

Practical market insights into your product

Exporting kithul from Sri Lanka to Europe

Kithul syrup and flour are exotic products for the European market. Most current consumers of kithul products in Europe originate from Sri Lanka or India. Other Europeans will first need to understand the benefits of kithul products and applications before they will buy them. This requires considerable promotion and cooperation with European importers to position kithul products according to needs of European consumers. Positioning kithul products as fine foods has the best chance of success. The unique taste and exclusivity of the products make them suitable for the fine foods market segment.

TABLE OF CONTENTS

■ Product description	2
■ Classification of Kithul	3
■ What makes Europe an interesting market?	3
■ Replacement of sugar threatens kithul market	5
■ Consumers want clean label products	8
■ What requirements must your product comply with?	8
■ Common requirements	9
■ Niche requirements	10
■ Quality requirements	11
■ Packaging requirements	12
■ What competition do you face?	12
■ Through what channels can you get your product on the market?	13
■ What are the end market prices?	16

PRODUCT DESCRIPTION

FIGURE 1: PHOTO OF CARYOTA URENS



Source: James Cook University, 2020

This factsheet provides information on the European market for *kithul* (*Caryota urens*) from Sri Lanka. *Caryota urens* is a native palm species in India and Sri Lanka and has been introduced to many other countries including Myanmar and China. *Caryota urens* or kithul trees produce three main food products. Within the scope of this research, we will cover two of them:

- Kithul syrup
- Kithul flour

Fermented beverages from the sap of *Caryota urens* are outside the scope of this research.

Kithul syrup properties:

- Natural and minimally processed product
- High antioxidant activity of kithul sap ([Tropical Agricultural Research](#))
- Low Glycemic Index (28 for treacle and 31 for jaggery): anti-diabetic (Sources: [24th ISCB Conference](#), 2018)
- Relatively high glutamate level in kithul treacle, compared to other treacles, of 73 mg/100g and presence of many other free amino acids (source: [Industrial Technology Institute of Sri Lanka](#))
- Contains reducing sugars which ensure that the syrup passes through the body rather than being stored ([Slow Food](#))
- Calorific value of 279 Kcal per 100 grammes. Carbohydrates 68.1 grammes per 100 grammes of which 67.2 grammes are sugars ([Guayapi](#)).
- Trace elements such as vitamin B and iron ([Happy Sugar](#)).

Kithul flour properties:

- Natural and minimally processed product
- High amylose content (28%) ([American Journal of Food Science and Technology](#))
- High starch content (67%) and high moisture sorption value (29%) ([American Journal of Food Science and Technology](#))
- Protein content (1%) ([American Journal of Food Science and Technology](#))
- Moderate antioxidant activity ([Procedia Food Science](#))

Production methods

- Kithul syrup: producers cut the young inflorescence of the tree to excrete sap. Application of a reagent increases sap excretion. After collecting the sap in containers, boiling of the sap evaporates the water and the resulting liquid substance is called treacle or syrup. The sap to treacle conversion ratio is typically around 8:1 depending on environmental conditions. Additional evaporation of water through boiling and stirring solidifies the product, which is then known as jaggery. Solid blocks of jaggery can be further processed into granulated sugar. Although solid blocks may sell well in local markets, European buyers are more interested in granulated sugar.
- Kithul flour: producers extract kithul flour from the pith of the stem.

TABLE 1: POTENTIAL USES IN FOODS AND HEALTH PRODUCTS:

Kithul syrup	Kithul flour
Retail packed syrup for use as sweetener in tea, coffee, desserts and as a spread on pancakes and toast	Thickener and stabilizer for food industry (especially baking powders)
Industrial sweetening ingredient for confectionery, ice cream, bakery products such as cakes and jams	Ingredient for porridge, pudding and traditional Sri Lankan dishes such as Thalapa and Wattalapan
Vinegar from fermented kithul	
Kithul nectar (drink)	

CLASSIFICATION OF KITHUL:

HARMONISED SYSTEM (HS) CODES IN SRI LANKA:

- 1702.90.22: kithul jaggery (solid state)
- 1702.90.30: kithul treacle (fluid state)

The European statistics agency Eurostat and statistics agencies from many other countries do not use above HS codes. Instead, customs authorities register imports of kithul syrup under the 6-digit HS code 1702.90 (rest group of undefined sugars). Alternatively, kithul is registered under 1704.9090 (sugar confectionery) and 1901.9090 (food preparations of flour, groats, meal, starch or malt extract).

