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- ?'s → eedl i ngs (ab r e & e a c h)
- ?'s → . n p o r t : a d e n & . u l g o b a
- ?'s → . e n t & i l l



. o l l o v e d b y o t h e r c u l t i v a r s : o n n y t k i n s

. e i t t

e n s a t i o n



cont.

- based on cultivars

- → low yields

- narrow nat ury window

- external colour

- poor fruit quality

physiological disorders

susceptibility to diseases



ARC • LNR & Horticulture

- ARC • LNR → Horticulture
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 - 1000 trees/year (ARC • LNR)
 - 1000 trees/year (ARC • LNR)
 - 1000 trees/year (ARC • LNR)
 - 1000 trees/year (ARC • LNR)



... & ... cont .

• → **best performers**

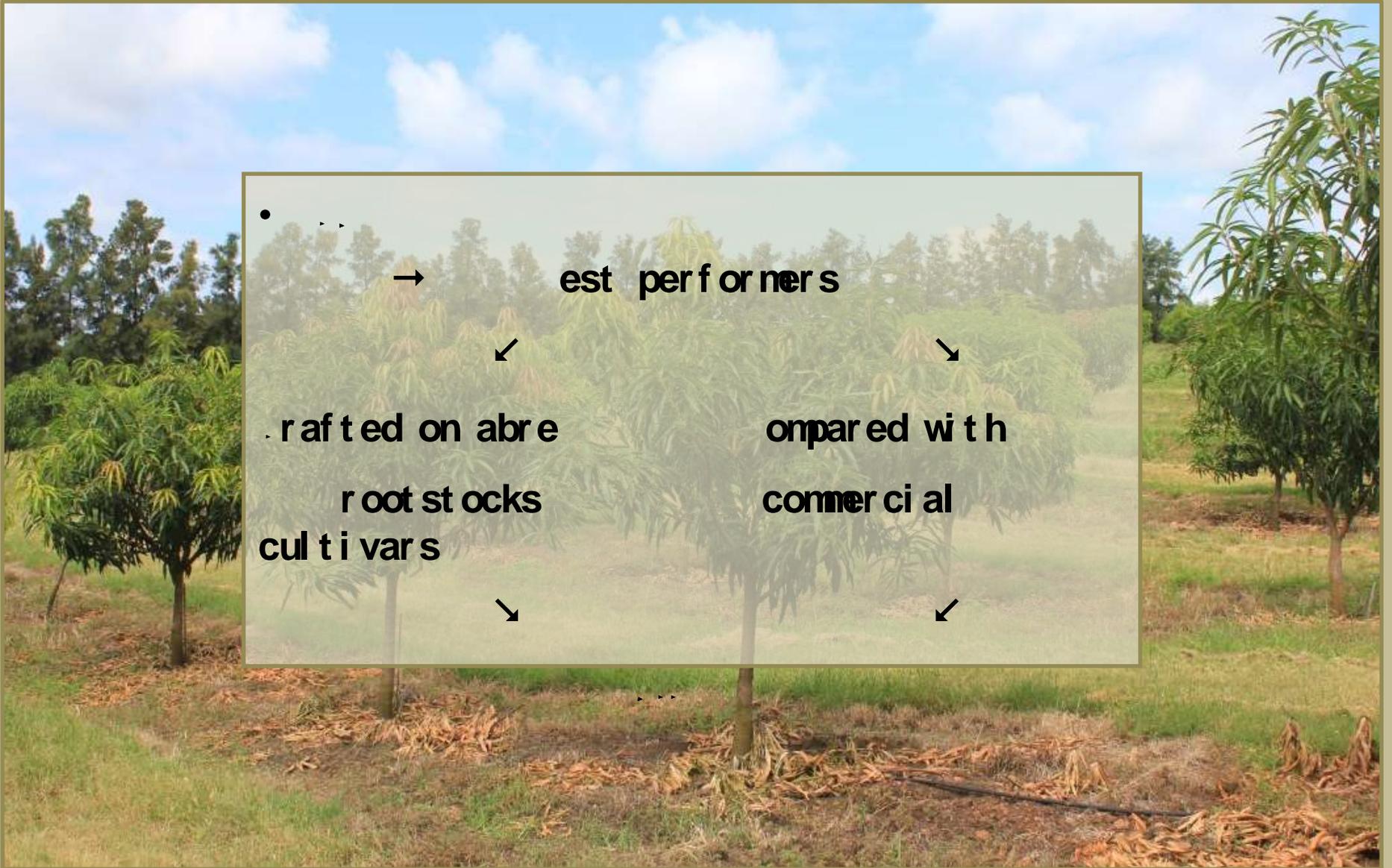
↙ ↘

grafted on abre **compared with**

root stocks **commercial**

cultivar s

↘ ↙



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Harvesting date: Mid February

