

Effect of Processing technologies on the Quality of Pasteurized Baobab nectar produced in southern Benin

A. M. Gbaguidi^{1,2}, F. J. Chadare^{*1, 2}, B. Gnanhoui¹, A.E. Assogbadjo³

¹ Laboratory of Food Sciences, Faculty of Agronomic Sciences, University of Abomey-Calavi, Calavi, Benin

² Laboratoire de Sciences et Technologie des Aliments et Bioressources et de Nutrition Humaine (LaSTAB-NH/UNA), Ecole des Sciences et Techniques de Conservation et de Transformation des Produits Agricoles, Centre universitaire de Sakété, Université Nationale d'Agriculture, Bénin

³ Laboratory of Applied Ecology, Faculty of Agronomic Sciences, University of Abomey-Calavi, Calavi, Benin

*Corresponding author: fchadare@gmail.com

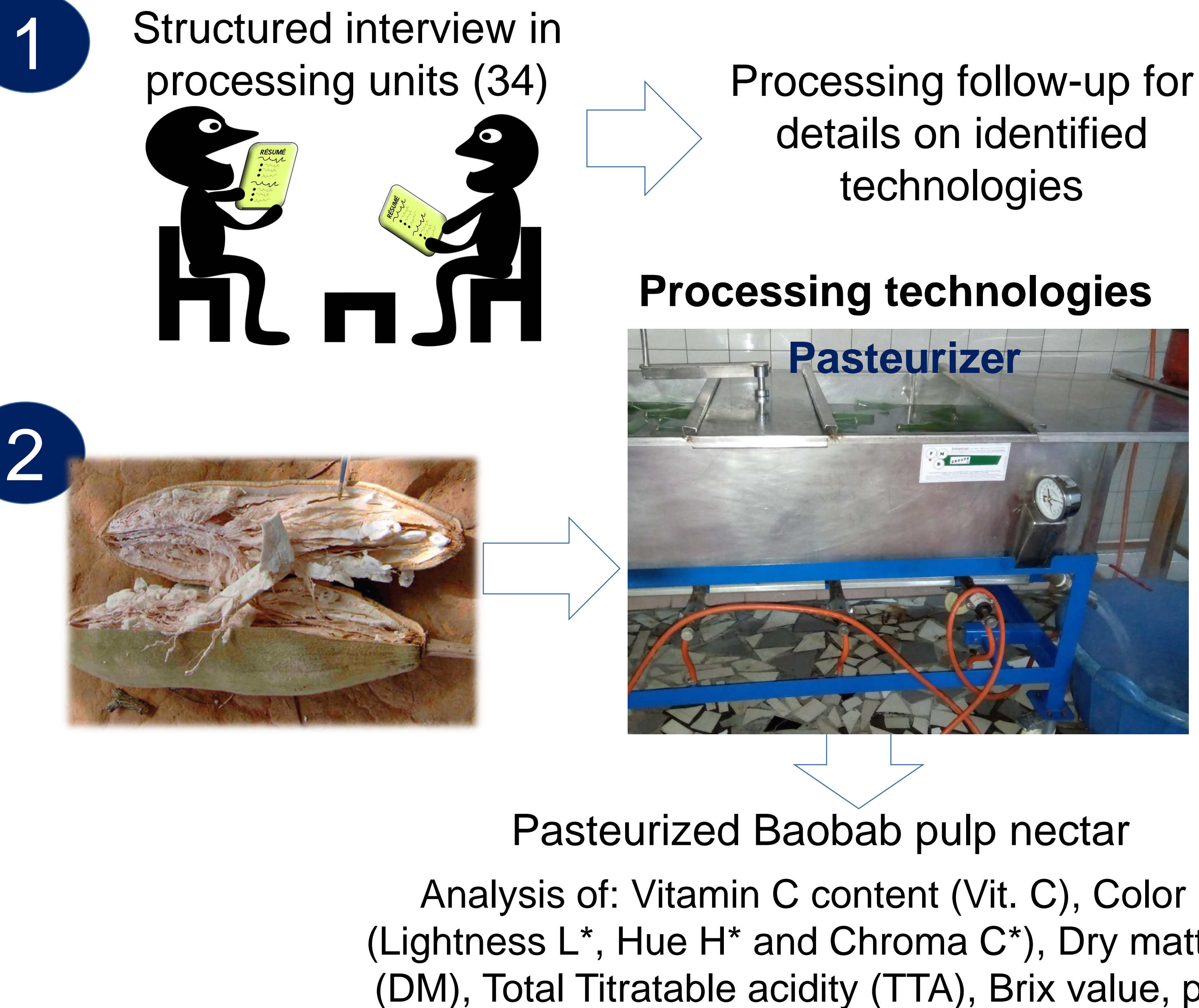
Background

The interest on *Adansonia digitata* fruit pulp has grown during last decades, due to its functional properties. The derived nectar is one of the most consumed product. This study assessed the **pasteurized baobab fruit pulp nectar technologies** used in Benin and **their effects** on the derived nectar's quality.

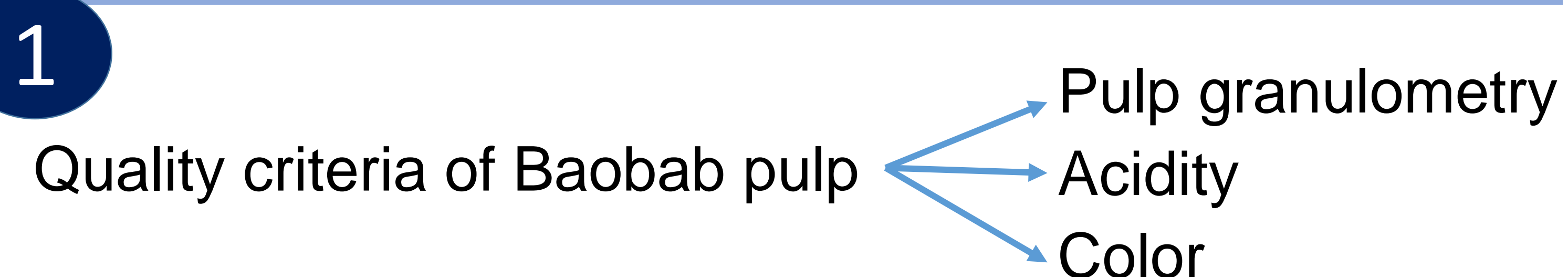


Figure 1: Baobab tree (a), fruits (b) and Pasteurized baobab pulp nectar (c)

Methods



Results



The discriminating criteria of technologies (Figure 1) are: Nature of the raw material used, used additives, Number of filtrations, **Number of thermal treatments**, Cooling nature (rapid or slow), Primary packages of derived nectar

