

INTRODUCED BANANAS: New Cultivars, More Options for Banana Growers

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Introduction

Musa researchers worldwide have developed and identified a number of new, high-yielding and disease-resistant banana cultivars. Through the Bioversity International (formerly INIBAP/IPGRI), these improved cultivars are now being made available for testing and distribution to smallholder banana growers. It is believed that the introduction of these new cultivars as a component of an integrated crop management strategy involving the use of clean planting materials, will have a rapid and significant impact on levels of production of banana in the Philippines. These cultivars are conserved at the National Plant Genetic Resources Laboratory and are available upon request.

Methodology

- Six (6) introduced hybrids were grown together with six (6) local cultivars at the Central Experiment Station at UPLB

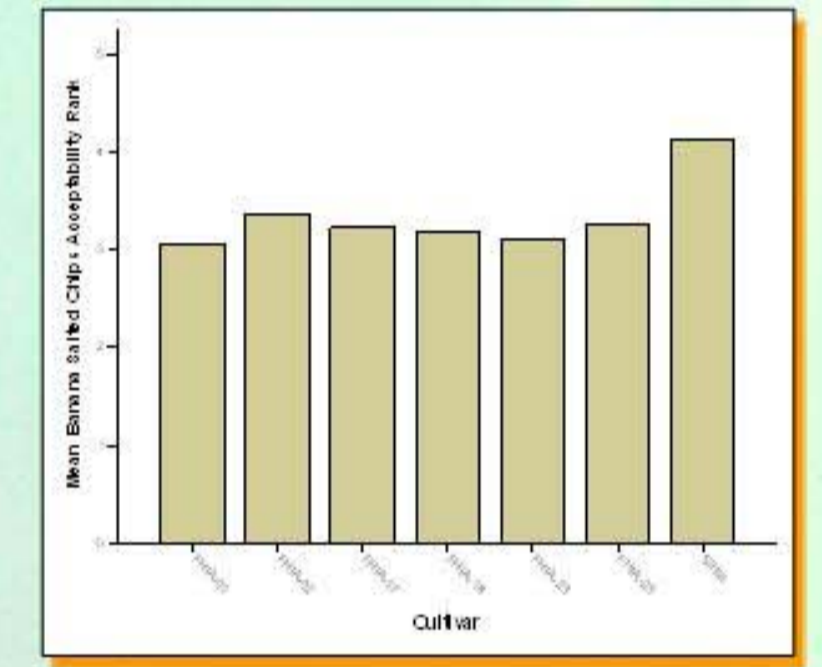


- The performance of the banana cultivars were evaluated in terms of:
 - ✓ Yield and yield characters
 - ✓ Visual and organoleptic (taste) assessment
 - ✓ Reaction to pests and diseases

Results

Yield evaluation and reaction to banana bunchy top virus (BBTV)

Cultivar	Days to harvest	Bunch weight	No. of hands	No. of fingers	Reaction to BBTV
FHIA 01	364 cd	22.22 d	9 de	126 ef	MR
FHIA 02	344 bc	24.30 d	9 de	130 ef	MR
FHIA 17	420 ef	36.61 b	12 b	201 c	MR
FHIA 18	400 de	21.38 d	8 de	133 e	R
FHIA 21*	355	26.50	8	113	MR
FHIA 23	449 fg	31.79 c	11 c	218 b	MR
FHIA 25	521 h	47.49 a	15 a	278 a	MS
Cuarenta Dias	279 a	8.51 g	7 f	110 h	HS
Cavendish	307 ab	23.44 d	8 de	128 ef	MS
Latundan	354 c	12.39 f	7 f	101 h	**
Cardaba	479 g	23.19 d	9 de	150 d	MR
Lakatan (Davao)	382 cde	17.24 e	7 f	116 gh	MS
Lakatan (Cavite)	379 cde	18.03 e	7 f	110 h	S



