



# MOABI BUTTER



**Enter the world of  
NAT oleis™**

**MOABI BUTTER**



# Moabi butter – At a glance

## INCI name : Baillonella toxisperma seed oil

- Also named “shea butter of the forest”, this is a rare botanical butter from the same botanical family as Argan and Shea butter.
- The tree is the symbol of power: the tallest tree of the African canopy (50-60 meters)
- Considered divine and auspicious by villagers.

### NATUREX ADVANTAGES

- Creation of a very new positive value chain in Central Africa. 1T available per year.
- Through moabi, Naturex is committed to reducing deforestation
- “From soil to oil”: full traceability and guarantee at each stage



SKIN  
CARE

- Moisturizing
- Barrier repair/Nourishing

HAIR  
CARE

- Repair
- Shine



An ancestral tree in Africa that is able to produce a very rare and beneficial oil



# Moabi Butter – from the wild forests of Central Africa



- Naturex harvests moabi fruits in Cameroon. This tree is only found from south-eastern Nigeria to Congo.
- It is found dispersed throughout the forest or in small groups. (less than 1 tree per Ha)
- It is a valuable timber tree, also prized for its distinctive oil that is obtained from its fruits. Local people also use other parts of the tree for medicine.
- As a result of large-scale timber extraction the species is in danger of disappearing.





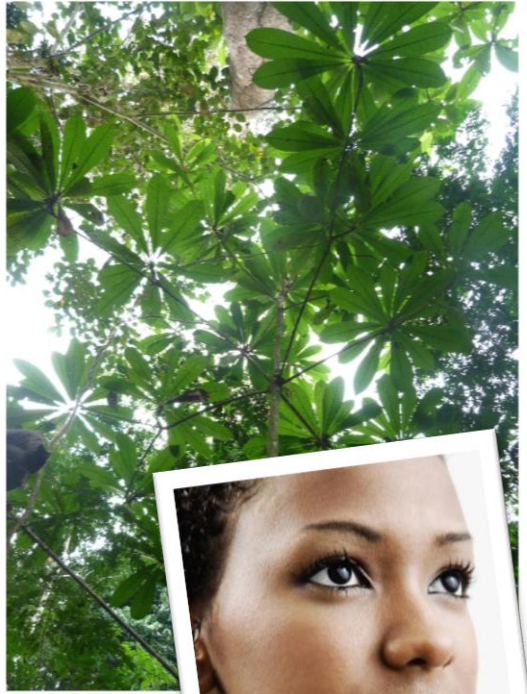
# Moabi butter - Botanical identity

- **Name: Moabi butter**
  - Botanical name: *Baillonella toxisperma*
  - Other common names: Njap, Nkoumma, Adjap, Djoh
- *Baillonella toxisperma* is part of the *Sapotaceae* family. Argan, Shea butter are part of the same botanical family
- The tree is majestic and stately: more than 50 m, it is the tallest tree in Africa
- Fruits are harvested in July and August; only trees with a 70 cm diameter (usually over 50 years old) regularly produce fruit.





# Moabi butter – Traditional use



- The tree has considerable importance for forest people and is highly appreciated by elephants.
- Fruits are allowed to fall from the tree for harvesting
- All parts of the tree are used:
  - Local populations cook with the oil and use it as a butter. A prized resource, it is rarely sold in markets. Villagers keep it for their own use, communities prefer it to any other oil.
  - Succulent fruit pulp is eaten by villagers and animals
  - The latex made from its bark is used for medicinal purposes against rheumatism, pain, and scarring.
  - The bark is also used by pygmies as camouflage when hunting
  - The seeds can be used to make foot-rattles for traditional dances



# Moabi butter – Harvesting & Processing



## Harvesting from July to August

Fruit harvesting and seed drying



Seeds are broken to obtain the kernel



Kernels are cut into small pieces and sun-dried



Cold-pressing



After adding water, the blend is boiled



Filtration

## Processing

60 to 100 liters per tree every 3 to 4 years.