The HS code applicable to kithul flour is 1106.20, which represents a rest group of flour, meal and powder of sago or roots or tubers of manioc, arrowroot, salep, Jerusalem artichokes, sweet potatoes and similar roots and tubers with high starch or inulin content, fresh, chilled, frozen or dried, whether or not sliced or in the form of pellets; sago pith.

WHAT MAKES EUROPE AN INTERESTING MARKET?

Since Europe does not produce any kithul syrup or flour, it is entirely dependent on imports. Trade data below show that the total European market for kithul syrup amounted to 22-57 tonnes in recent years. This represents a tiny segment of the total sugar market. To compare, the total European sugar market, including cane, beet, molasses and sugars not specified elsewhere, amounted to over 16 million tonnes in 2015.

TABLE 2: KITHUL SYRUP (HS17029022: KITHUL JAGGERY)

EXPORTS FROM SRI LANKA TO EUROPE*, IN THOUSAND € AND TONNES:

	Value			Volume		
	2015	2016	2017	2015	2016	2017
United Kingdom	19	36	35	11.4	18.5	n.a.
Italy	6	12	15	4.3	6.4	n.a.
France	9	12	9	5.3	7.3	n.a.
Switzerland	18	14	9	11.5	9.0	n.a.
Germany	5	13	7	3.5	10.0	n.a.
Norway	6	5	3	3.0	4.1	n.a.
Total Europe	70	95	80	43	57	n.a.

* Europe = EU28 + EFTA

Source: ITC Trademap, 2019

TABLE 3: KITHUL JAGGERY AND SYRUP EXPORTS FROM SRI LANKA, IN TONNES IN 2018

	Syrup	Jaggery
United Kingdom	0.2	7.9
Italy	0.9	4.2
Portugal	5.1	0.0
Switzerland	0.0	1.3
Cyprus	0.1	0.7
France	0.1	0.3
Other	0.0	0.8
Total	6.4	15.2

Source: CLP Consult, 2019

The United Kingdom is the main market for kithul in Europe. There are several factors to explain the importance of the United Kingdom in European kithul trade. First of all, the United Kingdom has historic ties with Sri Lanka and hosts a large diaspora of Sri Lankan emigrants and expatriates.

TABLE 4: SRI LANKAN DIASPORA IN EUROPE

Country	Number of Sri Lankan emigrants and expatriates
France	150,000
United Kingdom	132,000
Italy	110,000
Germany	60,000
Switzerland	55,000

Source: Wikipedia, 2020

As opposed to most people of European origin, Sri Lankans, particularly those of Sinhalese origin, know kithul and its uses. They currently form a major segment of the kithul market in Europe. Another factor to explain the importance of the United Kingdom in European kithul trade is the relatively high interest in the United Kingdom to try new and innovative food products. Other northwestern European countries usually follow later and eastern and southern European countries are often the last to adopt a product. The early adopters in northwestern Europe usually have relatively high disposable incomes and are able and more willing to pay a premium price for these products.

Nonetheless, Italy is another important market for kithul syrup and between 2015 and 2017, kithul exports from Sri Lanka to Italy more than doubled. Inclusion of kithul in the Ark of Taste by the Slow Food movement has been helpful to get recognition for kithul in the Italian market ([Slow Food Foundation](#)). The Slow Food movement strives to preserve traditional and regional cuisine around the world and support small-scale, family-based food production systems.

GROWING NICHES FOR NEW AND EXOTIC INGREDIENTS

Europeans import an enormous variety of products from other countries around the world and the interest in adding more products to the market offers opportunities for kithul. Currently, very few consumers know kithul despite a long history of kithul trade with Great Britain, Belgium, Germany, France, the Netherlands and several more European countries, as shown by Customs' records of colonial 'Ceylon'.

