

Universidade de Brasília

Faculdade de Agronomia e Medicina Veterinária

Setor de Fruticultura

**AVANCES EN EL CULTIVO DE PAPAYA:
PROPAGACIÓN, VARIEDADES Y
TÉCNICAS DE CULTIVO**

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Produção Mundial de Mamão (2012)
(1.000 toneladas)

2012

Índia
5.160 t

Brasil
1.580 t
12,4%

Indonésia
906 t

Nigéria
775 t

México
713 t

2000

Índia
1.517 t

Brasil
1.493 t

Nigéria
774 t

México
672 t

Indonésia
429 t

1990

Brasil
546 t

Nigéria
517 t

Índia
451 t

Indonésia
349 t

México
250 t

Fonte: FAO(2015)

Produção de Frutas no Brasil (2013) (1.000 toneladas)

Citros
20.200 t
47%

Abacaxi
2.400 t.
5,6%

Maracujá
840 t.
2%

Uva
1.500 t.
3,5%

Banana
6.900 t.
16%

Mamão
1.580 t.
3,7%

Coco verde
2.700 t.
6,3%

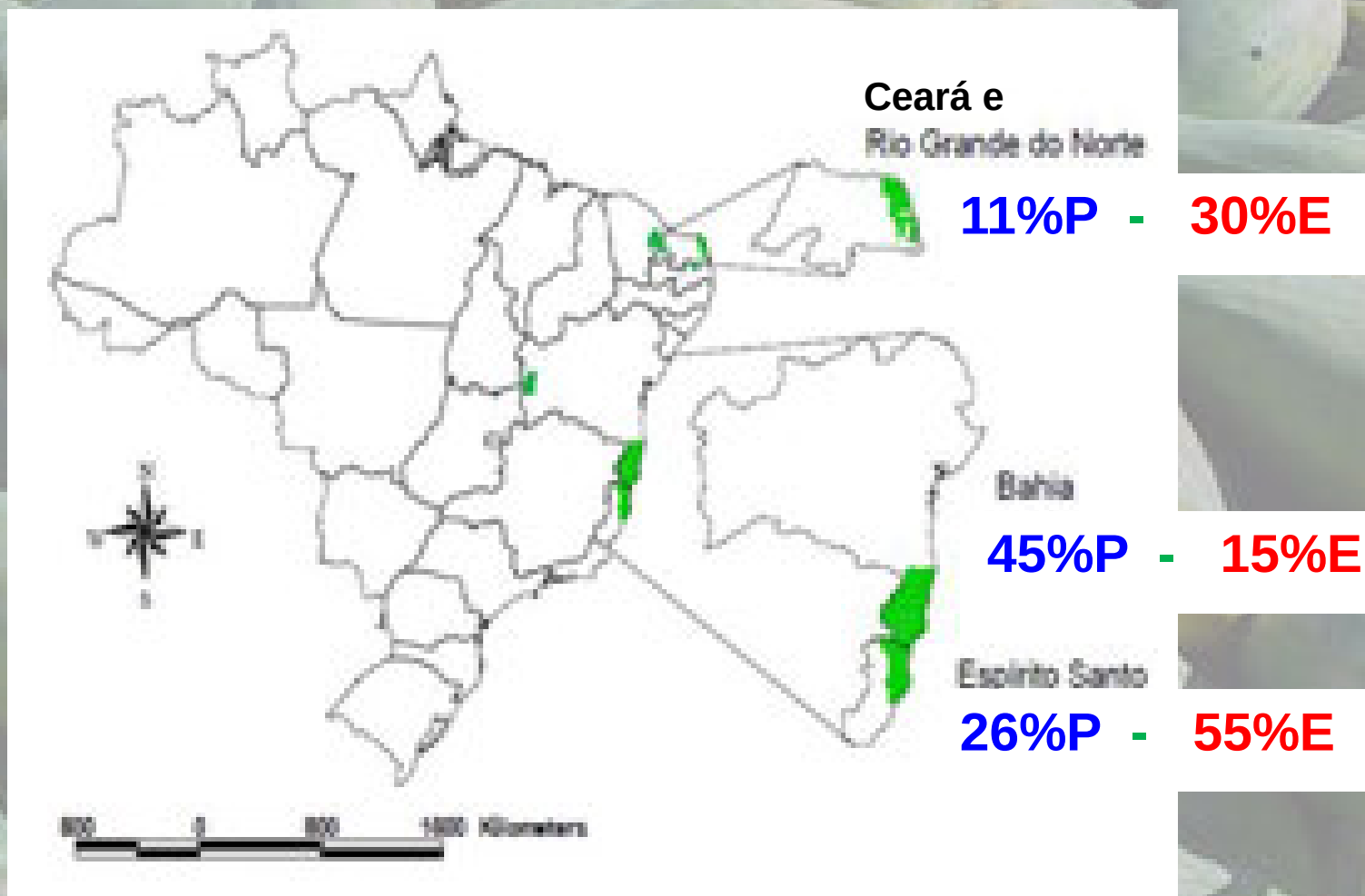
Manga
1.160 t.
2,7%

Outras
± 4400 t.
10%

Maçã
1.250 t.
2,9%

Fonte: IBGE (2015) e IBRAF

Produção Brasileira de Mamão (2013)