Results

1 Baobab pulp nectar processing technologies

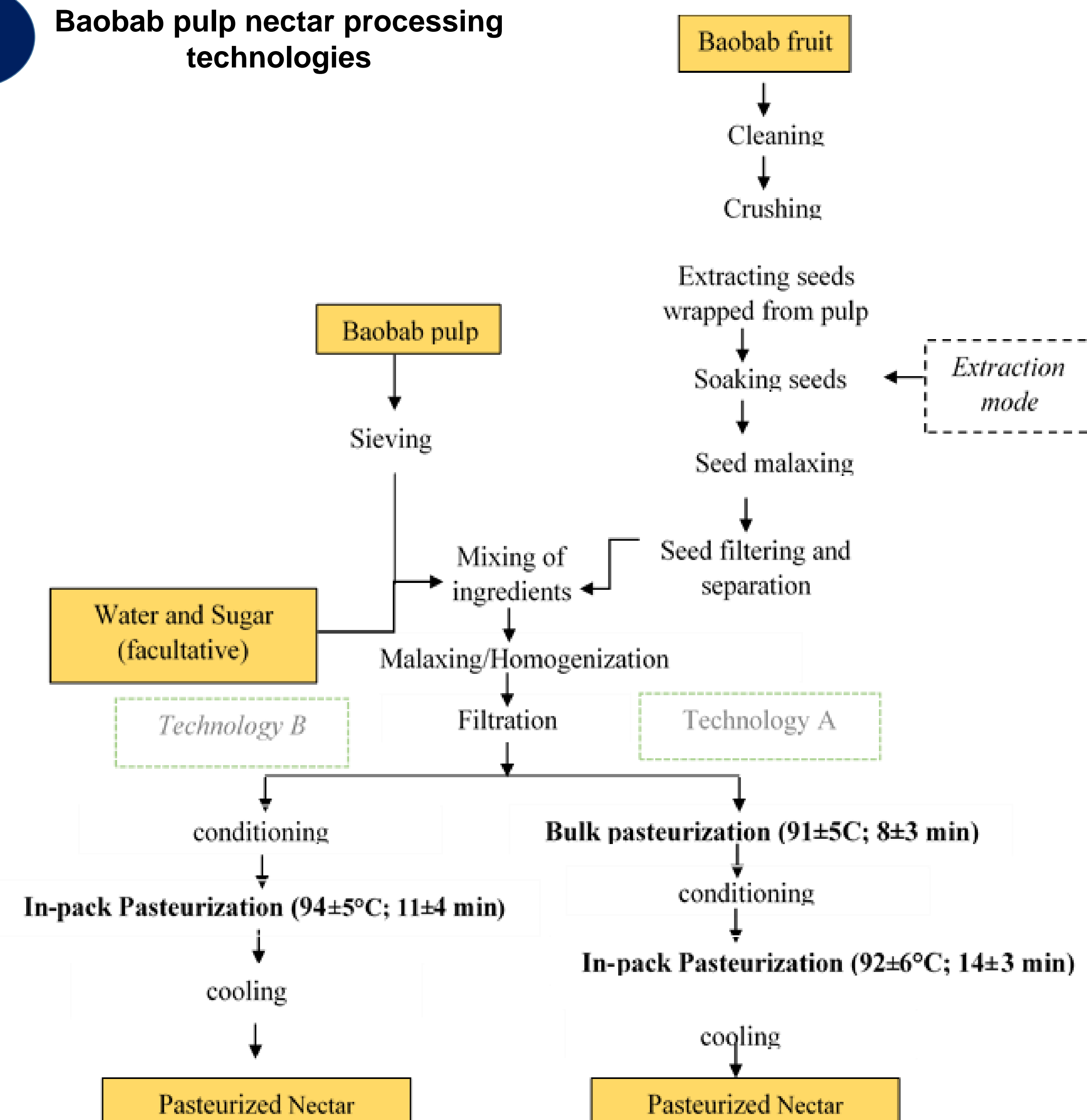


Figure 2: Pasteurized baobab pulp nectar processing technologies

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The Baobab nectars derived from the two technologies are not significantly different ($p>0,05$) based on the physico-chemical quality (Table 1), but the vitamin C content was reduced for about 35% in comparison to the pulp for about $299.13\pm9,0$ mg/100g to 209.8 ± 8.7 mg/100g; the color derived nectars were the same (Figure 2).

Table 1: Quality of derived Pasteurized nectars

Sample	Nectar T _A	Nectar T _B	Baobab pulp
Brix	12.92±0.2 ^a	12.17±0.0 ^b	-
pH	2.69±0.1 ^a	2.60±0.0 ^a	-
TTA (g/L dw)	717.01±21.2 ^a	735.0±22.9 ^a	-
DM(g/100g)	13.18±0.3 ^a	12.67±0.0 ^a	-
Lightness	73.38±0.3 ^a	74.28±0.1 ^a	-
Vit. C (mg/100g dw)	180.05±7.0 ^a	209.84±8.7 ^a	299.13±9.0

