



Sensory evaluation and consumer preference of white fleshed and orange fleshed sweetpotato

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Why investigate sensory and consumer acceptance of orange fleshed sweetpotato in Africa?

- **Vitamin A deficiency is a cause of early childhood death.**
- **Pale fleshed sweetpotato low in β -carotene is traditionally consumed**
- **Orange fleshed sweetpotato cultivars contain β -carotene but have different sensory characteristics**





Issues in introducing new cultivars

- Success depends not only on production characteristics but sensory ones
- Intervention strategies need to consider sensory pleasure as well as cultural, social and demographic variables
- Children's preferences influenced during early years of life
- Mothers influence children via their own preferences and might limit foods offered to children









Approach

- 2 traditional PFSP and 2 OFSP cultivars
- Panel evaluated sensory characteristics in detail
- Consumer acceptance judged by 94 school children and 60 mothers with pre-school aged children at a rural location in the Lake Zone, Tanzania



Appearance of cooked SP

	Polista	Resisto
		
	Sinia B	Karote DSM
		


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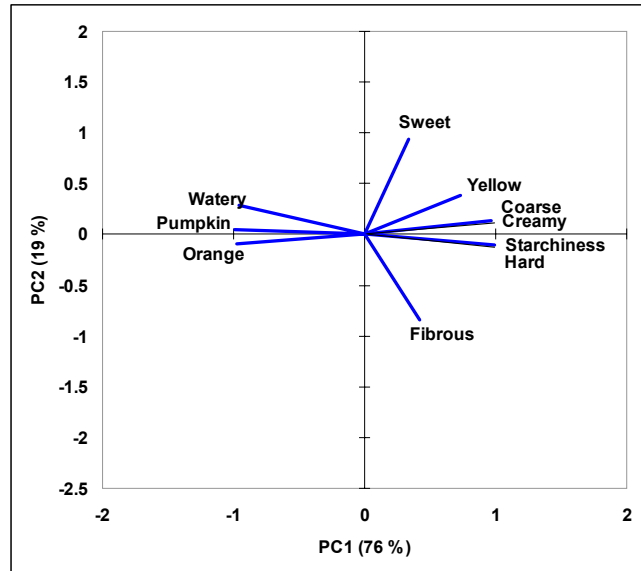
Sensory panellist



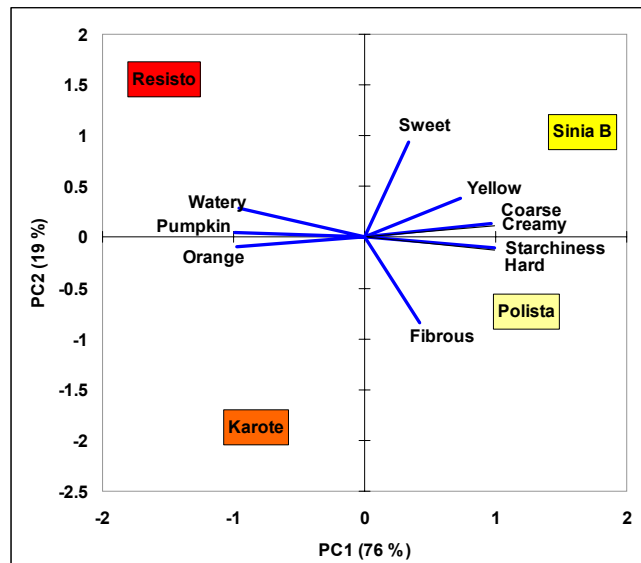

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Findings: Sensory characteristics



Findings: Sensory characteristics










School children testing sweetpotato




Mothers with young children testing sweetpotato



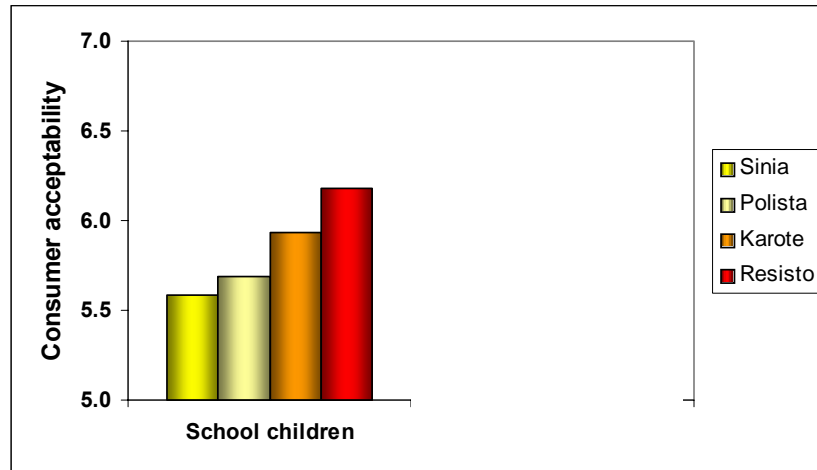


Dislike very much	Dislike moderately	Dislike slightly	Neither like nor dislike	Like slightly	Like moderately	Like very much
						