Fonte: IBGE e (2015)

Principais frutas exportadas pelo Brasil 2013

	US\$ 1000	t
Melões	147.580	191.413
Mangas	147.482	122.009
Castanha de caju	134.170	20.964
Uvas	103.000	43.182
Limões e limas	73.924	78.603
Maçãs	63.044	85.437
 Mamões	41.803	28.561
Bananas	35.576	99.216
Conservas e preparações (exclui sucos)	37.702	21.522
Castanha do Pará	21.115	13.619
Outras frutas	72.211	73.461
Total	877.606	777.987

Fonte: Agrostat Brasil, com dados da SECERNDEC

Ministério da Agricultura, Pecuária e Abastecimento

Mercado Mundial de Mamão - Exportação

	União Europeia	Estados Unidos	Outros	TOTAL
Mexico	-	127.000.00	7.600.00	134.600.00
Brasil	25.665.00	3.500.00	1.560.00	30.725.00
Guatemala	650.00	13.100.00	-	13.750.00
Belize	540.00	15.100.00	-	15.640.00
Republica Dominicana	230.00	1.500.00	-	1.730.00
Equador/ Colombia	10.456.00	-	780.00	11.236.00
Países Africanos	29.978.00	0.08	9.961.00	39.939.08
Sub Total	67.519.00	160.200.08	19.901.00	247.620.08
Países Asiáticos				76.000.00
Total				323.620.08

Fonte - AliceWEB MDIC/BRAPEX/HLB Specialtie/

Consejo Estatal de Productores de Papaya Coepapaya <coepapaya@hotmail.com>

Produção Integrada de Frutas



SITUAÇÃO BRASIL - Registro por Marca Comercial (exemplo)

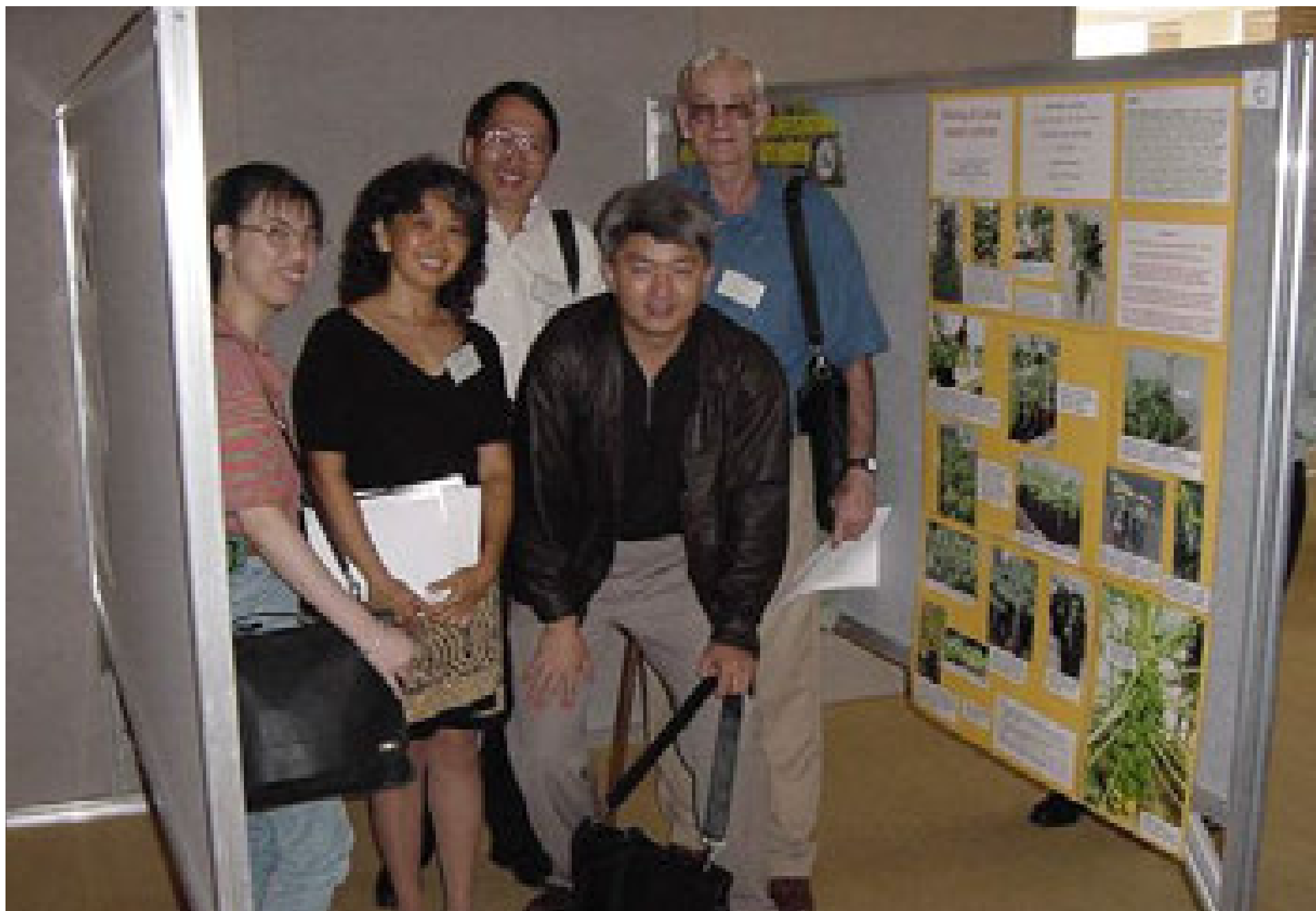
Comparativo (Registro)	Brasil	EU
Maçã	89	276
Melão	63	252
Figo	13	190