The mean values with different letters in raw are significantly different

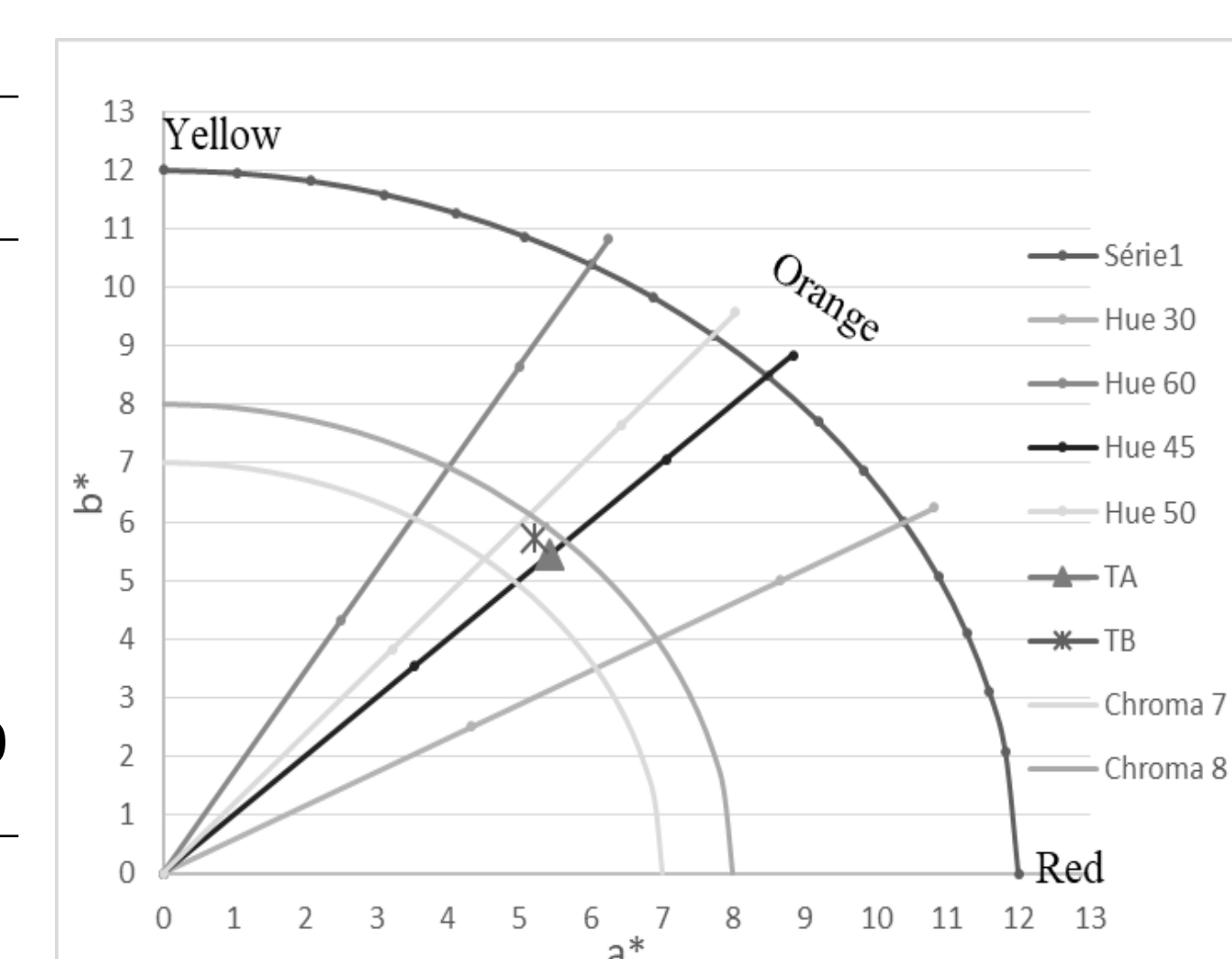


Figure 3: Color of Pasteurized nectars

Conclusion

Two technologies are used to pasteurize Baobab fruit pulp nectars in Benin. Both ways have a significant impact on the nutritional quality of the baobab nectar; almost 35% of the vitamin C content is destroyed during the heating processes. The remaining amount is still high (180-209 mg/100g) compared to conventional fruits.

Acknowledgements

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