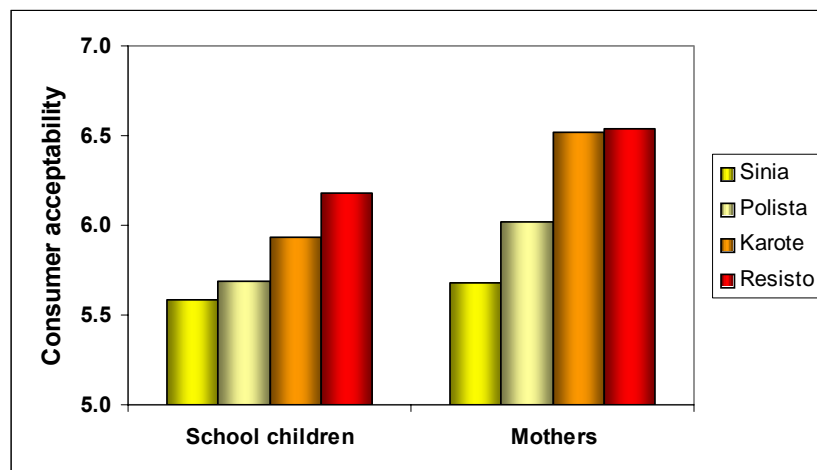




How do consumers judge the cultivars?