Mamão - 92 produtos - 10 princípios ativos



PROPAGACIÓN

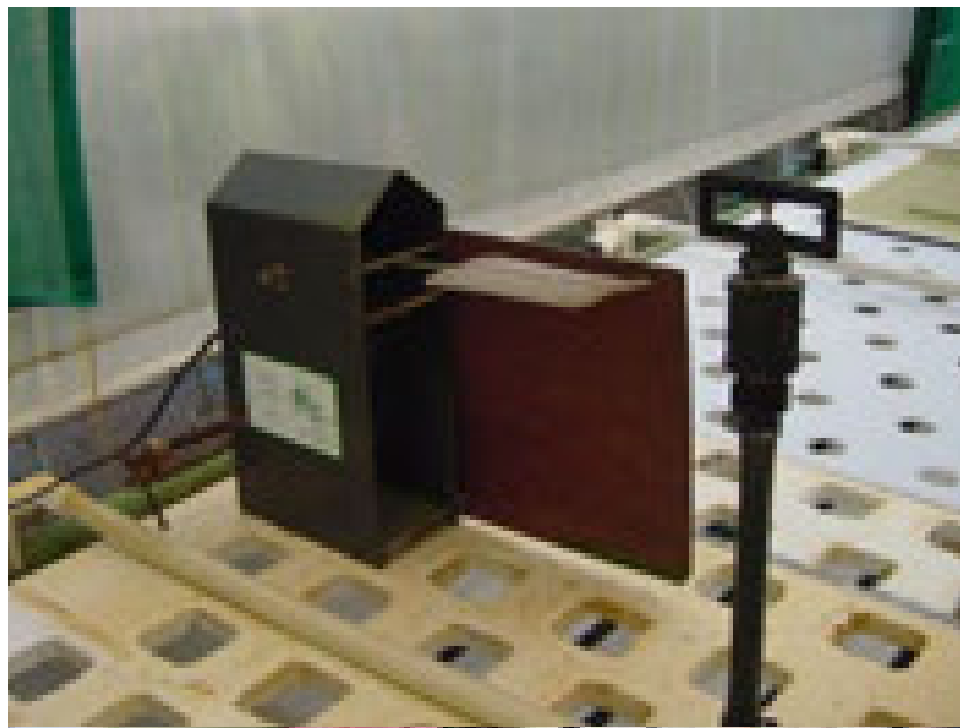


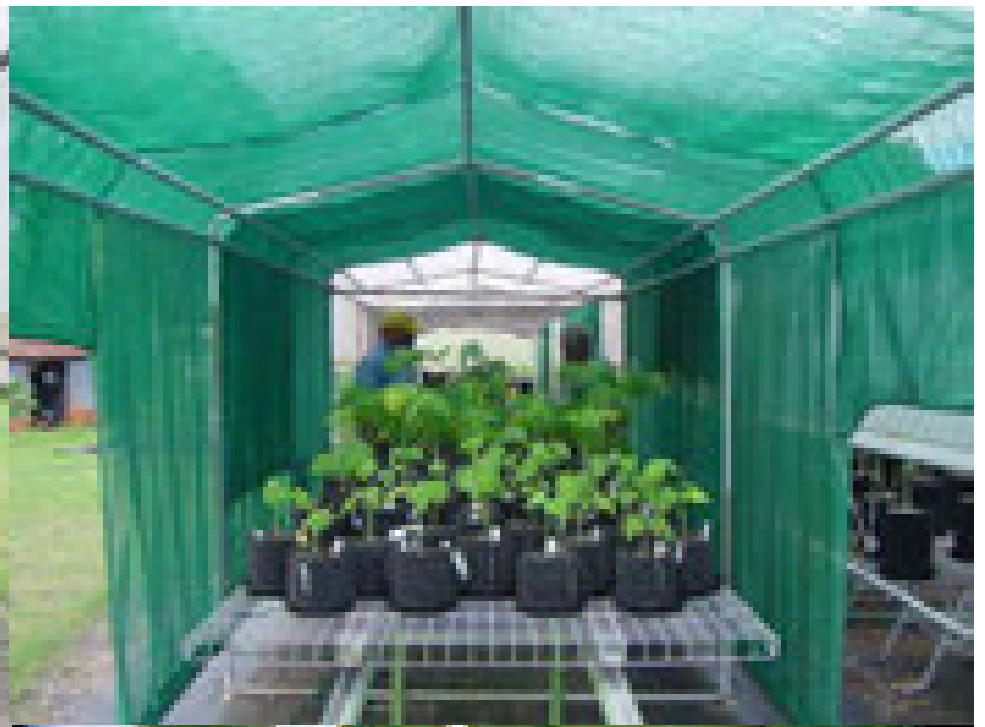
Prof. Peter Allan– Cairns 2000

Mr. Charley Loudon – Innisfall (QLD)









