

History of baobab oil (continued)

Producing baobab oil? What a business... and above all, what expertise!!!!

[The supply of baobab seeds](#), that's a whole story in itself, one that's already been told.↵ But once they arrive at the oil mill, nothing is guaranteed. There are new challenges to overcome. And they are significant.↵

Here is a small glimpse into the life of the oil mill and the daily routine of Sidya, Papa Samba, Tidiane and Abdoulaye, who supply seeds, extract the oil, package it and dispose of the by-products.

Warning, risk of flooding...

Let's do some calculations.↵

To produce 100 liters of oil, more than 1400 kg of seeds are needed...↵

Given that a fruit, weighing on average 200g, contains 30g of pulp and 90g of seeds, it therefore requires 15,000 fruits, or the production of approximately 100 trees.↵

To reach a target of 1000 liters per year, nearly 600 25kg bags need to be stored, along with almost as much oilseed cake. With a volume of 50 liters per bag, this amounts to approximately 60 m³ to be stored... requiring a total floor area of 30m²!↵

Not to mention that space is needed for the other oils as well.↵

Producing baobab oil is therefore also a matter of logistics. If we're not careful, we risk being quickly overwhelmed...

The oilseed cakes kept piling up. What to do with them?! They weren't palatable, the farmers said, and nobody wanted them, even if the prices were slashed. So we put them to compost, but then there was the challenge of getting rid of all that compost: Sokone isn't a major market gardening area, even though it's an activity that's starting to develop in the Diaglé Valley. Fortunately, a farmer friend and loyal partner, Eri Ly, who fattened cattle, agreed to try incorporating the oilseed cake into the feed he prepares for his animals: after some trial and error to find the right mix and a little time for them to get used to it, the animals took to it! Eri's bet paid off: this oilseed cake, which contains more than 25% protein, is as rich in phosphorus and potassium as peanuts and far surpasses them in magnesium, and thus enriches his feedstuff and is really not expensive at all.

And where do things stand today? Well, thanks to the rumor mill, we can no longer meet the demand!

Warning, danger

In the production room, there are holes in the walls. They look like bullet impacts, like the ones I saw in Bissau in 2001 when that beautiful city had just been ravaged by years of civil war.↵

No one was fighting here; they were provoked by the screws holding the cylinder head to the compression chamber. Under pressure, they broke and were violently ejected! It's best not to be in their way. In fact, it's strictly forbidden, and the production manager is very vigilant about this.

The seeds are not very resistant, but still, to obtain a 7% extraction rate you have to increase the pressure: and at 40 bars, it's no joke...If you are not attentive, if you don't have an ear to detect changes in engine speed, and if you are not reactive, you risk not only heating the oil but also breaking everything.

Today, the compression chamber has been reinforced and this no longer happens, but what a scare it was! That doesn't mean we can do just anything, though: the coupling screw, the one that secures the drive screw to the motor shaft, acts as an automatic disengagement mechanism. If the pressure accidentally becomes too high, it breaks and the motor runs free, thus protecting the press from irreversible damage. All we risk then is a production stoppage while it's replaced. It's a small price to pay!

Eventually...

The quiet beauty of baobab oil is thus the result of a multitude of challenges, each worthy of this monumental tree. But we learned to overcome them, and finally, over the course of a good ten years, we were able to transport, store, and press some 165 tons of seeds and produce around 12,000 liters of this magical oil, without it ever running out on the shelves of our store...

...for your enjoyment!