As the product and its name kithul are largely unknown to Europeans, suppliers must gain attention from consumers and educate them before they can convince consumers to buy kithul. The promotion of similar niche products offers useful insights into opportunities for promotion of kithul. Coconut blossom sugar and palm sugar are particularly good examples. Coconut blossom sugar resonates positively with many consumers in Europe as they have positive associations with coconuts and blossoms. Palm sugar benefits from the positive association with palm trees.

As most European consumers do not know what kithul syrup tastes like, they are reluctant to buy it. A definition of the taste can help to convince them to buy kithul. Such a definition must be based on European tastes, which are different from tastes in Sri Lanka. A European sensory panel can provide an objective analysis of the taste of kithul to identify unique sensory characteristics of kithul syrup. Alternatively, a tasting of kithul samples with European consumers can help to define the taste. Current European distributors of kithul such as [Guayapi](#) and [Happy Sugar](#) are describing the flavour of kithul as 'slightly caramel' and 'smoky'.

TIPS:

- Use terms such as 'palm' or 'blossom' in the name of the product to benefit from positive consumer associations and educate them on the origin of kithul. As 'urens' in the botanical name 'Caryota urens' is Latin for 'stinging', promotion of the name 'stinging palm syrup' or 'stinging palm jaggery' can support acceptance of the product by European consumers.
- Trade fairs in Europe offer opportunities to let consumers taste kithul and receive feedback to define the taste of kithul.
- [HHOYA](#) is an example of a European company that can organise a professional sensory panel for kithul syrup.

REPLACEMENT OF SUGAR THREATENS KITHUL MARKET.

Many European companies are replacing sugar in their products to respond to consumer concerns over the effect of sugar consumption on their health. Obesity, diabetes and heart disease are three of the main health problems related to sugar consumption. The large amount of calories in sugar and the large amount of sugar that many people consume makes an important contribution to obesity. Many people are actively avoiding or reducing sugar intake and looking for products without sugar or with reduced sugar content. While this creates opportunities for low-calorie sweeteners such as stevia and monk fruit, the same trend threatens the market for kithul, which is relatively high in calories compared to stevia and monk fruit.

Obesity, diabetes and heart disease have also been related to the high glycaemic index (GI) of many products including sugar. Conventional sugar has a GI of 60. Kithul treacle has a GI of 28 and is considered a low-GI food. Research has shown that choosing low-GI foods can particularly help manage glucose levels in people with Type 2 diabetes. A low GI indicates that it takes longer to process the sugar and that it results in a slower rise in blood sugar levels.

GI is mainly of concern to a relatively small but growing group of consumers, mainly diabetics (10% of the European population in 2020 according to WHO). This group is expected to grow to total 11% of the European population in 2040. In addition, there is a growing group of consumers who are concerned about diabetes without having been diagnosed as diabetic themselves.

Theoretically, the low GI of kithul syrup offers opportunities to target the diabetics population in Europe. Such a strategy would require suppliers of kithul to apply for authorisation by the European Food Safety Authority (EFSA) to make a health claim with regards to kithul syrup, according to [EU regulation 1924/2006](#). However, two major barriers limit the opportunities for kithul producers to use the low GI value for promotion of kithul as a healthy alternative to sugar. Firstly, costs of research to substantiate the health claim related to the benefits of kithul for diabetics can amount

to tens of thousands or even hundreds of thousands of Euros. Secondly, the outcome of such research is uncertain, as the benefit of consuming low-GI foods for managing glucose levels is under debate. The European Union has not authorised any health claims on the relation between low-GI foods and managing blood glucose levels. Similarly, the high antioxidant content of kithul does not provide opportunities to make health claims, as the European Union has not authorised any health claims relation to antioxidants in foods. In summary, a market strategy based on a health claim for kithul is not feasible.

