent

Fading of colour on bract base: colour discontinuing toward

the base Bract behaviour before failing: revolute

Wax on the bract: Slightly waxy

Fruit

Fruit position: curved towards stalk

Number of hands per bunch: 6 - 8 Number of fruits per hand: 16 - 1814 - 18 cm

Fruits length:

Transverse section of fruits:

Fruit apex:

Fruit pedicel length:

Remains of flower relicts at fruit

slightly ridged

Blunt-tipped

14.13 mm

apex:

Mature fruit peel colour:

Pulp in fruit: Pulp colour in maturity:

Presence of seed with source of

pollen: Seed shape:

base of the style prominent vellow

with pulp vellow

Complementary information:

Difficult to become yellow-peel if the fruits are harvested at immature

PISANG OMOL

Accession code: IX E Date of collecting: 1 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Bodo Masak

Genom: AA Synonym:

Origin: Kowatu-Rumberu Sub district: Kairatu

Elevation: 80 asl. Soil pH: 5.9

Longitude: E 128.4264° Latitude: S 3.2456°

Plant discriptors	Petiol/midrib/leaf
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Leaf habit: intermediate Petiol canal leaf III: Pseudostem height: 2.18 m Colour of midrib dorsal surface: Pseudostem circumference: 39 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal

Pseudostem colour: green

Pseudostem appearance: Dull Pigmentation of the underlying

pseudostem: brown

Sap colour: watery Number of suckers:

3/4 of the parent Development of suckers:

Blotches at the petiol base: Small blotches Blotches colour: brown

Male flower

Compund tepal basic colour: Cream

Compound tepal pigmentation: no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight Stigma colour: vellow Ovary basic colour: light green

Ovary pigmentation: no pigmentation

wide with erect margins light green

Blotches on leaf of water suckers:

Inflorenscence/male bud

Peduncle length: 60 cm Peduncle hairness: Slightly hairy Bunch position: hanging vertically Rachis type:

present and male bud may be

persistent style

degenerate or persistent

Rachis position: With a curve Male bud type: Normal Male bud shape: Intermediate Bract apex shape: Intermediate

Bract imbrication: old bracts overlap at apex

bract Colour of the bract external face: light green Colour of the bract internal face: vellow

Bract scars on rachis: very prominent Fading of colour on bract base: colour homogenous

Bract behaviour before failing: revolute Wax on the bract: without wax

Fruit

Fruit position: Curved upward Remains of flower relicts at fruit Number of hands per bunch:

Number of fruits per hand: 12 - 14 Mature fruit peel colour: Fruits length: 7 - 12 cm Pulp in fruit:

Transverse section of fruits: slightly ridged Pulp colour in maturity: Fruit apex: rounded Presence of seed with source of Fruit pedicel length: 10 mm

pollen: Seed shape:

Yellow with pulp Cream



Complementary information:

Dessert banana, soft pulp and suitable for old people

PISANG KULIT BAWANG

Accession code: X E Date of collecting: 1 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Kulit Bawang Subspesies/subgroup:

Genom: AA Synonym:

Origin: Kowatu-Rumberu Sub district: Kairatu

Elevation: 80 asl. Soil pH: 5.9

Longitude: E 128.4264° Latitude: S 3.2456°

l/midrib/leaf
)

Leaf habit: intermediate Petiol canal leaf III: wide with erect margins Pseudostem height: 3.1 m Colour of midrib dorsal surface: light green Pseudostem circumference: 50 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal Blotches on leaf of water suckers:

Pseudostem colour: Pink

Pseudostem appearance: Dull

Pigmentation of the underlying

pseudostem: brown Sap colour: waterv Number of suckers:

Development of suckers: 3/4 of the parent

Blotches at the petiol base: Small blotches Blotches colour: brown

Male flower

Compund tepal basic colour: Cream

Compound tepal pigmentation: no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight

Stigma colour: vellow Ovary basic colour: light green Ovary pigmentation: no pigmentation

Fruit

Fruit position: Curved upward Number of hands per bunch:

Number of fruits per hand: 10 - 12 Fruits length: 9 - 12 cm Transverse section of fruits: slightly ridged

Fruit apex: Bottle necked

Fruit pedicel length: 12 mm

Bract imbrication:

Bract scars on rachis:

Wax on the bract:

Inflorenscence/male bud

Peduncle length: 60 cm Peduncle hairness: Slightly hairy Bunch position: hanging vertically present and male bud may be Rachis type:

degenerate or persistent

Rachis position: With a curve Male bud type: Normal Male bud shape: Intermediate Bract apex shape: Intermediate

old bracts overlap at apex

bract Red-pink Pink

Very prominent

colour discontinuing toward the base

revolute slightly waxy

Cream

Remains of flower relicts at fruit

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

persistent style Mature fruit peel colour: Yellow Pulp in fruit: with pulp

Presence of seed with source of

Pulp colour in maturity:

pollen: Seed shape:



Complementary information:

Dessert and boiled banana, the colour of mature fruits are yellow and purple line along the ridges.

PISANG EKOR KUSU

Accession code: XIII E Date of collecting: 1 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Ekor Kusu Subspesies/subgroup:

Genom: AA Synonym:

Origin: Kowatu-Rumberu Sub district: Kairatu

Elevation: 70 asl. Soil pH: 5.9

Longitude: E 128.4265° Latitude: S 3.2455°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Straight with erect margins Pseudostem height: 2.78 m Colour of midrib dorsal surface: Pseudostem circumference: 38 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal Blotches on leaf of water suckers: None Pink

Pseudostem colour: Pseudostem appearance: Dull

Pigmentation of the underlying

pseudostem: brown Sap colour: waterv Number of suckers:

Development of suckers: 3/4 of the parent

Small blotches Blotches at the petiol base: Blotches colour: Dark brown

Male flower

Compund tepal basic colour: Cream

Compound tepal pigmentation: no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight

Stigma colour: vellow Ovary basic colour: light green Ovary pigmentation: no pigmentation

Number of hands per bunch:

Number of fruits per hand:

Fruit position:

Fruits length:

Perpendicular to the

stalk

10 - 12 cm slightly ridged

10 - 12

Transverse section of fruits: Fruit apex: Rounded

Fruit pedicel length: 16 mm light green

Inflorenscence/male bud

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

Peduncle length: 65 cm Peduncle hairness: Slightly hairy Bunch position: hanging vertically Rachis type:

present and male bud may be degenerate or persistent

With a curve Normal Intermediate Intermediate

old bracts overlap at apex

Bract Red-pink Pink

Very prominent

colour discontinuing toward

the base Revolute slightly waxy

Fruit

5

Remains of flower relicts at fruit

Rachis position:

Male bud type:

Male bud shape:

Bract apex shape:

Bract imbrication:

Bract scars on rachis:

Wax on the bract:

Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity: Presence of seed with source of

pollen: Seed shape:

Yellow

with pulp vellow

persistent style



Complementary information:

Boiled banana, the peduncle is long similar to nail of *Kus-kus*.