Garradunga in Far North Queensland - 2001





Seedling:

Transplant: 11th october 2001 Photo taken: late-january 2002



Cutting:

Transplant: 11th october 2001 Photo taken: late-january 2002

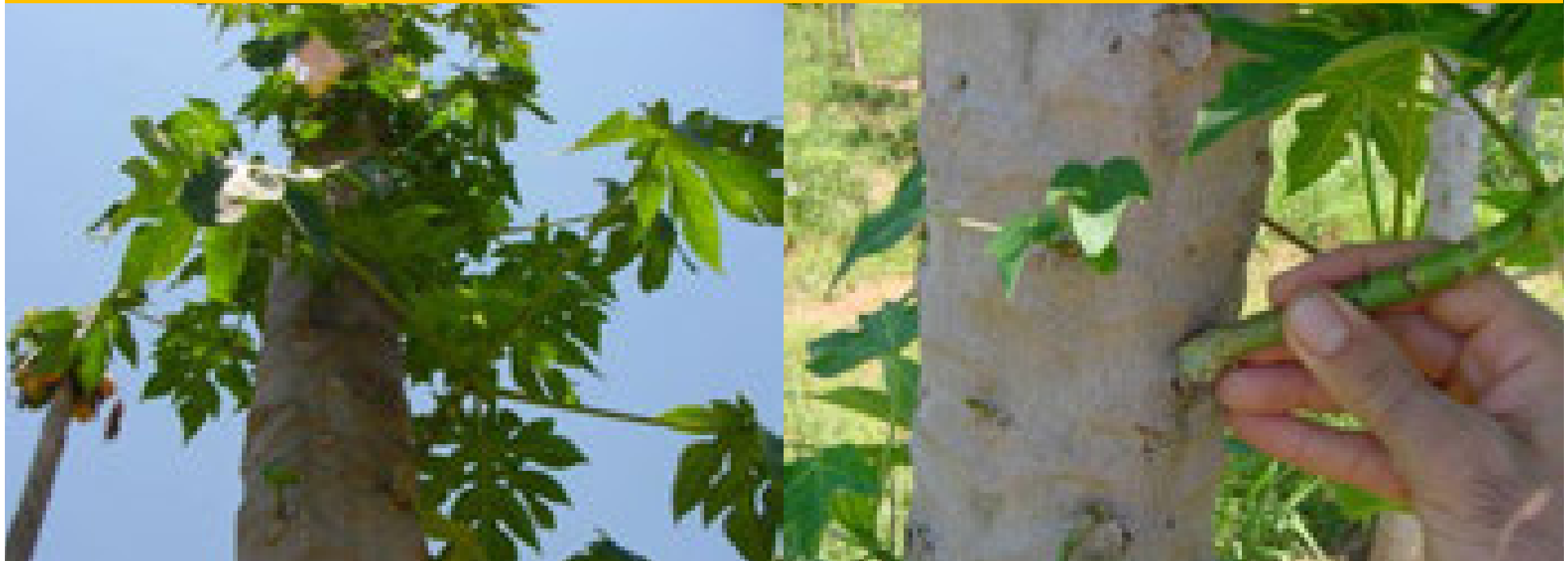


Tissue Culture:

Transplant: 11th october 2001 Photo taken: late-january 2002



CLONAL PROPAGATION OF PAPAYA BY CUTTING









University of Brasília – August 2001

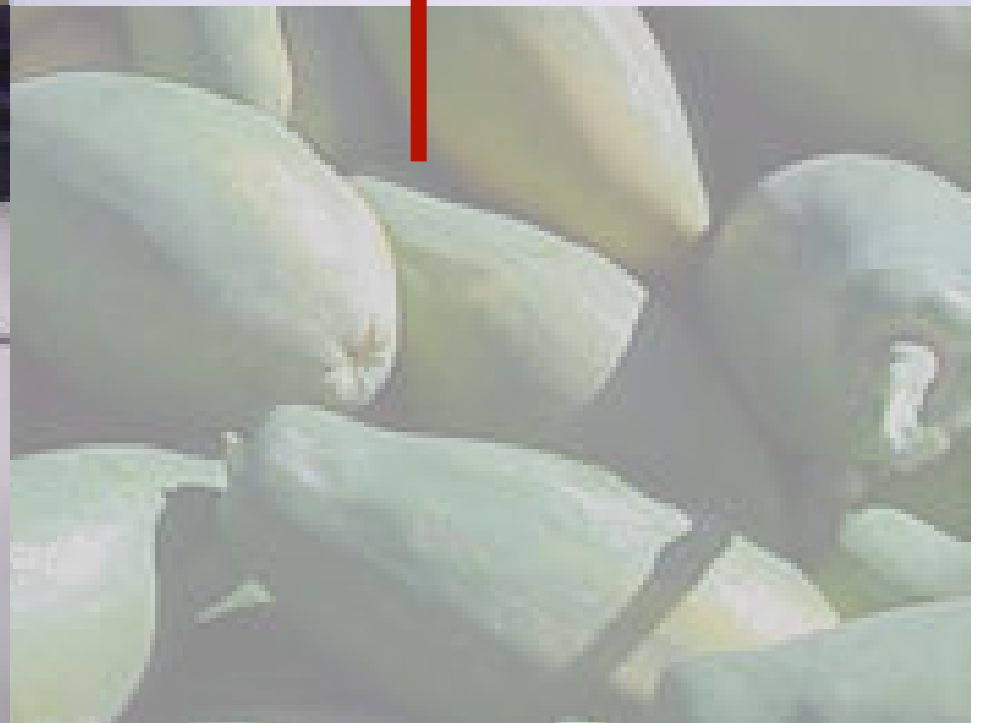
























Hermafrodite mother plants from cuttings / November 2002





***Phytophthora palmivora* – root rot**



***Phytophthora palmivora* – root rot**

BRAZIL UNAÍ – MG

2014 - 2015











O tamanho inicial das estacas influencia significativamente a quantidade de raízes desenvolvidas.

As estacas menores tiveram um enraizamento de 85% e as maiores de 75%.