# Moabi butter – NATUREX Sustainable Program



Our commitment for a positive impact on communities and environment



**1% to sustainability**  
Naturex commits to share 1% of sales from its NAT oleis™ range for the planet and communities via its foundation

## Social impact

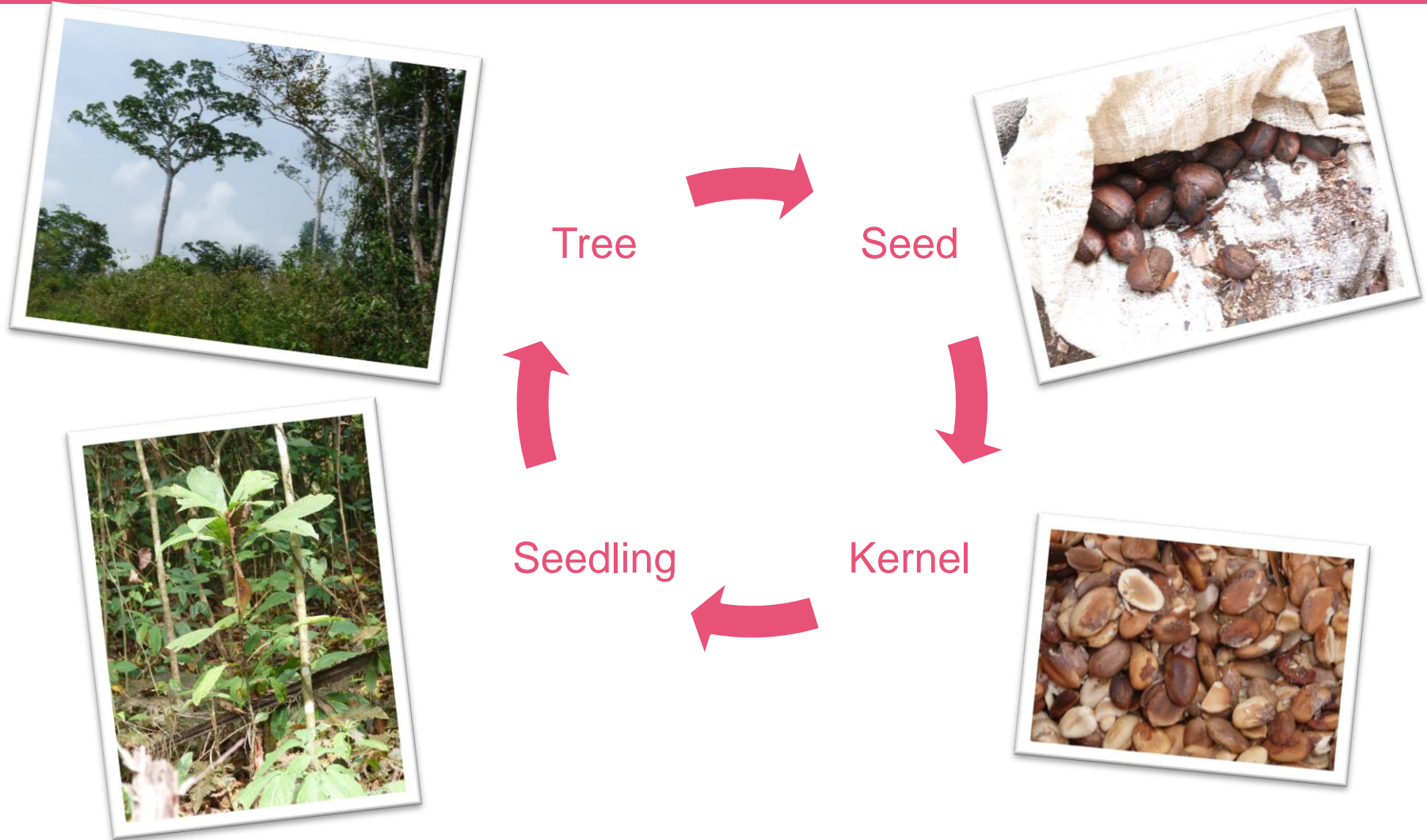
- Oil production has a positive impact on poverty in rural fields.
- Development of the supply chain with a local NGO.
- Extra revenue: Naturex buys the almond to communities the same price than the butter locally sold

## Environmental impact

- Developing moabi butter production is a way to fight against deforestation. The tree is classified vulnerable on the Red List IUCN (not CITES)
- Long term, oil production is more profitable than cutting the trees.
- Planting program: 5000 trees planted in wild environment for reintroduction.