PISANG HARUKU

Accession code: XIV E Date of collecting: 1 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Haruku Genom: AAB Synonym: Pisang Raja Sub district: Kairatu Origin: Kowatu-Rumberu

Elevation: 80 asl. Soil pH: 5.9

Longitude: E 128.4263° Latitude: S 3.2457°

green

Petiol/midrib/leaf Plant discriptors

Leaf habit: Dropping Petiol canal leaf III: straight with erect margins 5.74 m Pseudostem height: Colour of midrib dorsal surface: light green Pseudostem circumference: 101 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: robust

Pseudostem appearance: dull

Pseudostem colour:

Pigmentation of the underlying pseudostem: dark brown Sap colour: milky white

Number of suckers:

Development of suckers: 3/4 of the parent

Blotches at the petiol base: sparse blotching

Blotches colour:

Male flower

Compund tepal basic colour: cream Compound tepal pigmentation: no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under apex

Style shape: straight Stigma colour: vellow Ovary basic colour: cream

Ovary pigmentation: no pigmentation

Blotches on leaf of water suckers: without blotches

Inflorenscence/male bud

Peduncle length: 31-60 cm Peduncle hairness: very hairy Bunch position: hanging vertically

present and male bud may be Rachis type:

degenerate or persistent

falling vertically Rachis position:

Male bud type: normal Male bud shape: ovoid

Bract apex shape: obtuse and split

Bract imbrication: young bracts greatly overlap

Colour of the bract external face: red-purple Colour of the bract internal face: red

Bract scars on rachis: very prominent colour homogenous Fading of colour on bract base:

Bract behaviour before failing: not revolute Wax on the bract: very waxy

Fruit

Fruit position: curved upward Number of hands per bunch:

Number of fruits per hand: 16 - 17Fruits length: 20 - 25 cmTransverse section of fruits: slightly ridged

Fruit apex: pointed 19 mm

Fruit pedicel length:

Remains of flower relicts at fruit

apex: Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity:

Presence of seed with source of

Seed shape:

without any floral relicts

vellow with pulp vellow

pollen:



Complementary information:

The most popular cooking banana in Maluku, the size of finger is bigger than P. Raja in Java and Sumatera.

PISANG JARUM

Accession code: XII E Date of collecting: 1 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Jarum

Genom: AA Synonym:

Sub district: Kairatu Origin: Kowatu-Rumberu Elevation: 70 asl Soil pH: 5.7

Longitude: E 128.4265° Latitude: S 3.2455°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: straight with erect margins pink-purple Pseudostem height: 3.06 m Colour of midrib dorsal surface: Pseudostem circumference: 40 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: Blotches on leaf of water suckers: little or narrow blotches normal

Pseudostem colour: Pink

Pseudostem appearance: Dull Pigmentation of the underlying

pseudostem: purple Sap colour: milky white

Number of suckers:

Development of suckers: taller than parent Blotches at the petiol base: large blotches

Blotches colour: dark brown

Male flower

Compund tepal basic colour: Cream

Compound tepal pigmentation: no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight Stigma colour: vellow Ovary basic colour: light green Ovary pigmentation: no pigmentation

Fruit

Fruit position: curved upward

Number of hands per bunch: Number of fruits per hand: 11-12 Fruits length: 8.5 cm Transverse section of fruits: rounded bottle-necked Fruit apex:

Fruit pedicel length: 10 mm Inflorenscence/male bud

31-60 cm Peduncle length: Peduncle hairness: very hairy Bunch position:

curve at angle 45° Rachis type: present and male bud may be

degenerate or persistent

Rachis position: with a curve Male bud type: normal Male bud shape: like a top Bract apex shape: small shoulder

Bract imbrication: old bracts overlap at apex

bract Colour of the bract external face: pink-purple Colour of the bract internal face: cream

Bract scars on rachis: very prominent

Fading of colour on bract base: colour discontinuing towards the base

Bract behaviour before failing: revolute Wax on the bract: slightly waxy

Remains of flower relicts at fruit

base of the style prominent apex:

Mature fruit peel colour: yellow Pulp in fruit: with pulp Pulp colour in maturity: vellow

Presence of seed with source of pollen:

Seed shape:



Complementary information:

The most popular dessert banana in Maluku, the pedicels surface are hairy

PISANG GABU

Accession code: XV E Date of collecting: 1 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Gabu

Genom: AAB? Synonym:

Origin: Kowatu-Rumberu Sub district: Kairatu

Elevation: 50 asl. Soil pH: 4.6

Longitude: E 128.4255° Latitude: S 3.2465°

green

Brown

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: straight with erect margins Pseudostem height: 4.6 m Colour of midrib dorsal surface: Light green Pseudostem circumference: 97 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal

Pseudostem appearance: Dull

Pigmentation of the underlying pseudostem: Sap colour:

Pseudostem colour:

milky white Number of suckers:

½ than parents Development of suckers:

small blotches Blotches at the petiol base: dark brown

Blotches colour:

Male flower

Compund tepal basic colour: Cream Compound tepal pigmentation:

no pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

Apex Style shape: straight Stigma colour: vellow

Ovary basic colour: Ovary pigmentation:

Fruit

Fruit position: curved toward stalk

Number of hands per bunch: 6 - 8 Number of fruits per hand: 16 - 18Fruits length: 8.5 cm

Transverse section of fruits:

Fruit apex:

Fruit pedicel length: 15 mm

Blotches on leaf of water suckers:

Inflorenscence/male bud

Peduncle length: 40 cm Slightly hairy Peduncle hairness: Bunch position: Hanging vertically present and male bud may be Rachis type:

degenerate or persistent

Falling vertically

Rachis position: Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate

Bract imbrication: old bracts overlap at apex

bract Colour of the bract external face: red-purple Colour of the bract internal face: Pink-purple Bract scars on rachis: very prominent Fading of colour on bract base:

colour discontinuing towards

the base revolute slightly waxy

Remains of flower relicts at fruit

light green

no pigmentation

Mature fruit peel colour: Pulp in fruit:

Slightly ridged Pulp colour in maturity: Blunt-tipped Presence of seed with source of

> pollen: Seed shape:

base of the style prominent

vellow with pulp vellow

Bract behaviour before failing:

Wax on the bract:



Complementary information: Mature fruits are boiled before eaten

PISANG LANGSAT

Accession code: XVI E Date of collecting: 2 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: sucrier Local name: Pisang Langsat

Synonym: Pisang Mas, Pisang Nona, Pisang Bulan Terang Genom: AA

Origin: Neniari Sub district: Piru Elevation: 80 asl. Soil pH: 5.2 Longitude: E 128.2000° Latitude: S 3.0666°

> Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: straight with erect margins Pseudostem height: 2.77 m Colour of midrib dorsal surface: medium green Pseudostem circumference: 94 cm Colour of cigar leaf dorsal surface: green

Peduncle length:

Bunch position:

Rachis position:

Male bud type:

Male bud shape:

Bract apex shape:

Bract imbrication:

Bract scars on rachis:

Rachis type:

Peduncle hairness:

Pseudostem aspect: normal Pseudostem colour: yellowish green

Pseudostem appearance: shiny

Pigmentation of the underlying

pseudostem: red-purple Sap colour: milky white Number of suckers:

3/4 of the parent Development of suckers: Blotches at the petiol base: sparse blotching

Blotches colour: brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

apex Style shape: straight Stigma colour: vellow

Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: curved upward Number of hands per bunch: 7 - 9 apex:

Number of fruits per hand: 14 -18 Fruits length: 8.4 cm

Transverse section of fruits: rounded Fruit apex: blunt-tipped

Fruit pedicel length:

11 mm

Fading of colour on bract base:

Bract behaviour before failing:

Wax on the bract:

Colour of the bract external face:

Colour of the bract internal face:

Blotches on leaf of water suckers:

Inflorenscence/male bud

40 cm

normal

very hairy

With a curve

intermediate

intermediate

apex bract

red-puple

very prominent

no sign of wax

colour discontinuing towards

cream

the base

revolute

Hanging vertically present and male bud

may be degenerated

old bracts overlap at

Remains of flower relicts at fruit

persistent style Mature fruit peel colour: bright yellow Pulp in fruit: with pulp Pulp colour in maturity: vellow

Presence of seed with source of pollen:

Seed shape:

Complementary information:

Another sinonym of this banana is P. Mas (Java), the taste of flesh is similar to P. Berlin but sweeter.

PISANG MAKASAR MERAH

Accession code: XVII E Date of collecting: 2 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Red Green Banana Local name: Pisang Makasar Merah

Synonym: Pisang Kidang, Pisang Udang, Pisang Tembaga Genom: AAA

Origin: Neniari Sub district: Piru Elevation: 80 asl. Soil pH: 5.2

Longitude: E 128.2000° Latitude: S 3.0666°

Red purple

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Wide erect margins 4.22 m Pseudostem height: Colour of midrib dorsal surface: medium green Pseudostem circumference: 90 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers:

Pseudostem appearance: dull

Pigmentation of the underlying

Pseudostem colour:

pseudostem: brown Sap colour: milky white

Number of suckers:

Development of suckers: 3/4 of the parent Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

apex straight

blunt-tipped

15 mm

Style shape: Stigma colour: vellow Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: Parallel to the stalk Number of hands per bunch: 6 - 8

Number of fruits per hand: 11 - 17 cm Fruits length: 8 - 16 cm rounded

Transverse section of fruits:

Fruit apex:

Fruit pedicel length:

Remains of flower relicts at fruit

Wax on the bract:

Bract scars on rachis:

apex: Mature fruit peel colour:

Pulp in fruit: Pulp colour in maturity:

Presence of seed with source of pollen:

Seed shape:

50 cm very hairy

Hanging vertically present and male bud may be degenerated

Rachis position: Falling vertically Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate Bract imbrication: old bracts overlap at

Inflorenscence/male bud

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

Peduncle length:

Bunch position:

Rachis type:

Peduncle hairness:

apex of bud red-puple Pink purple

very prominent colour discontinuing towards

the base Revolute

Slightly waxy

persistent style

Pink purple

with pulp

ivorv





PISANG ANIM-1

Accession code: XX E Date of collecting: 2 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Anim-1 Synonym: Pisang Goroho Matahari Genom: AAA?

Reddish green

Origin: Neniari Sub district: Piru Elevation: 80 asl. Soil pH: 5.2

Longitude: E 128.2000° Latitude: S 3.0666°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Pseudostem height: 3.58 m Colour of midrib dorsal surface: medium green Pseudostem circumference: 54 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers:

Pseudostem appearance: dull

Pigmentation of the underlying pseudostem: brown

Pseudostem colour:

Sap colour: milky white

Number of suckers:

Development of suckers: 3/4 of the parent

Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

> apex straight

Stigma colour: vellow Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: perpendicular to the stalk

> 3 - 4 8 - 12 cm

Fruits length:

Transverse section of fruits: Fruit apex:

Number of hands per bunch:

Number of fruits per hand:

Fruit pedicel length:

Style shape:

16 - 18 cm

rounded rounded 20 mm

Bract scars on rachis: Fading of colour on bract base:

Colour of the bract external face:

Colour of the bract internal face:

Bract behaviour before failing:

Wax on the bract:

Remains of flower relicts at fruit

Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity: Presence of seed with source of

pollen: Seed shape: Wide erect margins

Inflorenscence/male bud

Peduncle length:

Bunch position:

Rachis position: Male bud type:

Male bud shape:

Bract apex shape:

Bract imbrication:

Rachis type:

Peduncle hairness:

60 cm very hairy

Hanging vertically present and male bud may be degenerated

Falling vertically normal intermediate

intermediate old bracts overlap at

apex of bud red-puple Pink

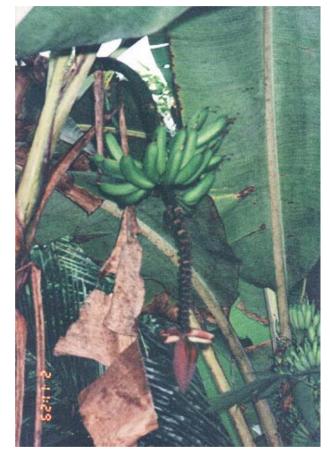
very prominent

colour discontinuing towards

the base Revolute Slightly waxy

persistent style

with pulp



Complementary information:

PISANG ANIM-2

Accession code: XX E Date of collecting: 2 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Red Green Banana Local name: Pisang Anim-2

Synonym: Pisang Godok, Pisang Rojomolo Genom: AAA

Origin: Neniari Sub district: Piru Elevation: 80 asl. Soil pH: 5.2

Longitude: E 128.2000° Latitude: S 3.0666°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Wide erect margins Pseudostem height: 4.08 m Colour of midrib dorsal surface: medium green Pseudostem circumference: Colour of cigar leaf dorsal surface: 86 cm green Pseudostem aspect: normal Blotches on leaf of water suckers: none Pseudostem colour: green

Pseudostem appearance: dull Pigmentation of the underlying

pseudostem: brown Sap colour: milky white

Number of suckers:

Development of suckers: 3/4 of the parent Blotches at the petiol base: sparse blotching

Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

> apex straight

> > blunt-tipped

Stigma colour: vellow Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: Curved upward Number of hands per bunch: 6 - 8

Number of fruits per hand: 12 - 18 cmFruits length: 13 - 16 cm Transverse section of fruits: rounded

Fruit apex:

Style shape:

Fruit pedicel length: 11 mm Remains of flower relicts at fruit

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

Inflorenscence/male bud

Peduncle length:

Bunch position:

Rachis position:

Male bud type:

Male bud shape:

Bract apex shape:

Bract imbrication:

Bract scars on rachis:

Wax on the bract:

Rachis type:

Peduncle hairness:

apex:

Mature fruit peel colour:

Pulp colour in maturity: Presence of seed with source of

Seed shape:

Base of the style prominent vellow Pulp in fruit: with pulp

ivorv

50 cm

normal

very hairy

Hanging vertically present and male bud

may be degenerated

old bracts overlap at

colour discontinuing towards

Falling vertically

intermediate

intermediate

apex of bud

very prominent

red-puple

the base

Revolute

Slightly waxy

Pink

pollen:



Complementary information:

Dessert or cooking banana, similar to Pisang Makasar Putih (Maluku) or Red-green banana

Accession code: IV E Date of collecting: 30 November 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: *Musa* Spesies/group: *acumintata* Subspesies/subgroup: Local name: Pisang Hutan-1

Genom: AAw Synonym:

Origin: Honitetu Sub district: Kairatu

Elevation: 175 asl. Soil pH: 5.0

Longitude: E 128.4333° Latitude: S 3.2333°

Plant discriptors		Petiol/midrib/leaf	
Leaf habit:	intermediate	Petiol canal leaf III:	Wide erect margins
Pseudostem height:	5.2 m	Colour of midrib dorsal surface:	Medium green
Pseudostem circumference:	57 cm	Colour of cigar leaf dorsal surface:	Green
Pseudostem aspect:	normal	Blotches on leaf of water suckers:	
Pseudostem colour:	green		
Pseudostem appearance:	Shiny	Inflorenscence/male bud	
Pigmentation of the underlying		Peduncle length:	30 cm
pseudostem:	brown	Peduncle hairness:	very hairy
Sap colour:	watery	Bunch position:	horizontal
Number of suckers:	6	Rachis type:	Present and male bud

Number of suckers:
6 Rachis type:
Present and male bu
Development of suckers:
3/4 of the parent
Blotches at the petiol base:
Blotches colour:
Dark brown
Agachis type:
Present and male bu
may be degenerated
horizontal
Normal

Blotches colour:

Dark brown

Male bud type:

Normal

intermediate

intermediate

Bract apex shape:

Compund tepal basic colour:

Cream

Male bud type:

Normal

intermediate

intermediate

old bracts overlap at

Compound tepal pigmentation:

Lobe colour of compound tepal:

Free tepal appearance:

No pigmentation

Colour of the bract external face:

Several folding under

Colour of the bract internal face:

Colour of the bract internal face:

Pink

apex Bract scars on rachis: very prominent
Style shape: straight Fading of colour on bract base: colour discontinuing towards

Stigma colour: yellow the base
Ovary basic colour: cream Bract behaviour before failing: Revolute
Ovary pigmentation: No pigmentation Wax on the bract: Waxy

Fruit

4.5 mm

Fruit pedicel length:

Fruit position:

Curved upward

Remains of flower relicts at fruit

apex:

Base of the style prominent

Number of fortic and bank at 16, 18 are a second and a se

Number of fruits per hand: 16 – 18 cm Mature fruit peel colour: Yellow Fruits length: 14.2 cm Pulp in fruit: with pulp

Transverse section of fruits: Slightly ridge Pulp colour in maturity: Ivory Fruit apex: Presence of seed with source of

pollen: > 20 Seed shape: Piramid



Complementary information:

Accession code: IV E Date of collecting: 2 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: acumintata Genus: Musa

Subspesies/subgroup: Local name: Pisang Setan

Genom: AAw Synonym:

Sub district: Piru Origin: Neniari Elevation: 80 asl. Soil pH: 4.6

Longitude: E 128.2000° Latitude: S 3.0666°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Wide erect margins 3.97 m Pseudostem height: Colour of midrib dorsal surface: Medium green Pseudostem circumference: 45 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: slender

Pseudostem colour: Greenish pink

Pseudostem appearance: Shiny Pigmentation of the underlying

pseudostem: brown Sap colour: waterv

Number of suckers:

1/4 of the parent Development of suckers: Blotches at the petiol base: sparse blotching

Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under apex

Style shape: straight Stigma colour: vellow

Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: Curved upward

Number of hands per bunch:

Number of fruits per hand: 10 - 12 cmFruits length: 7.0 cm Transverse section of fruits:

Fruit apex:

Fruit pedicel length:

10 mm

apex:

Mature fruit peel colour: Pulp in fruit:

Bract scars on rachis:

Wax on the bract:

Fading of colour on bract base:

Bract behaviour before failing:

Remains of flower relicts at fruit

Slightly ridge Pulp colour in maturity: pointed Presence of seed with source of

> pollen: Seed shape:

Blotches on leaf of water suckers:

Inflorenscence/male bud

Peduncle length: 40 cm Peduncle hairness: very hairy Bunch position: horizontal Rachis type:

Present and male bud may be degenerated

Falling vertically Rachis position: Male bud type: Normal Male bud shape: Like a top Bract apex shape: intermediate

old bracts overlap at Bract imbrication: apex of bud

Colour of the bract external face: red-puple Colour of the bract internal face: Pink

very prominent

colour discontinuing towards the base

Revolute Waxy

Base of the style prominent

Yellow with pulp Cream

> 20 Piramid



Complementary information:

Accession code: XXIV E Date of collecting: 4 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: Musa Spesies/group: acumintata Subspesies/subgroup: banksii? Local name: Pisang Hutan-3

Genom: AAw Synonym:

Origin: Waitala Sub district: Kairatu

Elevation: 10 asl. Soil pH: 3.7

Longitude: E 128.6833° Latitude: S 3.3333°

apex

straight

yellow

cream

No pigmentation

Plant discriptors		Petiol/midrib/leaf	
Leaf habit:	intermediate	Petiol canal leaf III:	Wide erect margins
Pseudostem height:	4 m	Colour of midrib dorsal surface:	Medium green
Pseudostem circumference:	68 cm	Colour of cigar leaf dorsal surface:	Green
Pseudostem aspect:	slender	Blotches on leaf of water suckers:	none
Pseudostem colour:	green		
Pseudostem appearance:	Shiny	Inflorenscence/male bud	
Pigmentation of the underlying		Peduncle length:	30 cm
pseudostem:	pink	Peduncle hairness:	very hairy
Sap colour:	watery	Bunch position:	horizontal
Number of suckers:	4	Rachis type:	Present and male bud
Development of suckers:	3/4 of the parent		may be degenerated
Blotches at the petiol base:	sparse blotching	Rachis position:	horizontal
Blotches colour:	brown	Male bud type:	Normal
		Male bud shape:	intermediate
Male flower		Bract apex shape:	intermediate
Compund tepal basic colour:	cream	Bract imbrication:	old bracts overlap at
Compound tepal pigmentation:	No pigmentation		apex of bud
Lobe colour of compound tepal:	yellow	Colour of the bract external face:	yellow
Free tepal appearance:	several folding under	Colour of the bract internal face:	Whitish yellow

Bract scars on rachis:

Wax on the bract:

Seed shape:

Fading of colour on bract base:

Bract behaviour before failing:

very prominent

Slightly waxy

Revolute

Piramid

colour homogenous

Style shape:

Stigma colour:

Ovary basic colour:

Ovary pigmentation:

Fruit Fruit position: Curved upward Remains of flower relicts at fruit Number of hands per bunch: apex: None Number of fruits per hand: 16 - 18 cmMature fruit peel colour: Yellow Fruits length: 10.5 cm Pulp in fruit: with pulp Transverse section of fruits: Pulp colour in maturity: rounded Ivory Fruit apex: pointed Presence of seed with source of Fruit pedicel length: 10 mm pollen: > 20



Complementary information:

Fruits are seeded and the colour of male bud flower is yellow.

Accession code: XXV E Date of collecting: 4 December 1996

 $Collectors: Edison\ H.S.,\ Agus\ Sutanto,\ Catur\ Hermanto,\ Tahan\ Uji\ and\ Nasaruddin\ Razak$

Genus: *Musa* Spesies/group: *acumintata* Subspesies/subgroup: *malacensis*? Local name: Pisang Hutan-4

Genom: AAw Synonym:

Origin: Waina Sub district: Amahai Elevation: 5m asl. Soil pH: 4.6

Longitude: E 128.8635° Latitude: S 3.2016°

green

Plant discriptors Petiol/midrib/leaf

Leaf habit: intermediate Petiol canal leaf III: Straight with erect margins
Pseudostem height: 3.68 m Colour of midrib dorsal surface: Medium green
Pseudostem circumference: 47 cm Colour of cigar leaf dorsal surface: Green
Pseudostem aspect: Blotches on leaf of water suckers:

Pseudostem appearance: Shiny Inflorenscence/male bud

Pigmentation of the underlying pseudostem: pink Peduncle length: 30 cm

pseudostem: pink Peduncle hairness: very hairy
Sap colour: watery Bunch position: horizontal

Number of suckers: 2 Rachis type: Present and male bud
Development of suckers: 1/4 of the parent may be degenerated

Blotches at the petiol base: sparse blotching Rachis position: horizontal Blotches colour: brown Male bud type: Normal Male bud shape: intermediate Bract apex shape: intermediate

Compund tepal basic colour: cream Bract imbrication: old bracts overlap at

Compound tepal pigmentation: No pigmentation
Lobe colour of compound tepal: yellow Several folding under Colour of the bract external face: Several folding under Colour of the bract internal face: Pink-purple

apex Bract scars on rachis: very prominent
Style shape: straight Fading of colour on bract base: colour discontinuing towards

Style snape: straight Fading of colour on bract base: colour discontinuing toward the base

Ovary basic colour: cream Bract behaviour before failing: Revolute Ovary pigmentation: No pigmentation Wax on the bract: Waxy

Fruit

Pseudostem colour:

Fruit position:

Curved upward

Number of hands per bunch:

Number of fruits per hand:

Curved upward

Remains of flower relicts at fruit

apex:

None

Mature fruit peel colour:

Yellov

Number of fruits per hand: 18 – 20 cm Mature fruit peel colour: Yellow Fruits length: 7.4 cm Pulp in fruit: with pulp Transverse section of fruits: rounded Pulp colour in maturity: Ivory

Fruit apex: pointed Presence of seed with source of

Fruit pedicel length: 20 mm pollen: > 20 Seed shape: Piramid



Complementary information:

PISANG TERNATE

Accession code: XXII E Date of collecting: 3 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Ternate Svnonvm: Pisang Asam Genom: AAB? Origin: Tanah Goyang Sub district: Piru Elevation: 3 asl. Soil pH: 5.5

Longitude: E 128.0489° Latitude: S 3.2879°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: Wide erect margins Pseudostem height: 4.23 m Colour of midrib dorsal surface: medium green Pseudostem circumference: 88 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers: none Pseudostem colour: Reddish green