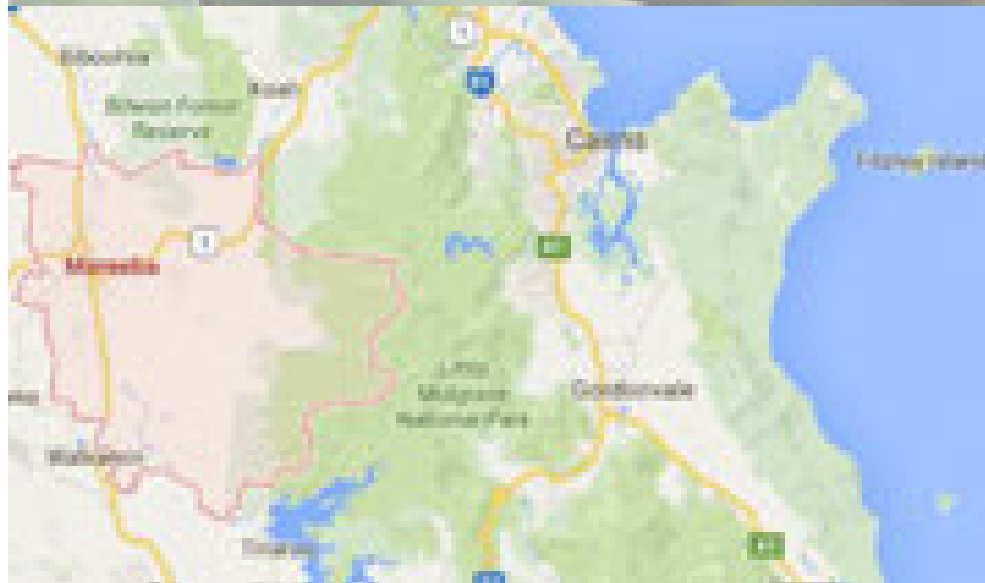




AUSTRÁLIA

MAREEBA – QLD

2015



TURN HERE 1.3 km

SKYBURY FARMGATE



Papaya • Coffee • Bananas

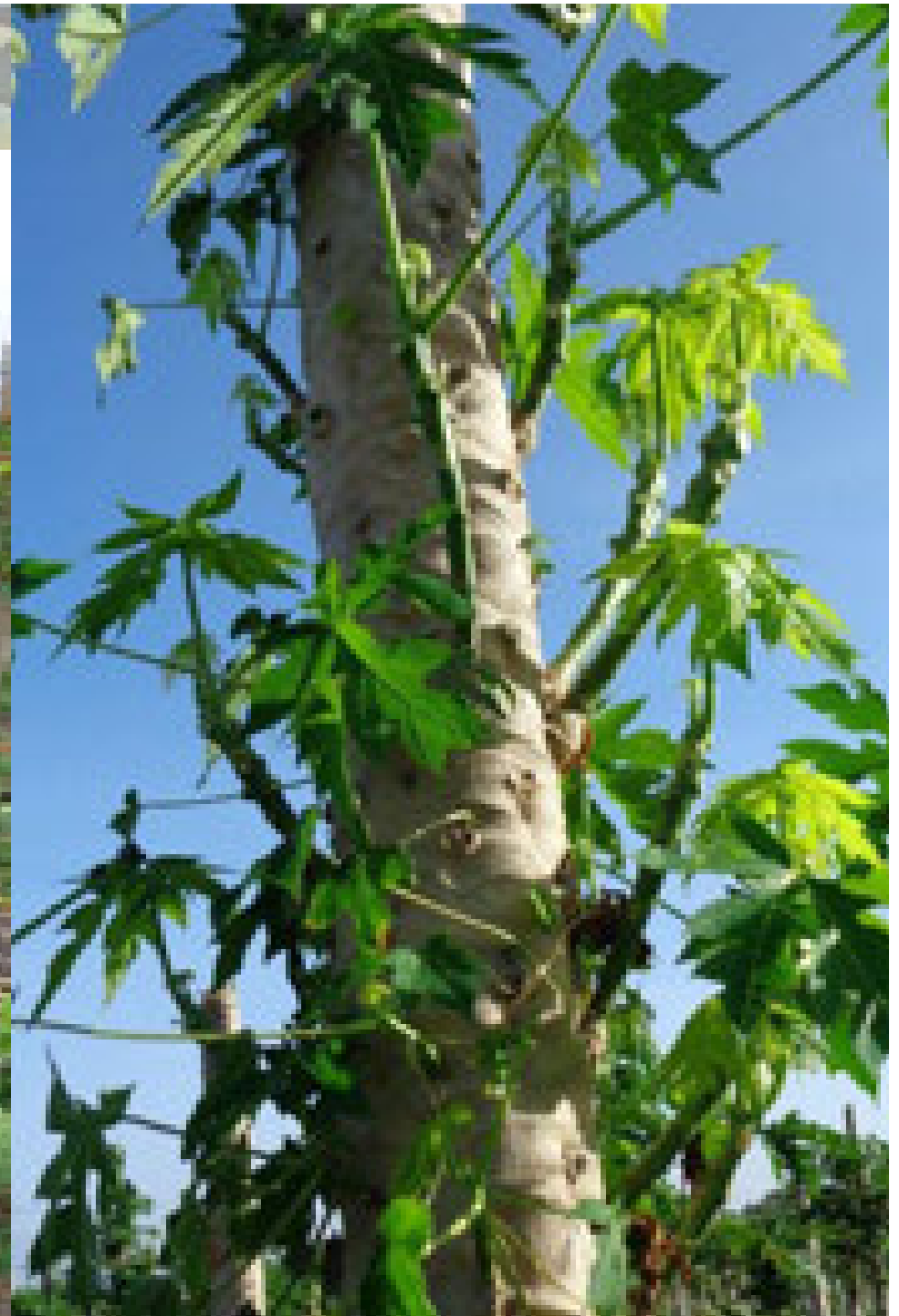
OPEN Monday to Friday 10am - 4pm www.skybury.com.au



Shoots Preconditioning



Shoots Preconditioning



Shoots Preconditioning. One week later.



Shoots Pre-conditioning. One week later.



Treatments

Treatment	Cutting characteristics			
	Decapitated trees (DT)	Leafy	Growing tips (GT)	Pre-conditioning
T1	Yes	Yes	Yes	No
T2	Yes	No	No	Yes
T3	Yes	No	Yes	Yes
T4	No	No	Yes	Yes





T1



T3

Treatments



T2



T4



Preventing dehydration



Bottom heat



Dipping in Indole Butyric acid



Misting

Coconut fiber substrate

Nursery period: 3 weeks





Thickness of cuttings did not show significant differences in all treatments.

However, the thin and medium cuttings (both with 65% RA) were slightly better when compared with thick one with 57%.





- ✓ Size of cuttings did not show significant differences.
- ✓ Leafy and leafless cuttings rooted well under the experiment condition.
- ✓ Preconditioning treatment seems to enhance rooting in leafless cuttings.
- ✓ Leafless cuttings, particularly T2 and T4, were the most promising for mass production in the nursery, since they allow higher density (double to triple number of cuttings) with less disease pressure when compared to leafy cuttings