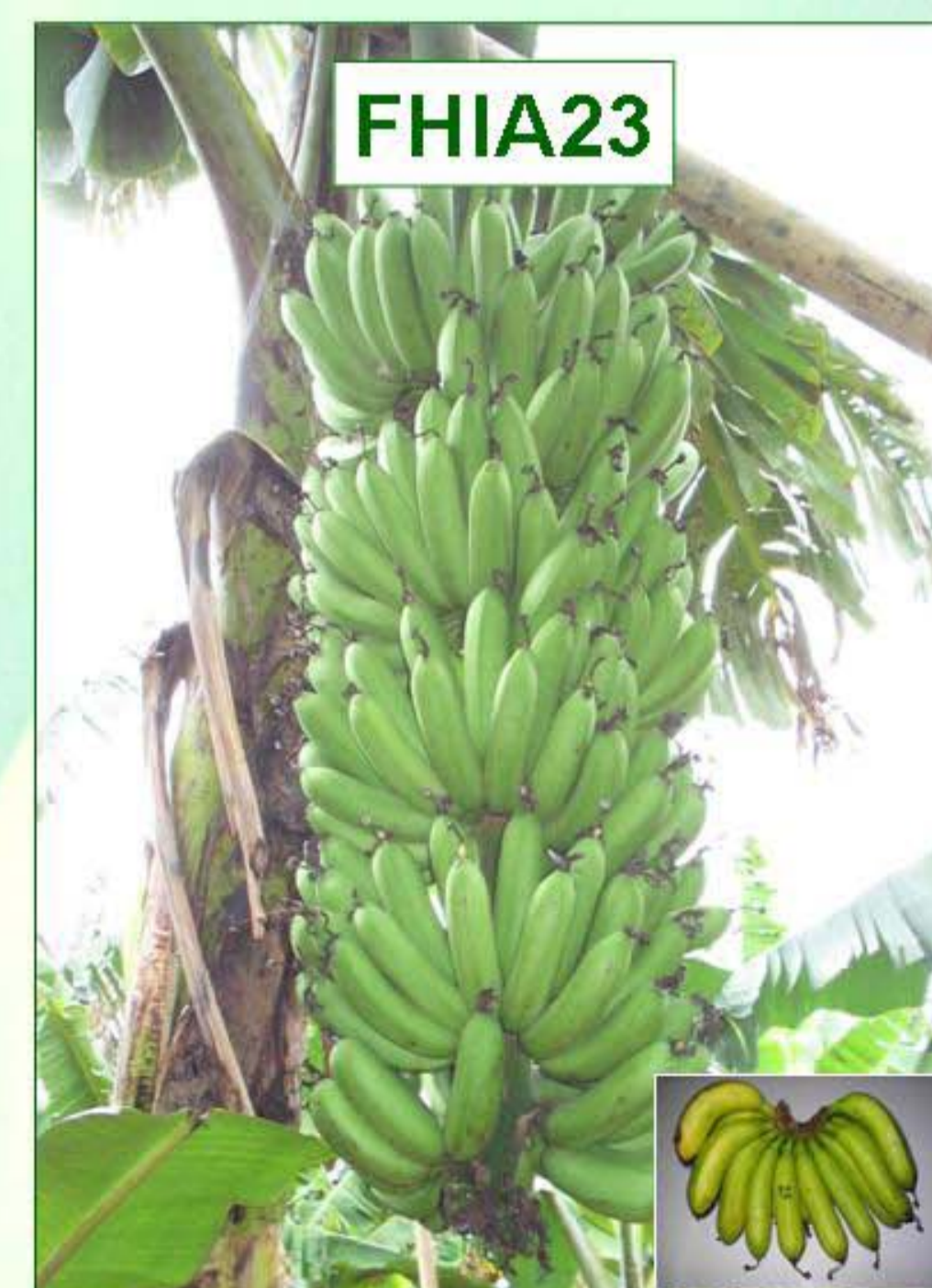
Summary of taste test



- Local cultivars, Lakatan (Cavite and Davao) and Saba, are preferred as table and cooking bananas, respectively, over the introduced cultivars.
- FHIA 01 is better liked as cake compared to Buñgulan
- FHIA hybrids (except FHIA 25) are favored as honeyed banana chips
- FHIA hybrids are favored as salted banana chips

* Data on yield evaluation was taken from a separate trial at MMSU
** Many of the plants were infected by other diseases
R: Resistant; MR: Moderately Resistant; S: Susceptible; MS: Moderately Susceptible; HS: Highly Susceptible

Bunch and hand (inset) characteristics of outstanding introduced cultivars



Conclusion and Recommendation

- FHIA 17, 21, 23 and 25 produced heavier bunches than the highest yielding local cultivars (Cavendish and Cardaba), while FHIA 17 and 21 produced the heaviest individual fruits. However, these introduced cultivars were less sweet than the local cultivars based on TSS reading.
- While the selected introduced cultivars may not be preferred by the local consumers as dessert bananas, the potential of these cultivars may be for the processing industry, particularly as raw materials for the production of banana chips.