Pseudostem appearance: dull

Pigmentation of the underlying

pseudostem: brown Sap colour: milky white

Number of suckers:

Development of suckers: 1/4 of the parent Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

apex Style shape: straight Stigma colour: vellow

Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: Curved upward Number of hands per bunch: 8 - 10Number of fruits per hand: 16 - 20 cm

pointed

Fruits length: 9.5 - 10 cmTransverse section of fruits: Slightly ridged

Fruit apex:

Fruit pedicel length: 20 mm

Inflorenscence/male bud

Peduncle length: 30 cm Peduncle hairness: slightly hairy Bunch position: Hanging with engle 45°

present and male bud Rachis type: may be degenerated

With a curve

Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate Bract imbrication: old bracts overlap at apex of bud

Colour of the bract external face: red-puple Colour of the bract internal face: Pink very prominent

Bract scars on rachis:

Rachis position:

Fading of colour on bract base: colour discontinuing towards the base

Revolute Slightly waxy

Bract behaviour before failing: Wax on the bract:

Remains of flower relicts at fruit

apex: Mature fruit peel colour:

Pulp in fruit: Pulp colour in maturity:

Presence of seed with source of

pollen: Seed shape: Base of the style prominent

vellow with pulp ivorv



Complementary information:

Dessert or cooking banana, the taste of pulp is slightly sour

PISANG HARUKU GUNUNG

Accession code: XXIII E Date of collecting: 3 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Haruku Gunung

Genom: AAA? Synonym: Origin: Tanah Goyang Sub district: Piru Elevation: 3 asl. Soil pH: 4.4 Longitude: E 128.0489° Latitude: S 3.2879°

Plant discriptors

Petiol/midrib/leaf intermediate Petiol canal leaf III:

Leaf habit: Pseudostem height: 5.06 m Pseudostem circumference: 96 cm Pseudostem aspect: normal

Pseudostem colour: Reddish green

Pseudostem appearance: dull

Pigmentation of the underlying

pseudostem: Sap colour:

Number of suckers:

3/4 of the parent Development of suckers: Blotches at the petiol base: Dark brown

Blotches colour:

sparse blotching

brown

milky white

13 - 15 cm

14 - 20 cm

Bottle neck

15 mm

Slightly ridged

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: No pigmentation Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

apex Style shape: straight Stigma colour: vellow

Ovary basic colour: cream

Ovary pigmentation: No pigmentation

Fruit

Fruit position: Parallel toward stalk

Number of hands per bunch:

Number of fruits per hand:

Fruits length:

Transverse section of fruits:

Fruit apex:

Fruit pedicel length:

Peduncle hairness: Bunch position:

Rachis type:

Rachis position: Male bud type:

Male bud shape: Bract apex shape:

Bract imbrication:

Colour of the bract external face: Colour of the bract internal face:

Bract scars on rachis:

Fading of colour on bract base:

Bract behaviour before failing:

Wax on the bract:

Remains of flower relicts at fruit

apex:

Mature fruit peel colour:

Pulp in fruit:

Pulp colour in maturity: Presence of seed with source of

pollen: Seed shape:

Straight erect margins Medium green

Green

Colour of cigar leaf dorsal surface: Blotches on leaf of water suckers:

Inflorenscence/male bud

Colour of midrib dorsal surface:

Peduncle length: 65 cm slightly hairy Hanging vertically present and male bud

may be degenerated Falling vertically

normal intermediate intermediate old bracts overlap at

apex of bud red-puple Pink

very prominent

colour discontinuing towards the base

Revolute Slightly waxy

Base of the style prominent

vellow with pulp vellow



Complementary information:

Dessert or cooking banana, the size of finger bigger than P. Raja/P. Haruku.

PISANG JAWAKA OBIE

Accession code: XXIII E Date of collecting: 3 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: Musa Spesies/group:

Local name: Pisang Jawaka Obie Subspesies/subgroup:

Genom: ABB/BBB Synonym: Pisang Jawaka

Sub district: Piru Origin: Tanah Goyang Elevation: 3 asl. Soil pH: 4.8

Longitude: E 128.0489° Latitude: S 3.2879°

Plant discriptors Petiol/midrib/leaf

Leaf habit: Margins curved inward intermediate Petiol canal leaf III: Pseudostem height: 6.60 m Colour of midrib dorsal surface: light green Pseudostem circumference: 155 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: robust

Pseudostem colour: green Pseudostem appearance: shiny

Pigmentation of the underlying

pseudostem: Dark brown Sap colour: watery Number of suckers:

Development of suckers: 3/4 of the parent

Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: simple folding under

apex Style shape: straight Stigma colour: cream Ovary basic colour: cream

Ovary pigmentation: no pigmentation

Fruit

Fruit position: parallel to the stalk

Number of hands per bunch: 9 - 10 Number of fruits per hand: 12 - 14Fruits length: 17 cm

Transverse section of fruits: pronounced ridged Fruit apex: bottle-necked

Fruit pedicel length: 37 mm Remains of flower relicts at fruit

apex:

Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity: Presence of seed with source of

Seed shape:

Blotches on leaf of water suckers: None

Inflorenscence/male bud

Peduncle length: 65 cm Peduncle hairness: hairless

Bunch position: hanging at angle 45° Rachis type: present and male bud may be

degenerate or persistent

Rachis position: falling vertically

Male bud type: normal Male bud shape: intermediate Bract apex shape: obtuse and split

Bract imbrication: young bracts slightly overlap

red-purple red

Colour of the bract external face: Colour of the bract internal face:

very prominent Bract scars on rachis: colour homogenous

Fading of colour on bract base: revolute Bract behaviour before failing: very waxy Wax on the bract: 65 cm

Base of the style prominent

yellow with pulp vellow

pollen:



Complementary information:

PISANG SEPATU AMORA

Accession code: XIX E Date of collecting: 5 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: Musa Spesies/group:

Local name: Pisang Sepatu Amora Subspesies/subgroup:

Genom: ABB/BBB Synonym: Pisang Kepok Origin: Makariki Sub district: Amahai Elevation: 10 asl. Soil pH: 5.9

Longitude: E 128.9366° Latitude: S 3.3107°

Plant discriptors Petiol/midrib/leaf

Leaf habit: intermediate Margins curved inward Petiol canal leaf III: Pseudostem height: 4.68 m Colour of midrib dorsal surface: light green Pseudostem circumference: 99 cm Colour of cigar leaf dorsal surface: Green Blotches on leaf of water suckers: Pseudostem aspect: robust None

