



How to produce the stabilized soybean milk in Benin?

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Introduction

The soybean milk is nourishing product and can easily replace cowmilk.

In Benin, the major constraint of the women who process soy in milk using traditional method is especially the quality of the milk that is just steady for some hours. Beyond 16 hours, in ambient temperature, this quality deteriorates and becomes unfit to human consumption.

Facing this constraint, the National Institute of the Agricultural Research of Benin has developed an improved technology for good quality soybean milk production that can be kept for at least three (03) months.

The present technical sheet describes how to produce this stabilized soybean milk.

Material and Methods

Good quality and clean soybean grain (Fig.1) and water are the main raw materials used in the production of the soy milk. The main equipment used are: millstones (Fig.2) for milling soaked grains of soy, white and very clean clove (Fig.3) for the filtration of the milk; a pot (Fig.4) for the cooking of milk and a sterilizer (Fig.5) to sterilize the bottled milk. The necessary ingredients for milk production are sugar and fresh leaves of citronella. The diagram below (Fig.6) presents the different stages of stabilized soy milk production on an artisanal scale.



Fig.1 : Clean grain of soybean



Fig.2: milling machine



Fig.3 : white clove for filtration



Fig.4 :Pot containing raw milk



Fig.5 : Sterilized versed



Fig.7 : Cooked milk of soy



Fig.8: Packed milk

Results

Processing 1kg soybean with 12L of water gives 9 L of milk equivalent of 30 bottles of 0.30L. The duration of this production is about 4 hours. This milk is stable for at least three months to ambient temperature. The analyses on the quality of the soy milk produced showed that it keeps its physical, chemical and microbiological characteristics during storage. The practice of steam sterilization (Fig.5) has a positive effect on stability of the soy milk (Fig.8).

Implication for development

The transfer of this technology of production of the steady soy milk toward the women processors of soy will contribute to the development of this activity.

This technology can also induce the emergence or creation of Small and medium Enterprises for soy milk production in Benin there fore the creation of new jobs.

Conclusion

The team of INRAB, thank PAEPARD and his partners for the financing of the CRF-Benin Project (ProSAM) through which the technology of steady milk of soy is developed.

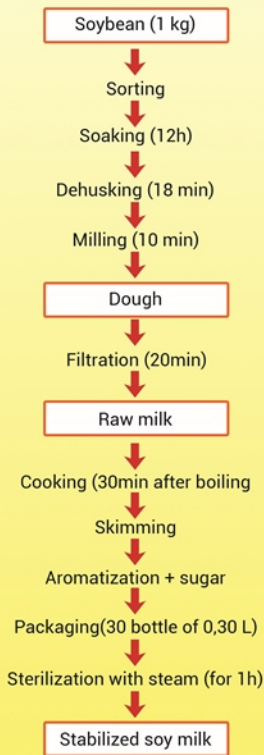


Fig 6 : Diagram for stabilized milk of soybean