- Yield: 2008 – 14.7, 2009 – 43.1, 2010 – 71.8

Fruit size (g/fruit): 421

Taste: 8

Fibre: 7

Remarks: Excellent taste and colour



Harvesting date: Mid January

- Yield (kg/tree): 2003 - 81.0, 2004 - 85.4

Fruit size (g/fruit): 344 - 463

Taste: 7

Fibre: 7

Remarks: -

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Harvesting date: Early January

- Yield (kg/tree): 2000/2001 – 87.8

Fruit size (g/fruit): 424

Taste: 5

Fibre: 6

Remarks: High yielding selection

Harvesting date: Early January

- Yield: 2002 – 66.4, 2003 – 75.4, 2004 – 31.2

Fruit size (g/fruit): 461

Taste: 8

Fibre: 7

Remarks: Resistant to sun scorching,
excellent external appearance

ARC & LNR cont.

emphasis changed → export to Europe



competition from South America



Brazil



Peru

Food quality

Food

Quality



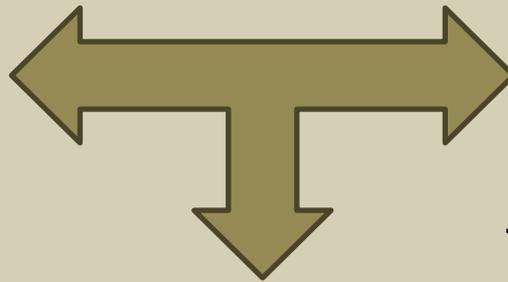
Cost (€)



Domestic sales (%)

Export (%)

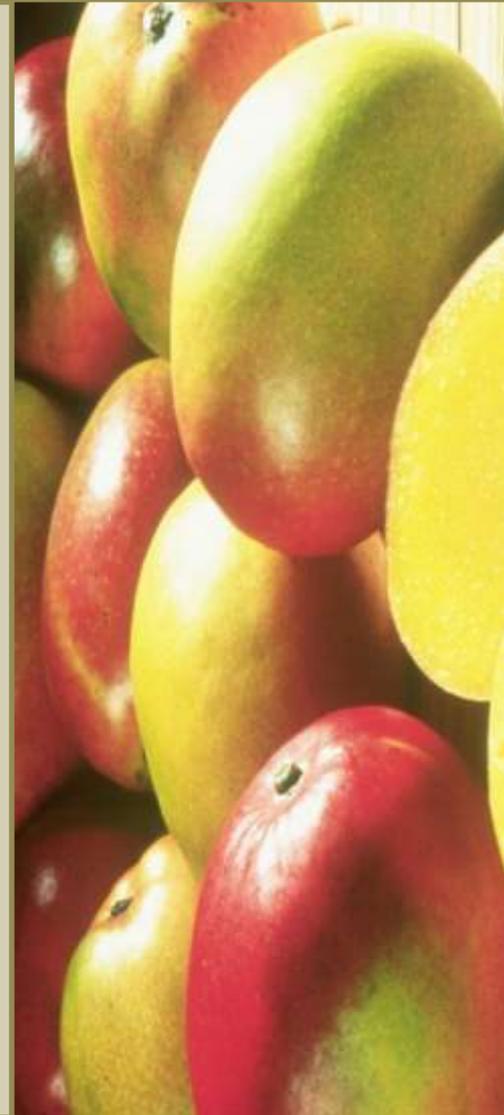
Market share (%)



Cost (€)

EXPLORE ASIAN MARKETS

- Yellow/green external colour
- Little fibre



& cont.



Harvesting date: Late January

- Yield: 2006 – 2.6, 2007 – 36.6, 2008 – 14.3, 2009 – 20.4, 2010 – 72.6

Fruit size (g/fruit): 558

Taste: 6

Fibre: 7

Remarks: Soft, juicy, good taste

Harvesting date: Mid January

- Yield: 2003 – 37.4, 2005 – 4.3, 2006 – 18.3

Fruit size (g/fruit): 528

Taste: 6

Fibre: 8

Remarks: Soft and juicy

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total nango production

<u>Year</u>	<u>Total (t)</u>	<u>Export (t)</u>	<u>%</u>
2002/2003	66 777	17 337	26
2004/2005	89 464	6 056	7
2007/2008	82 661	2 759	3
2010/2011	50 592	657	1
2011/2012	65 807	1 072	2

& cont .

→ decrease in export

→ emergence of small scale farmers



strategy change



International markets



Disease tolerant
critical

High yields

Fruit size not

fruit

\ & ... cont .