Pseudostem colour: green Pseudostem appearance: shiny

Pigmentation of the underlying

pseudostem: Blue-purple Sap colour: watery

Number of suckers:

Development of suckers: 3/4 of the parent Blotches at the petiol base: sparse blotching

Blotches colour: Blue-purple

Male flower

Compund tepal basic colour: Compound tepal pigmentation:

Lobe colour of compound tepal: Free tepal appearance:

Style shape: Stigma colour: Ovary basic colour:

Ovary pigmentation:

Fruit

Fruit position: parallel to the stalk

Number of hands per bunch: 16 - 20 Number of fruits per hand: 12 - 14Fruits length: 14 cm

Transverse section of fruits: pronounced ridged Blunt-tipped

Fruit apex:

Fruit pedicel length: 35 mm Remains of flower relicts at fruit

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

Inflorenscence/male bud

65 cm

hairless

hanging at angle 45° No male bud

Base of the style prominent

yellow

vellow

with pulp

Peduncle length:

Bunch position:

Rachis position:

Male bud type: Male bud shape: Bract apex shape:

Bract imbrication:

Bract scars on rachis:

Wax on the bract:

Rachis type:

Peduncle hairness:

apex:

Mature fruit peel colour: Pulp in fruit:

pollen: Seed shape:

Pulp colour in maturity: Presence of seed with source of

Complementary information:

P. Kepok-like, but no male bud flower, 20 hands per bunch, boiled banana, originally from Sulawesi, potential resistant to bacterial disease.



PISANG GAPI

Accession code: XXVII E Date of collecting: 5 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Subspesies/subgroup: Local name: Pisang Gapi Svnonvm: Pisang Barangan Genom: AAA Origin: Makariki Sub district: Amahai

Elevation: 10 asl. Soil pH: 5.9

Longitude: E 128.9366° Latitude: S 3.3107°

cream

vellow

apex

vellow

cream

18 mm

no pigmentation

slightly curved

several folding under

Petiol/midrib/leaf Plant discriptors

Leaf habit: Petiol canal leaf III: open with margins spreading erect Pseudostem height: 4.32 m Colour of midrib dorsal surface: light green Pseudostem circumference: 92 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers: Pseudostem colour: green

Inflorenscence/male bud

dull Pigmentation of the underlying Peduncle length: 75 cm purple Peduncle hairness: very hairy waterv Bunch position: hanging vertically Rachis type: present and male bud 3/4 of the parent may be degenerated sparse blotching falling vertically Rachis position: Male bud type: normal blue-purple

Male bud shape: intermediate Bract apex shape: intermediate

Bract imbrication: young bracts slightly

overlap Colour of the bract external face: red-purple Colour of the bract internal face: pink purple Bract scars on rachis: very prominent

Fading of colour on bract base: colour discontinuing toward

the base Bract behaviour before failing: revolute

Wax on the bract: no pigmentation moderately waxy

Fruit

Pseudostem appearance:

Development of suckers:

Blotches at the petiol base:

Male flower Compund tepal basic colour:

Compound tepal pigmentation:

Lobe colour of compound tepal:

Free tepal appearance:

Style shape:

Stigma colour:

Ovary basic colour:

Ovary pigmentation:

Fruit pedicel length:

pseudostem:

Number of suckers:

Blotches colour:

Sap colour:

Fruit position: parallel to the stalk Remains of flower relicts at fruit Number of hands per bunch: persistent style Number of fruits per hand: 13 - 16 Mature fruit peel colour: light yellow Fruits length: 15 - 20 cmPulp in fruit: with pulp Transverse section of fruits: rounded Pulp colour in maturity: vellow Fruit apex: blunt tip Presence of seed with source of

pollen:

Seed shape:

Complementary information:

Introduced from Sulawesi, the most commercial dessert banana in Sulawesi..

PISANG BATU SANGIR

Accession code: XXVIII E Date of collecting: 5 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Batu Sangir Subspesies/subgroup:

Genom: AAB? Synonym:

Origin: Makariki Sub district: Amahai

Elevation: 10 asl. Soil pH: 5.9

Longitude: E 128.9366° Latitude: S 3.3107°

dull

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: wide erect margins 5.27 m Pseudostem height: Colour of midrib dorsal surface: light green Pseudostem circumference: 96 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers: Pseudostem colour: green

Pseudostem appearance: Pigmentation of the underlying

pseudostem: brown Sap colour: Milky white

Number of suckers:

Development of suckers: 3/4 of the parent Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream Compound tepal pigmentation:

no pigmentation

Free tepal appearance: several folding under

apex

8 - 9

16 - 18

rounded

pointed

22 mm

10 - 12 cm

Style shape:

Ovary basic colour: cream

Fruit

Number of hands per bunch:

Number of fruits per hand:

Transverse section of fruits:

Fruit pedicel length:

Fruit position:

Fruits length:

Fruit apex:

Ovary pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

slightly curved

Curve upward

Stigma colour: vellow

Remains of flower relicts at fruit

Colour of the bract external face:

Colour of the bract internal face:

Fading of colour on bract base:

Bract behaviour before failing:

Bract scars on rachis:

apex: Mature fruit peel colour:

Wax on the bract:

Pulp in fruit: Pulp colour in maturity: Presence of seed with source of

pollen:

Seed shape:

Inflorenscence/male bud

Peduncle length: 75 cm Peduncle hairness: very hairy Bunch position: hanging vertically present and male bud Rachis type:

may be degenerated falling vertically Rachis position:

Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate Bract imbrication:

young bracts slightly overlap

red-purple pink purple very prominent

colour discontinuing toward

the base revolute

moderately waxy



persistent style light yellow with pulp vellow

> **Complementary information:** Introduced from Sulawesi, dessert banana



PISANG GOROHO MATAHARI

Accession code: XXIX E Date of collecting: 5 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Goroho Matahari Subspesies/subgroup:

Genom: AAA? Synonym: Pisang Anim-1 Origin: Makariki Sub district: Amahai Elevation: 10 asl. Soil pH: 5.9