TIPS:

- Refrain from making any health claims for kithul syrup and focus on promoting other benefits instead.
- As an alternative to using health claims, you can provide a bibliography with links to research articles on health benefits of kithul syrup on your website and in other promotion materials.
- As another alternative to using health claims, you can provide comparisons of the Glycaemic Index and antioxidant content in your product to other products. For example, you can mention the GI of 28 for kithul syrup with the GI of 60 for sugar. Or you can compare the antioxidant content as measured in Trolox Equivalent Antioxidant Content (TEAC) of your kithul sap or kithul flour with that of other products. You can find these values in research articles for [kithul sap](#) and [kithul flour](#).

CONSUMERS WANT NATURAL SWEETENERS

The food industry in Europe has started to focus more on natural sweeteners instead of artificial sweeteners. This shift resulted from several critical food research articles which suggested that synthetically manufactured food products can have a negative effect on health. Though aspartame was originally introduced as a new, 'healthier' artificial sweetener substitute for refined sugar, critical research has linked aspartame to health issues such as depression, headaches and autism.

A growing group of consumers avoids products with artificial sweeteners and looks for natural products instead. What is 'natural' is under debate, as a legal definition is lacking. In practice, many consumers now regard brown and unrefined sugar as healthier and more natural than white, refined sugar. Many consumers also regard honey, agave syrup and maple syrup as more natural and healthier than cane or beet sugar.

Many suppliers of alternative sweeteners explicitly mention that their product can replace sugar from sugar beet or sugar cane to benefit from the negative consumer perception around conventional cane or beet sugar. For example, [Candico](#) offers such sugars as part of its Sugar of the World range: "The Sugars of the World range from the Candico brand takes you into a different sweet world. This *alternative to beet and cane sugar* also comes from organic farming: Bio Agave Powder from Mexico and Bio Coconut Blossom Sugar from Indonesia create high-quality taste sensations and offer new culinary experiences. All this with a reduced glycaemic index. The basic raw materials for these sugars are selected with great care."

Kithul syrup is more distinct from conventional cane or beet sugar than jaggery. Since this distinction is important to respond to consumer demand for alternatives to sugar, the supply of syrup has a higher chance of success than the supply of jaggery.

TIP:

- Disassociate your product from cane and beet sugar by promoting the kithul tree as the source and explaining the natural process of producing kithul syrup. Position your product as a whole food, which is minimally processed and, unlike white sugar, still contains trace elements such as iron.

SUSTAINABLE SOURCING REMAINS HIGH ON THE AGENDA OF FOOD MANUFACTURERS

Consumer concerns about global issues such as climate change and bad working conditions in countries where their products originate are stimulating European buyers of palm sugars such as kithul to become stricter in their requirements for the sustainability of production. For example, they are increasingly promoting the collection of sap from trees in natural forests as an alternative to cutting down such natural forest.

It is important to realise that European companies have different definitions, priorities and ambition levels with respect to sustainable sourcing. There is no single way to address these matters. However, many buyers require transparency from their suppliers on sustainability issues. Some buyers will ask their suppliers to fill out forms to conduct a self-audit. Other buyers require compliance with their standards or third-party standards, such as the EU organic standard or a fair trade standard.

KITHUL FLOUR CONSUMPTION

EU consumption of starch and starch derivatives was 9.3 million tonnes in 2018.

TABLE 5: EU STARCH MARKET SEGMENTS

Market segment	Share in total consumption
Confectionery and drinks	27 %
Bakery & Biscuits	5 %
Dairy	5 %
Savoury/prepared food	15 %
Other food	15 %
Animal feed	2 %
Non-food applications (primarily paper making)	40 %

Source: Starch Europe, 2019

In terms of starch products, 28% of total European starch consumption comprises native starches, 19% comprises modified starches and 53% comprises starch sweeteners. Kithul flour is a new product on the European market and does not constitute a significant part of the enormous starch market. Wheat, corn and potato starch producers dominate the European starch market.

