

## Technical Data Sheet: Arenga Rainforest Sugar

Arenga Rainforest Sugar is a creamy, dark brown sugar with delicious caramel aftertaste. This sugar is produced from pure sugary juice that is tapped from the flower stalk of an Arenga tree through evaporation, cooking, and dehydration. This sugar, till date, is hand crafted and is an artisanal product. Arenga sugar is a diabetic-friendly and healthier alternative sweetener to white cane sugar. Its low glycemic index (GI) is almost half that of white sugar and honey, which makes this product even suitable for diabetics! This 'superfood' contains 50 times more minerals than white sugar, three times more potassium than bananas, and vitamin C and B12.



## Ethical Product

By purchasing this product you directly contribute to rainforest conservation. In West Kalimantan alone, we can help at least 2340 farmers with a sustainable daily income, straight from their existing forest, from trees that are ready to be cultivated. Only 5 Arenga are sufficient to provide the farmers' family with their basic needs.

The Arenga tree is evergreen and is particularly useful as a source of food during the dry season. It grows very well among larger trees in diverse rainforest ecosystems. The trees thrive in hilly and undulating terrains courtesy its deep roots. This feature also renders watering or fertilizing the trees by humans unnecessary. An advantage of harvesting Arenga trees is the restoration impact on rainforests. Regular harvesting improves growth of the trees, improves forest floors' ecosystem, provides diet for wildlife, maintains forests' biodiversity and is of high conservation value.

## Colour and flavour

Due to the Maillard reaction, while boiling down the nira to a solid and crystallized form, the sugar slowly discolours towards light brown. This gives the Rainforest Sugar its distinctive and subtle caramel flavour.

Rainforest sugar has about 90% of sweetening power compared to refined sugar of cane/beet sugar. Aside its characterizing caramel touch on its flavour pallet, a slight acidity is there to perceive too.

## Advantages of Rainforest Sugar

- ✔ Delicious, unique taste
- ✔ Suitable for diabetics because of its' low glycemic index
- ✔ Buy sugar and conserve the rainforest (buying 1 kg Rainforest Sugar per month helps conserve an area of 32 m2 of rainforest)
- ✔ Contributes directly to biodiversity conservation
- ✔ Providing farmers with a stable and continuous income, 365 days a year
- ✔ Lowest price markup through integrated supply chain

## Consistency and behaviour

After boiling down and crystallizing, the palm sugar gets sieved to guarantee a fine crystallized palm sugar with no chunks or potential presence of foreign bodies. There is no absolute guarantee for a free from foreign body product. Unrefined Rainforest Sugar has the tendency to attract moist. Therefore, try to minimize the time of Rainforest Sugar exposed to open air. At all times keep your product contained closed.

Even though we dry the Rainforest Sugar as well as possible (aim for <2% moist) the crystallized sugar still stays sticky due to its mineral composition and therefore has the tendency to lump under pressure or long-term storage. There have been cases of bulk bags being rock hard. When looked after a mechanized solution for breaking it is recommended to have bags either broken by vibrating or rolling (breaking/crunching) machines. Don't use grinding stones or mechanisms as such if the crystal size must be maintained. Using grinders is only advised when having a less coarse palm sugar does not interfere with required product specs on production. For e.g., the production of chocolate or beverages in which the palm sugar should dissolve.

## For those new to Arenga Rainforest Sugar

What is Rainforest Sugar? Rainforest sugar is basically boiled down and crystallized Arenga Pinnata tree fluids. These fluids are referred to as sugar juice or *Nira*. The nira can be harvested by 'tapping' the Arenga tree. This is typically done by cutting of the flower stems. Through these cut of stems the trees start 'bleeding' their high sugar level containing nira which is then to be collected. To get maximum output of sugar it is important to boil down the nira as fast as possible, meaning before natural fermentation kicks in, as yeast consumes the sugars by turning them into alcohol. For this reason, farmers need to climb their trees and collect the nira twice a day.

There are many tree species suitable for producing sugar, but three are typical. Looking at the mineral composition of sugars produced by these three species many similarities can be found:

- Arenga Pinnata (Arenga blossom nectar, Arenga sugar, Aren Sugar, palm sugar or Gula Aren)
- Borassus flabellifer (Palmyra or palm jaggery.);
- Better known as coconuts: Coco nucifera (Gula Java, Coconut palm sugar or Coconut blossom nectar);
- Better known for dates: Phoenix dactylifera (Date palm sugar, palm sugar)