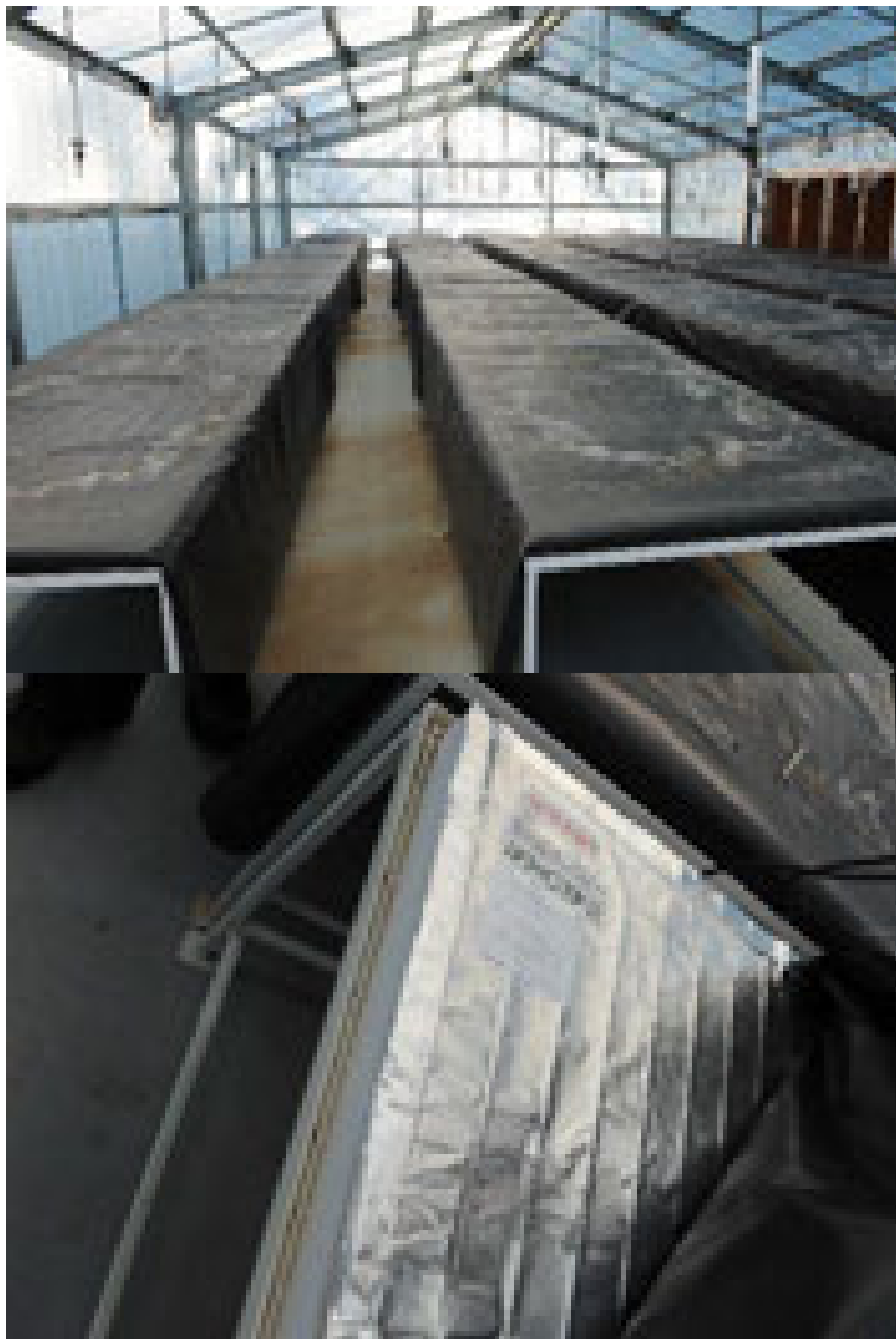






Skybury Nursery















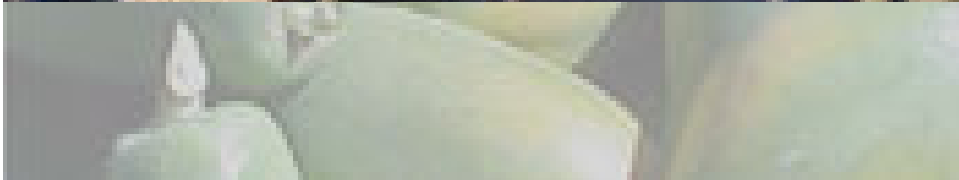
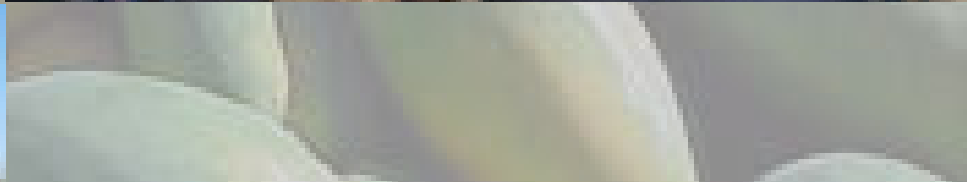
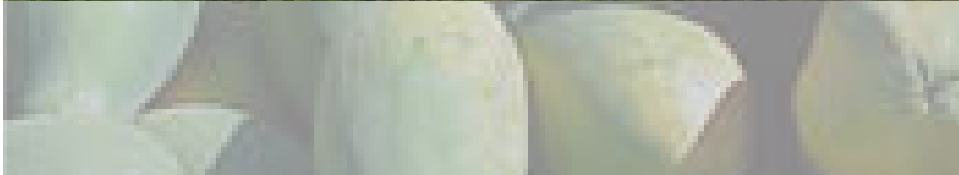