Reddish green

Longitude: E 128.9366° Latitude: S 3.3107°

Petiol/midrib/leaf Plant discriptors

Leaf habit: intermediate Petiol canal leaf III: wide erect margins Pseudostem height: 3.67 m Colour of midrib dorsal surface: light green Pseudostem circumference: 65 cm Colour of cigar leaf dorsal surface: green Pseudostem aspect: normal Blotches on leaf of water suckers:

Pseudostem appearance: dull

Pigmentation of the underlying

Pseudostem colour:

pseudostem: brown Sap colour: Milky white

Number of suckers:

3/4 of the parent Development of suckers: Blotches at the petiol base: sparse blotching Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: several folding under

apex

stalk

5 - 6

16 - 20 cm

16 - 18 cm

rounded

20 mm

perpendicular to the

slightly curved Style shape:

Stigma colour: vellow Ovary basic colour: cream

Fruit

Number of hands per bunch:

Number of fruits per hand:

Transverse section of fruits:

Fruit pedicel length:

Fruit position:

Fruits length:

Fruit apex:

Ovary pigmentation: no pigmentation

Inflorenscence/male bud

Peduncle length: 60 cm Peduncle hairness: very hairy Bunch position: Hanging vertically

present and male bud Rachis type: may be degenerated Rachis position:

Falling vertically

Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate Bract imbrication:

old bracts overlap at apex of bud

Colour of the bract external face: red-puple Colour of the bract internal face: Pink

very prominent

colour discontinuing towards

the base Revolute Slightly waxy

Bract behaviour before failing:

Fading of colour on bract base:

Wax on the bract:

Bract scars on rachis:

Remains of flower relicts at fruit

persistent style

with pulp

Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity:

Presence of seed with source of

pollen: Seed shape:

Complementary information:

Introduced from Sulawesi, similar to P. Anonim-1, boiled, mixed with sauce and eaten soon after harvested.



PISANG SUSU TERNATE

Accession code: XXX E Date of collecting: 8 December 1996

Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Spesies/group: Genus: Musa

Local name: Pisang Susu Ternate Subspesies/subgroup: Mysore

Genom: AAB Synonym: Pisang Pulo Sub district: Salahutu Origin: Tulehu

Elevation: 90 asl. Soil pH: 5.6 Longitude: E 128.3310° Latitude: S 3.6012°

Plant discriptors

Petiol/midrib/leaf

Leaf habit: intermediate Margins curved inward Petiol canal leaf III: Pseudostem height: 4.2 m Colour of midrib dorsal surface: light green Pseudostem circumference: 81 cm Colour of cigar leaf dorsal surface: Green Pseudostem aspect: normal

Pseudostem colour: Red-purple

Pseudostem appearance: dull

Pigmentation of the underlying

pseudostem: Dark brown Sap colour: Milky white

Number of suckers:

Development of suckers: 3/4 of the parent Blotches at the petiol base: sparse blotching

Blotches colour: Dark brown

Male flower

Compund tepal basic colour: cream

Compound tepal pigmentation: no pigmentation

Lobe colour of compound tepal: vellow

Free tepal appearance: simple folding under

apex Style shape: rolling Stigma colour: cream Ovary basic colour: cream

Ovary pigmentation: no pigmentation

Fruit

Fruit position: Curve upward Number of hands per bunch: 10 - 12

18 - 20 Number of fruits per hand: Fruits length: 8 - 10 cm Transverse section of fruits: slightly ridged

Fruit apex: pointed

Fruit pedicel length: 25 mm Remains of flower relicts at fruit

apex:

Mature fruit peel colour: Pulp in fruit:

Pulp colour in maturity: Presence of seed with source of

pollen:

Blotches on leaf of water suckers:

Inflorenscence/male bud

Peduncle length: 50 cm Peduncle hairness: hairy

Bunch position: hanging at angle 45° Rachis type: present and male bud may be

degenerate or persistent

Rachis position: falling vertically

Male bud type: normal Male bud shape: intermediate Bract apex shape: intermediate Bract imbrication: old bracts overlap at apex of bud

Colour of the bract external face: red-purple Colour of the bract internal face:

Bract scars on rachis: very prominent Fading of colour on bract base: colour homogenous

Bract behaviour before failing: revolute Wax on the bract: very waxy

Base of the style prominent

yellow with pulp vellow

Seed shape:



Complementary information:

Dessert banana, slightly acid of pulp taste, seedless.

PISANG BUAGAMUTU

Accession code: XVIII E Date of collecting: 8 December 1996 Collectors: Edison H.S., Agus Sutanto, Catur Hermanto, Tahan Uji and Nasaruddin Razak

Genus: *Musa* Spesies/group:

Subspesies/subgroup: Local name: Pisang Buagamutu

Genom: AA? Synonym:
Origin: Neniari Sub district: Piru
Elevation: 80 asl. Soil pH: 4.6

Longitude: E 128.2000° Latitude: S 3.0666°

Plant discriptors Petiol/midrib/leaf

Leaf habit: Petiol canal leaf III: Straight erect margins

Pseudostem height: Colour of midrib dorsal surface: light green Pseudostem circumference: Colour of cigar leaf dorsal surface: Green

Pseudostem aspect: Blotches on leaf of water suckers: Pseudostem colour:

Pseudostem appearance: Inflorenscence/male bud

Pigmentation of the underlying pseudostem: Peduncle length: Peduncle hairness: Sap colour: Bunch position:

Number of suckers:

Development of suckers:

Blotches at the petiol base:

Rachis type:

Rachis position:

Blotches colour: Male bud type:

Male bud shape:
Male flower
Bract apex shape:
Compund tepal basic colour:
Compound tepal pigmentation:

Lobe colour of compound tepal: Colour of the bract external face: Free tepal appearance: Colour of the bract internal face:

Bract scars on rachis:

Style shape: Fading of colour on bract base: Stigma colour: Bract behaviour before failing:

Ovary basic colour: Wax on the bract:

Fruit

Ovary pigmentation:

Fruit position: Curve upward Remains of flower relicts at fruit

Number of hands per bunch: apex:

Number of fruits per hand: Mature fruit peel colour: yellow Fruits length: 7.5 cm Pulp in fruit: with pulp

Transverse section of fruits: slightly ridged Pulp colour in maturity: yellow

Fruit apex: rounded Presence of seed with source of Fruit pedicel length: 10 mm pollen:

Seed shape:



Complementary information:

Base of the style prominent

Few fingers per hand, not good condition so that no character observation