

CASSAVA STARCH





Roots and Tubers Processing Toolkit

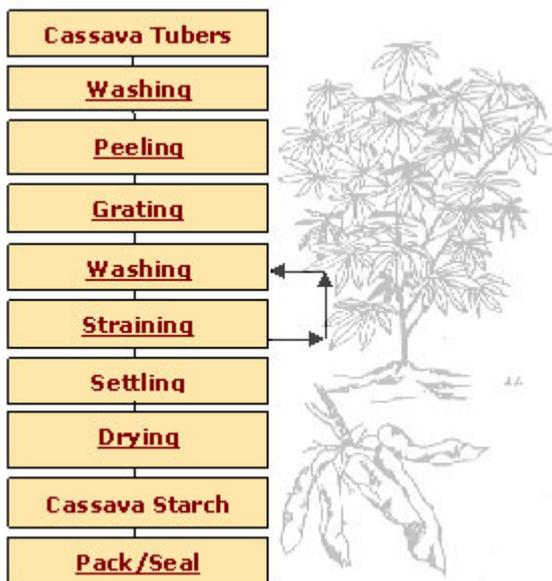


CASSAVA STARCH

1.- Production of cassava starch: general information

Traditionally starch was made from arrowroot or sago palm. However, cassava is a cheaper raw material and has tended to replace these starches. The juice obtained from grated cassava contains a certain amount of starch which settles out after standing for a few hours. The liquid can be decanted off and the starch recovered. The most common use of starch is to add to puddings or mix with fruit. Cassava starch can be stored as needed. It is baked into cakes in the Caribbean, Pacific Islands and Jamaica. Cassava starch can be further processed into tapioca. The wet starch is heated in a pan, stirring continuously until the grains burst and gelatinise into globules. In West Africa, cassava starch is traditionally processed and dried, then rehydrated later to make a porridge.

2.-Processing details for cassava starch production



2.1.-Cassava Tubers

Fresh cassava is a moist, low acid food that is susceptible to bacterial and fungal growth. Hygienic practice should be followed to prevent cross contamination and spoilage. All waste materials should be removed from the site to avoid cross contamination.

Fresh cassava should be free from microbial and insect damage. Bruised, damaged or mouldy roots should be discarded as they will reduce the quality of the gari.

Fresh roots should be processed within two days of harvest to prevent deterioration and loss of quality. Tubers should be thoroughly washed to remove sand and dirt.

2.2.-Washing

Preparation of raw material

Fresh cassava is a moist, low acid food that is susceptible to bacterial and fungal growth. Hygienic practice should be followed to prevent cross contamination and spoilage. All waste materials should be removed from the site to avoid cross contamination.

Fresh cassava should be free from microbial and insect damage. Bruised, damaged or mouldy roots should be discarded as they will reduce the quality of the gari.

Fresh roots should be processed within two days of harvest to prevent deterioration and loss of quality. Tubers should be thoroughly washed to remove sand and dirt.

2.3.-Peeling

Tubers are peeled by hand. Woody pieces should be removed. Mechanical peelers are available. After peeling, the tubers are washed in clean water to remove any pieces of peel and dirt.

2.4.-Grating

Washed tubers are grated into coarse pieces, using either a manual or motorised cassava grater or rasper.

2.5.-Washing / Straining

Grated cassava is washed with clean water and strained through a cloth bag. The bag is squeezed to extract the starch milk, which is poured into a bucket or basin. The washing and squeezing process is repeated several times until the squeezed liquid is no longer white.

2.6.-Setting

Decantation

The squeezed liquid is left to stand for several hours to allow the starch to settle to the bottom. The liquid is decanted off. The starch is washed and the procedure repeated until the liquid poured off is clear.

2.7.-Drying

The white starch remaining at the bottom of the basin is removed and spread out on mats to dry in the sun. When it is almost dry, the starch is either pressed into balls or dried completely and then pounded into a powder.

2.8.-Packaging

Cassava starch is very hygroscopic and easily absorbs moisture from the surrounding air. It should be packed in moisture and air proof bags.