CHINA
SANYA – HAINAN ISLAND

2007 - 2014



Mr. Deng Fu Bing







**Mass propagation of papaya cutting in China
Sanya – Hainan Island - May 2007**

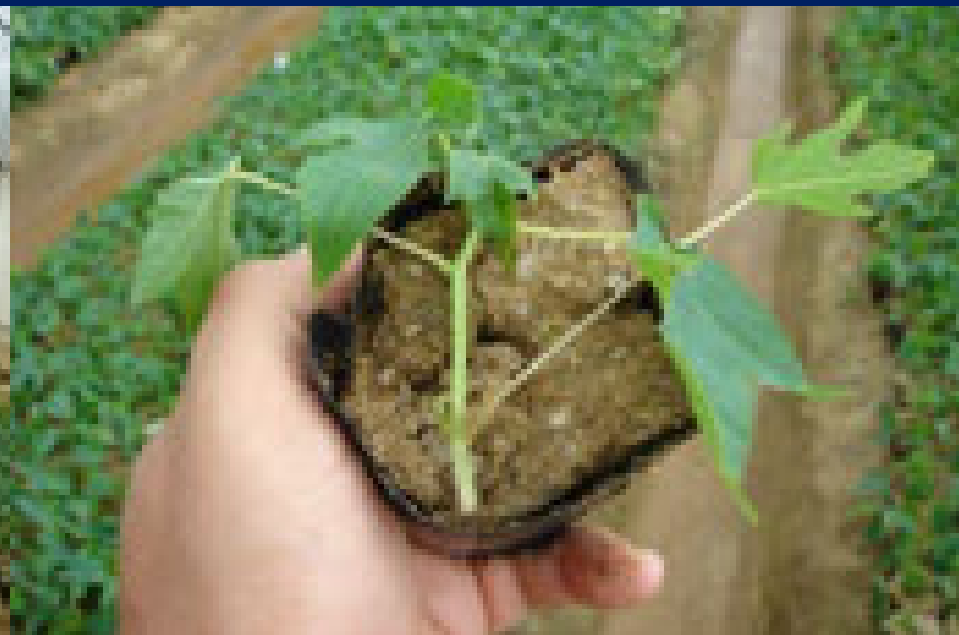








Mass propagation of papaya by cutting in Hainan, China – January 2008







US\$ 0.70 / plant



500 ha (10%) planted with papaya cutting in Hainan, China – January 2008







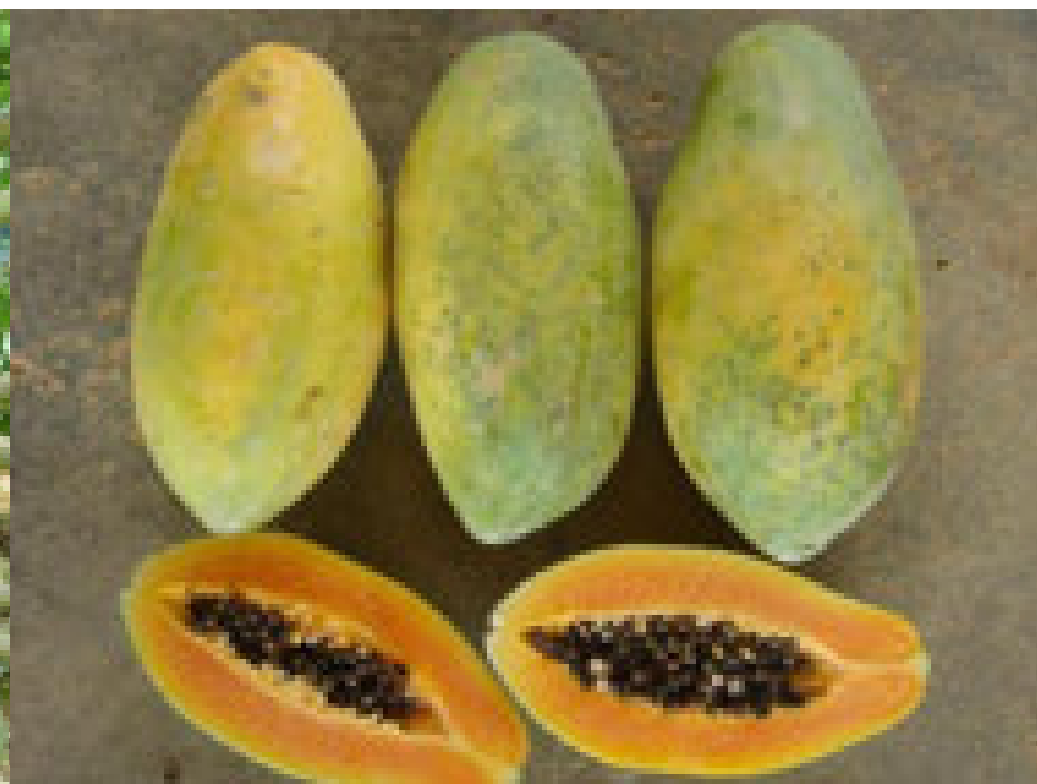


BIG SUNRISE SOLO

JAN 2008



JAN 2008



LITTLE SUNRISE SOLO



Mass propagation of papaya by tissue culture in Hainan, China – January 2008





Guangzhou Fruit Science Research Institute Guangzhou Fruit World



Guangzhou Fruit Science Research Institute - Guangzhou Fruit World







PAPAYA NURSERY IN SANYA

MARCH 2014















