

**Illustrated  
guidebook**

## **Making the « Malt for the Porridge »**



Version du 18/05/2021

We call "**Malt for the porridge**" the "flour" obtained from cereals germinated with care and cleanliness.

Sprouted or germinated cereals are rich in amylases. Amylases have the power to **liquefy** thick porridge, **without diluting it**. The "Malt for the porridge" is particularly rich in amylases. Thus, by adding a very small amount of this malt to the hot porridge, we obtain "Liquefied Concentrated Porridge" (LCP)

The preparation of the "Malt for Porridge" is based on traditional cereal malting methods used for the preparation of local beers.

In 'Artisan Production Units' (APU), 'Community Manufacturing Groups' (CMG) and for the family use, the making of the "Malt for the Porridge" is done according to the following process steps.

**Grain preparation,**  
**Grain germination**  
**Germinated grain drying,**  
**Grinding and sieving,**  
**Testing the liquefying potential of the malt,**  
**Malt packaging and storing.**

NB. Malt contains sugars, amylases, vitamin B. Malt does not contain alcohol.

The document 04c of the site [www.bamisagora.org](http://www.bamisagora.org) , "Malt for the porridge - Preparation", gives further information on how to obtain a good quality "Malt for porridge".



# 1° - Grain preparation -

Choose good, living grains of, sorghum, maize (corn), pearl millet, paddy rice, . . . .



All varieties of cereal may be used to prepare malt.

Choose well-stored grains, from the former harvest if possible, in order for all of them to germinate.

Try out several different kinds of cereal and choose the one which prepares the most 'liquefying' malt.



**2° - Grain preparation -** The weight of malt obtained is about half the weight of the grain set to germinate.

	<b>Amount of BAMiSA FLOUR planned, in Kg</b> (or according to the number of 500 gram bags)			
	<b>10 Kg</b> (20 bags)	<b>25 Kg</b> (50 bags)	<b>50 Kg</b> (100 bags)	<b>1 Tonne</b> (2 000 bags)
<b>Amount of Malt to prepare</b>	<b>200 g</b>	<b>500 g</b>	<b>1 Kg</b>	<b>20 kg</b>
<b>Weight of grains of sorghum, maize, pearl millet, ... to be set to germinate.</b>	<b>≥ 400 g</b>	<b>≥ 1 Kg</b>	<b>≥ 2 Kg</b>	<b>≥ 40 Kg</b>

**This table shows the weight of grain to germinate according to the planned amount of flour.**



### 3° - Grain preparation -

**Winnow, Sieve-calibrate,  
Wash and Sort the grain**



Tambacounda Sénégal



Calibrate with an adequate sieve enables to keep only the bigger grains

During the washing, keep only the good 'heavy', ripe and big grains which will be able to germinate.



## 4° - Grain germination -

### Rehydrate the grain

Soaking the grains in a little bit of water enables them to swell (to rehydrate them) and « wake » them up !

Depending on the grain, the soaking may need several hours.

Change the water used for soaking and use lightly chlorinated drinking water.



**Be careful :** Grains need air to live and germinate.  
Too long a soaking period would leave them to smother and ferment.



**5° - Grain germination -** Maintain the grains damp by soaking them or regularly watering them during 2 to 5 days



Fada N'Gourma Burkina Faso 2005



Maintain germination until the germ is clearly visible.

**Be careful :** Cover the grains, place them in the shade, in a draft-free location, avoiding too hot or cold temperatures.



## 6° - Germinated grain drying -

The germinated grain is to be thoroughly dried in the sun and then

## 7° - Sorting -

Sort to keep only the fully germinated grains



Dagana Sénégal 2012



Fada N'Gourma Burkina Faso 2005

The drying malt may attract flies. In that case, cover with cloth or a mosquito net.  
In order to gather only the germinated grains, use a fork and shake a little.  
Remove grains that have not germinated.

**Be careful :** When the weather is very damp, it is possible to finish the drying by lightly heating and stirring the germinated grain « hand in the pan ».



## 8° - Grinding -

Grind finely



Dagana Sénégal 2012



Podor Sénégal 2013



With a mill

With a « peanut butter »  
hand mill»

or on stone

**Be careful :** Avoid the small leftover residual quantities of malt grist which could be dispersed in other millings.



## 9° - Sieving -

Then sieve in order to eliminate fragments and hulls



Fada N'Gourma Burkina Faso 2006

Sieve with a fine mesh sieve.

**10° - Malt checking -**

Prepare a porridge according to the « 1 + 2 + 3 Recipe»  
And check that the malt liquefies efficiently the porridge.



Koupéla Burkina Faso 2014

**Thick porridge, before adding 3 pinches of malt.**  
**The same porridge, one or two minutes after the action of the malt..**

# 11° - Malt Packaging and Storing -

## Packaging



Fada N'Gourma Burkina Faso 2006



Niamey 2017

The small bag of malt is to be put at the top of the flour.

Package the malt in small airtight bags or 'sachets', easy to open and close.

## 12° - Malt Packaging and Storing -

Store in a dry place



The malt which is not packaged can be stored in pots.

Well-dried and well-stored malt keeps its amylasic power during several months.

It can be used to prepare Liquefied Concentrated Porridges (LCP's) with any kind of flours



## RECAP CHART OF THE PROCESS STEPS IN THE MAKING OF) THE "MALT FOR PORRIDGE

<b>Grain préparation</b>	1	Choose good quality sorghum, maize, millet grain, paddy rice,
	2	Determine the necessary quantity of grain
	3	Winnow, Sieve-Calibrate, Wash and Sort
<b>Grain germination</b>	4	Set to soak for a few hours
	5	Set to germinate for about 2-5 days, maintainig the grains moist
	6	Sort to eliminate no-sprouted grain
<b>Germinated grain drying</b>	7	Dry well
<b>Grinding and Sieving</b>	8	Grind finely
	9	Sieve
<b>Malt testing</b>	10	Prepare a porridge according to the « 1 + 2 + 3 Recipe». And check than malt efficiently liquefies the porridge
<b>Malt packaging and Storing</b>	11	Put the malt in the airtight sachets
	12	Store in a dry place