# Moabi butter – From growing to industry





# Moabi butter – NATUREX premium quality



A butter is an oil that solidifies at ambient temperature. The fusion point is high and superior to other oils. Butters are rich in saturated fatty acids.

- Melting point of Moabi Butter: 26-28°C.

## **1 grade available:**

- Refined grade: thanks to a decoloring and deodorization process, the butter is ready for cosmetic formulation (no odor and no color)

## **Naturex guarantees premium quality via strict quality control on each batch:**

- Fatty acid profile
- Characteristic unsaponifiable compounds
- Low acid value\*
- Low peroxide value\*
- Infra-red spectrum fingerprint
- DNA authentication if necessary

*\*according to each botanical oil bibliographic data*



# Moabi butter - A very specific composition

- The rancimat analysis shows that moabi butter is stable
- Moabi oil OSI rancimat: 11.7h [110°C, 10L/h]

## Triglycerides

**Unsaturated fatty acids**  
Oleic acid 47-57% (omega 9)

**Saturated fatty acids**  
Stearic acid 25-35%  
Palmitic acid 5-15%

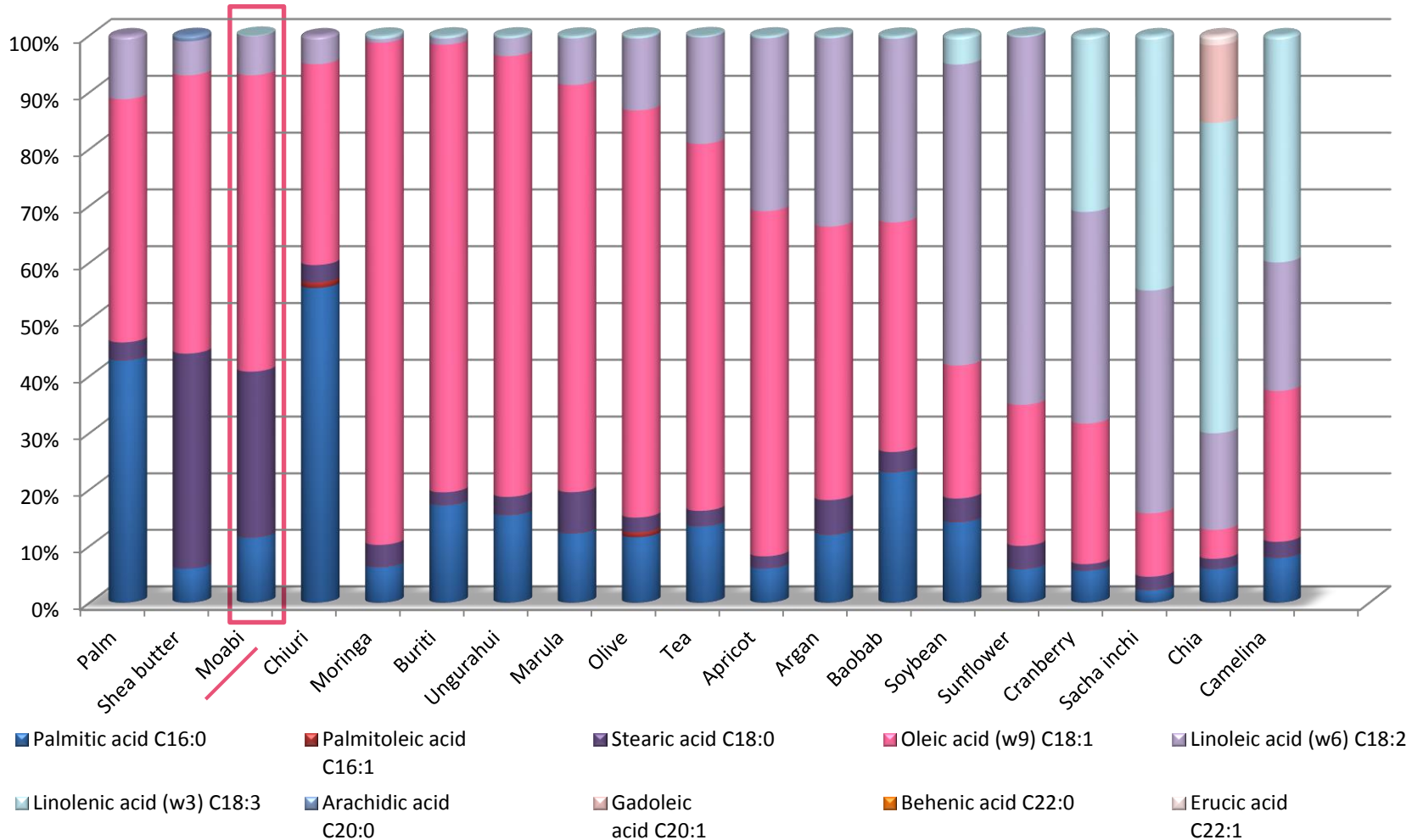
## Unsaponifiables

**Phytosterols**  
About 124mg/kg.  
The main sterol present is beta-sitosterol (about 40%).





# Moabi butter - Examples of FA profiles





# Moabi butter - Fatty Acids (FA) Biochemistry

## FA skin and hair effects

### Mono- unsaturated FA

Omega 9 ( $\omega$ -9)  
C18:1  
Oleic acid

Important constituent of  
sebum and hair lipids

Deficit: dry skin, dry hair

### Poly-unsaturated FA = Essential FA Vital for healthy skin

Omega 6 ( $\omega$ -6)  
C18:2  
Linoleic Ac

Most important FA in epidermis.  
Central role in the barrier  
function

Deficit: atopic dermatitis

Omega 3 ( $\omega$ -3)  
C18:3  
 $\alpha$ -Linolenic Ac

Component of Stratum  
Corneum.

Deficit: inflammatory  