GLUTEN-FREE

In Europe about 1% of the population is diagnosed with coeliac disease, according to the [Dr Schär Institute](#), but there is a much larger group that is affected by an allergy or intolerance for gluten. Food media inform consumers about healthy eating and increase the awareness of allergen-free diets. This attention will be beneficial for the further growth of gluten-free flours such as kithul flour.

Italy and the United Kingdom are the leading markets for gluten-free food. Germany, the Nordic countries and Poland (now an emerging gluten-free market) are also consumers of gluten-free products.

Kithul flour is particularly interesting for manufacturers of gluten-free food, because it has a high amylose content and provides a texturizing solution for manufacturers that need increased gel strength. They can use kithul flour as part of their toolkit to manufacture gluten-free foods with attractive properties. Food manufacturers will consider using kithul flour in their toolkit when they know the characteristics and functionality of kithul flour in different applications such as baking products and desserts. They usually develop blends of different starches for different applications and processing conditions (e.g. temperatures, acidity). They will first need to test kithul flour extensively before offering kithul flour or blends with kithul flour to their customers.

TIP:

- Provide samples of kithul flour to manufacturers of texturizing systems and starch blends and support them with researching the functionality in different applications and processing conditions.

CONSUMERS WANT CLEAN LABEL PRODUCTS

In response to consumer demand for healthy food products with less synthetic ingredients and more natural ingredients, European food manufacturers are developing products with 'clean labels'. Clean label products do not contain ingredients which are perceived to be unhealthy by the average consumer and generally include more names of ingredients that the average consumer perceives to be natural. In terms of starches, this favours unmodified starches such as kithul flour. From this perspective, kithul flour provides an interesting alternative to starches from products which are associated with intensive agriculture, such as corn starch.

TIP:

- Target manufacturers with a clean label strategy and mention suitability of kithul flour for manufacturing clean label products.

WHAT REQUIREMENTS MUST YOUR PRODUCT COMPLY WITH?

REQUIREMENTS YOU MUST MEET

European Union food safety legislation and buyer requirements are of particular concern in the kithul syrup market as kithul is often produced in an environment where producers have little control over hygiene conditions.

The [General Food Law](#) is the legislative framework for food safety in Europe. To guarantee food safety and allow action in cases of unsafe food, food products must be traceable throughout the entire supply chain.

It is important to define critical control points to monitor for any food safety hazards ([HACCP](#)). Relevant hazards in kithul sap collection and processing include contamination by physical elements (plastic residues, metals and dirt), biological elements (yeasts) and chemical elements (polycyclic aromatic hydrocarbons (PAH) and cleaning agents):

- Yeast: European buyers are particularly concerned about yeast levels. Yeasts multiply between the collection and processing of sap. Optimisation of collection practices and storage and transport to the processing site can keep yeast levels in kithul sap to a minimum.
- Contamination by polycyclic aromatic hydrocarbons (PAH) is a potential risk in kithul syrup production when the kithul sap is boiled over an open fire and sap is exposed to smoke particles. Polycyclic aromatic hydrocarbons (PAHs) are chemicals that are formed by the incomplete burning of coal, oil and gas, garbage and other fossil fuels.

Prevent any contamination of your product to ensure that your kithul syrup is safe for consumption. If European companies or authorities find that the safety of your product cannot be guaranteed, they will take it off the market and register it in the [European Union's Rapid Alert System for Food and Feed](#).

TIPS:

- Establish a traceability system and keep samples for each from your suppliers to trace the origin of a product in case of non-conformity.
- Keep your facilities clean by setting up strict operating procedures, such as cleaning schedules for your processing equipment.

Search the [European Union's Rapid Alert System for Food and Feed \(RASFF\) database](#) to see examples of withdrawals from the market and the reasons for these withdrawals.

TIPS:

- Establish a traceability system and keep samples for each from your suppliers to trace the origin of a product in case of non-conformity.
- Keep your facilities clean by setting up strict operating procedures, such as cleaning schedules for your processing equipment.
- Search the [European Union's Rapid Alert System for Food and Feed \(RASFF\) database](#) to see examples of withdrawals from the market and the reasons for these withdrawals.