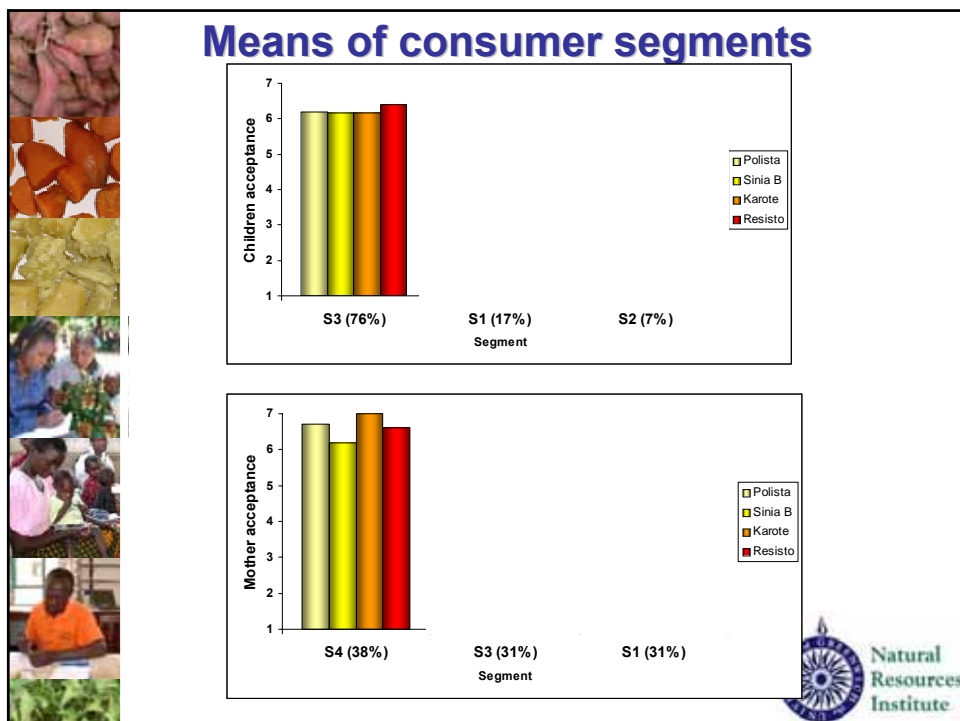
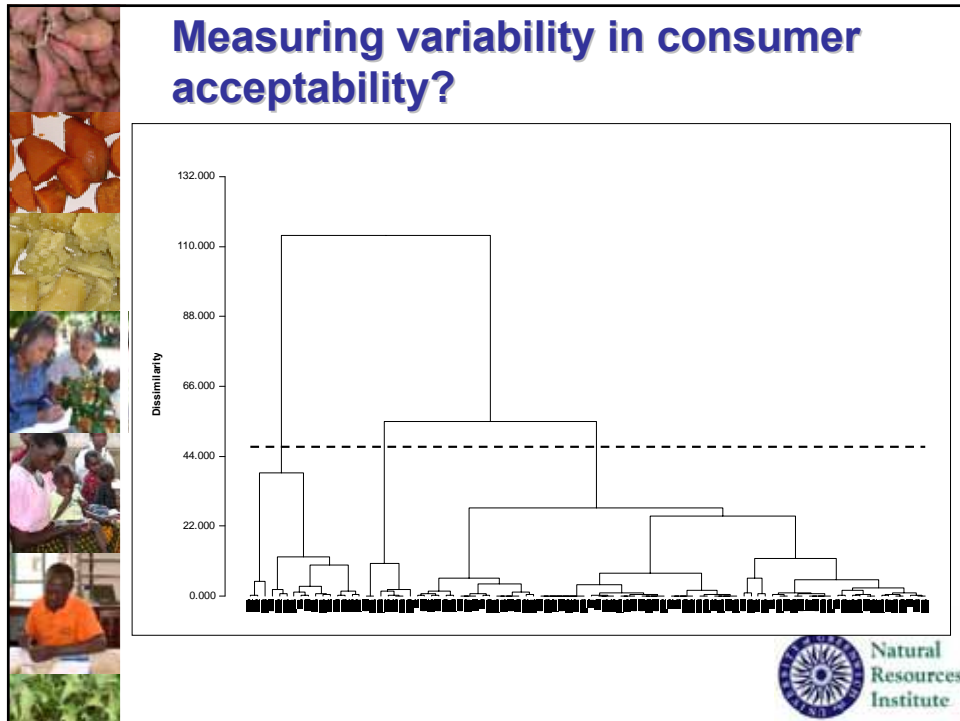
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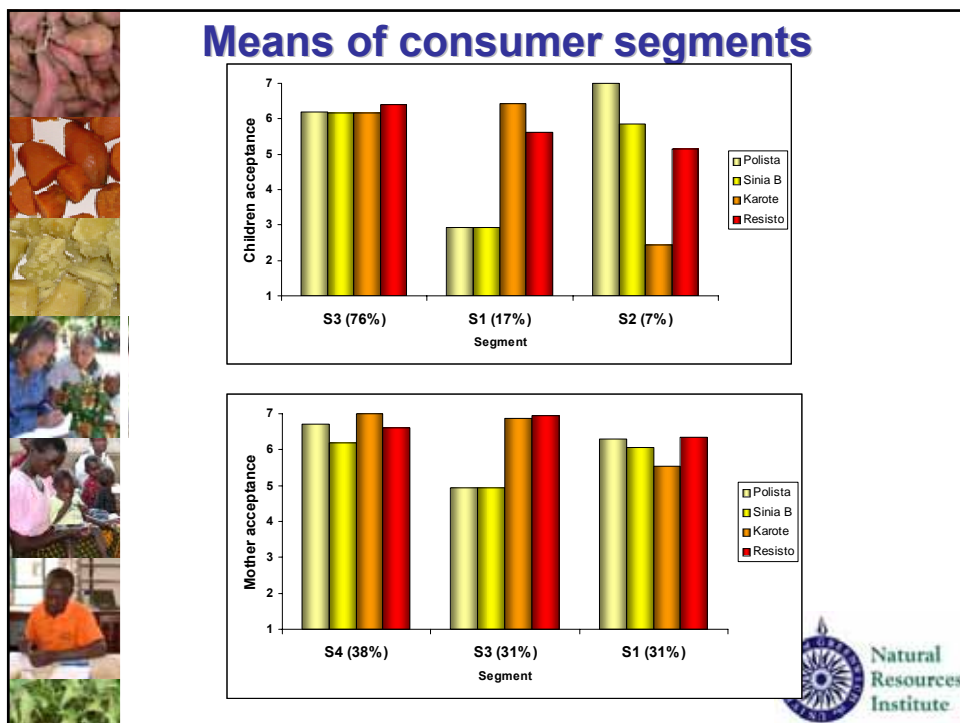
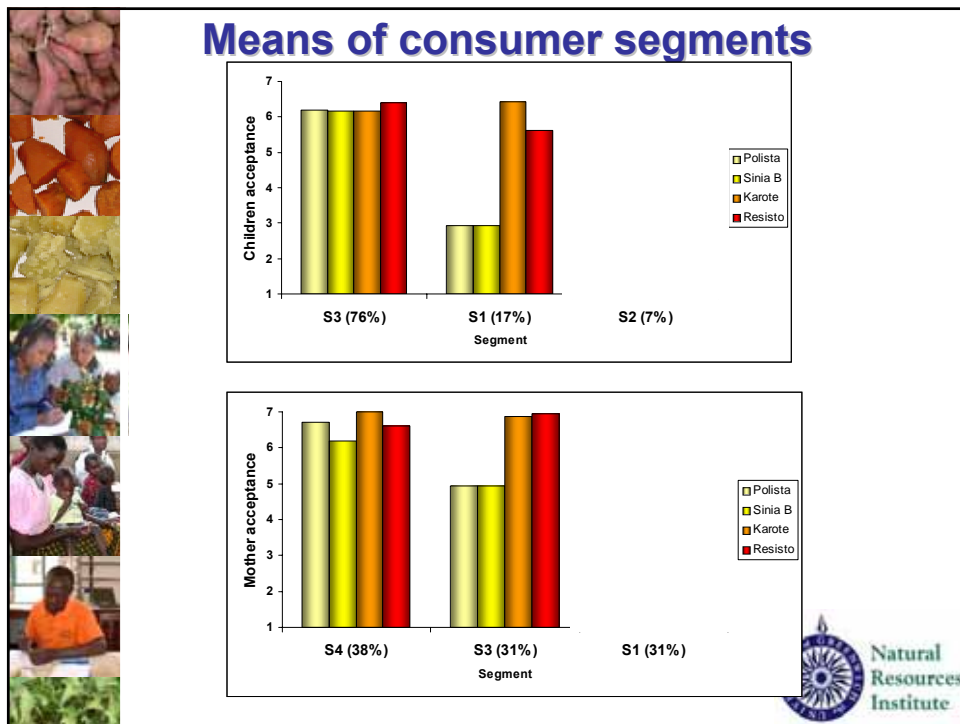