Harvesting date: Mid February

- Yield: 1995 – 11.7, 1996 – 3.6, 1997 – 32.1, 1998 – 9.0, 1999 – 58.9, 2000 – 106.6

Fruit size (g/fruit): 332

Taste: 6

Fibre: 6

Remarks: -

Harvesting date: Mid February

- Yield: 1995 – 15.1, 1996 – 6.3, 1997 – 50.9, 1998 – 15.3, 1999 – 95.7, 2000 – 101.3

Fruit size (g/fruit): 295

Taste: 7

Fibre: 6

Remarks: Waxy skin

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Harvesting date: Late January

- Yield: 1995 – 8.9, 1996 – 19.6, 1997 – 23.6, 1998 – 24.8, 1999 – 38.0, 2000 – 50.0

Fruit size (g/fruit): 248

Taste: 7

Fibre: 7

Remarks: -

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> % of total production

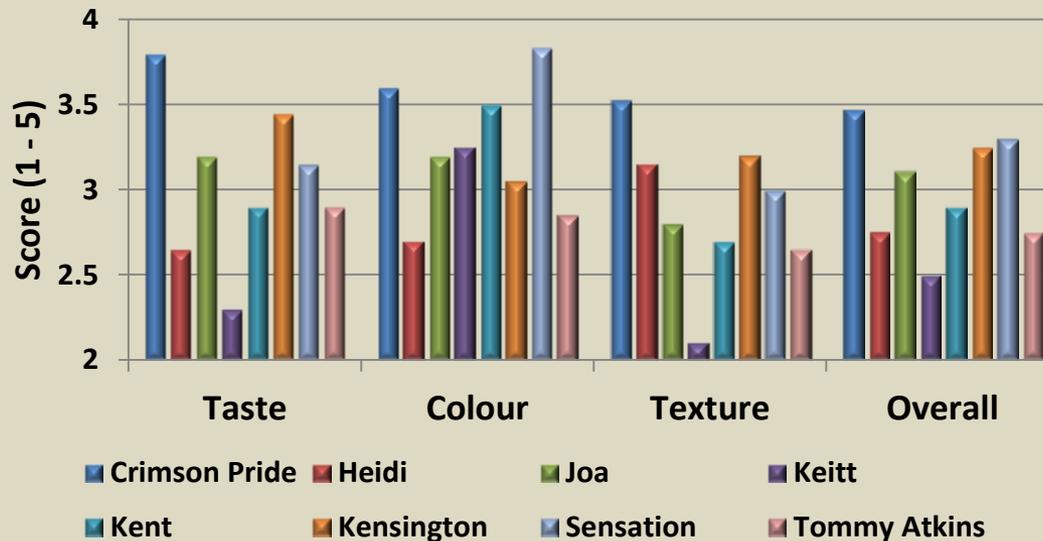
<u>Year</u>	<u>Total (t)</u>	<u>Dried (t)</u>	<u>%</u>
2002/2003	66 777	6 090	9
2004/2005	89 464	11 894	13
2007/2008	82 661	17 017	21
2010/2011	50 592	13 338	26
2011/2012	65 807	14 122	21

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ensory evaluation → val uat or s



Dried Mango



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...



<u>Year</u>	<u>Total (t)</u>	<u>Juice (t)</u>	<u>%</u>
2002/2003	66 777	11 761	18
2004/2005	89 464	34 922	39
2007/2008	82 661	32 473	39
2010/2011	50 592	16 190	32
2011/2012	65 807	18 797	29



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<u>Year</u>	<u>Total (t)</u>	<u>Juice (t)</u>	<u>%</u>
2002/2003	66 777	15 025	23
2004/2005	89 464	16 939	19
2007/2008	82 661	11 758	14
2010/2011	50 592	7 353	15
2011/2012	65 807	13 614	21

nal I scal e far ners → prayi ng cost s → i gh yi el ds



- reed ing i s t i n e c o n s u m i n g
- x p e n s i v e → h y s i c a l s i z e o f p r o g r a m
- t r a t e g i e s → . l e x i b l e
- x p o r t n o t n a i n f o c u s
- u t c o n e s → x p o r t → u r o p e (. c u l t i v a r s)
 - s i a (. c u l t i v a r s)
 - I t e r n a t i v e m a r k e t s → . e l e c t i o n s



→ el ect i on f or speci f i c ni che m ar ket s

→ em i - com m er ci al eval uat i on



r odu cers i n di ffer ent ar eas

→ com m er ci al rel ease + .. prot ect i on

= nsur e exi stence of mango

br eedi ng pr ogr am





- ... for funding the mango breeding program
- South African mango growers association (SAG) – growers
- ... div of ... arns