dermatosis, acne, psoriasis,  
atopic dermatitis



# Moabi butter – Unsaponifiables for skin and hair benefits

NAToleis™

- **Tocopherols**

- Protect against the damaging effect of lipid peroxidation
- Protect cell membranes and DNA from free radical damage



- **Phytosterols**

- Have a chemical structure close to cholesterol, that composes intercorneocytary cement and sebum
- Raise the stratum corneum cohesion and reform the protective hydrolipidic film of the skin
- Reinforce the barrier function



# Moabi butter - Cosmetic benefits

**NAT**oleis™



## SKIN CARE

- Moisturizing
- Barrier repair/Nourishing



## HAIR CARE

- Shine
- Repair





# Moabi butter - Cosmetic applications

**Sensorial profile:** smooth lipidic film, emollient



## SKIN CARE

- Melting body butter
- Moisturizing night cream
- Lip care



## HAIR CARE

- Hair conditioning balm
- All repairing hair care lines



# Moabi butter - To summarize

- **100% natural process.** No chemical substances added when processing the oil.
- Moabi butter by Naturex is **very resistant to oxidation;** Shelf life 18 months.
- **Natural intrinsic properties of the oil are preserved** thanks to the cold-pressing: moisturizing, regenerative, hair repair.
- Unadulterated: from the tree to your product, **quality is traceable and measured**
- Stored at a chilled temperature, protected from light.
- **Sustainable sourcing:** contribution to Naturex sustainable program (1% Foundation)





# Moabi butter – References

- **References**
  - LA030100 for the refined grade
- **Recommended dosage:** 1-50%

- **Safety assessment**

Good local tolerance safety assessment is available, established by expert toxicologist, based on the regulation (CE) N° 1223/2009 and based on the recommendations of the SCCS notes of guidance