No difference between mothers & pre-school aged children

But is this the whole picture?

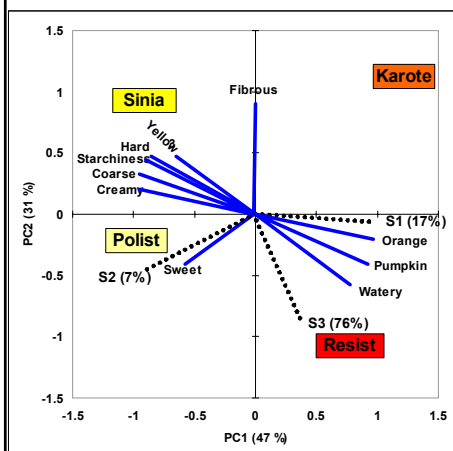




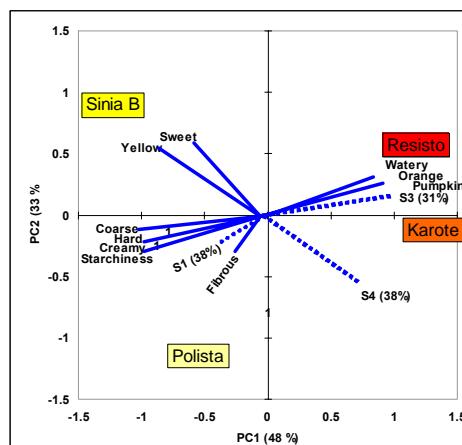


How does consumer acceptance relate to the sensory panel attributes?

School children



Mothers



Conclusions

- Sensory & consumer testing a useful tool to support nutrition interventions, breeding and post-harvest initiatives;
- But only part of picture – yield, disease resistance, post-harvest losses also;
- Consumer acceptance differed – mothers liked more than children & 3 patterns of acceptability;
- Difference between children & mothers in sensory perception?;





Conclusions

- Need to screen new cultivars
- Not all OFSP are equally liked (maturity? & need to identify which groups)
- HarvestPlus - will explore acceptability in Uganda and Mozambique. Impact of nutrition messages on acceptability.



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