TABLE 6: ADDITIONAL REQUIREMENTS YOU MUST MEET TO SUPPLY KITHUL SYRUP AND FLOUR TO EUROPE

Subject	Explanation
Documentation	Ensure the buyer can access the following documentation: <ul style="list-style-type: none"> - Technical Data Sheet (TDS) or Specification - Certificates of analysis to support the claims of the specification - Certificate of origin
Representative samples	Your sampling method should result in lot samples that represent what you can deliver in terms of quantities, quality and lead time as specified by the buyer and in your technical data sheet
Payment and delivery terms	Payment terms define risks of trade for you and your buyer. European buyers take fewer risks with new suppliers. They expect new suppliers to accept payment after delivery and inspection of the product. Pay attention to strict compliance with delivery terms as agreed upon with your buyer

TIPS:

- Take more risks and offer more attractive payment terms to new buyers than to existing buyers. Payment after receipt and inspection of products are most favourable for buyers. Payment in advance poses the most risk to the buyer.
- Refer to the [EU Trade Helpdesk](#) for more information on buyer requirements.

COMMON REQUIREMENTS

The requirements listed below are common in Europe. Most of your competitors already comply with these requirements.

SYRUPS VERSUS GRANULAR SUGAR

Syrups are more expensive to transport than granular sugars for two reasons. The first reason is that preservation of quality of syrups from a different climatic region such as Sri Lanka requires conditioning of transport. Without temperature control, condensation will cause moisture in containers which will severely increase the chance of mould formation. The second reason is that transportation of water as part of a syrup is costly. For this reason, many European manufacturers of syrups buy dry sugar and add water to prepare their syrups. For example, the Dutch company Tradin imports coconut sugar and then re-hydrates to produce the syrup. In the case of kithul syrup, this implies that re-hydration of jaggery may make economic sense. An additional benefit of transporting dry matter instead of a liquid is elimination of the risk that breaking of containers during transport or handling ruins an entire container load. This risk is particularly high when syrups are packed in weak containers, such as plastic drums.

TIP:

- Consider exporting jaggery with a low moisture content, such as kithul jaggery powder, for re-hydration in Europe to address challenges with quality and costs of transportation.

TABLE 7: ADDITIONAL REQUIREMENTS COMMON IN EUROPE

Subject	Explanation
Certification of food safety management	In addition to stricter specifications than those laid down in European Union legislation, buyers often require you to have a certificate for a stringent food safety management system. The most important food safety management systems in Europe in order of importance are FSSC 22000 , BRC and IFS .
Sustainable business practices	European buyers prefer suppliers that apply sustainability principles in their business. This involves social and environmental responsibility as well as sustainable sourcing practices.
Website	Payment terms define risks of trade for you and your buyer. European buyers take fewer risks with new suppliers. They expect new suppliers to accept payment after delivery and inspection of the product. Pay attention to strict compliance with delivery terms as agreed upon with your buyer

NICHE REQUIREMENTS

Comply with below requirements to gain access to specific market segments.

ORGANIC CERTIFICATION

A small but growing group of European buyers require third-party certification of sustainability. Organic certification in particular is gaining relevance.

To market your food product in the European Union as 'organic', you need to implement organic farming techniques and have your facilities audited by an accredited certifier. These requirements are specified in the EU Regulation 848/2018, which entered into force in 2018. The objective of this new legislation is to simplify the old organic legislation. However, rules for organic production and testing have also become stricter.

TIP:

- Organic certification can provide access to interesting niche markets and strengthen the image of your product as a natural product. However, be aware that few European buyers are willing to pay a significant price premium for organic food products.

FAIRTRADE CERTIFICATION

Producers with ethically traded kithul syrup or flour are currently not able to benefit from the widespread recognition offered by the Fairtrade label in Europe. Because Fairtrade International does not yet have a standard for kithul syrup or flour production, it is not possible to certify kithul producers.

Alternatives to the Fairtrade label are offered by two standards organisations: Ecocert runs the Fair for Life certification scheme and Control Union has Fair Choice.

TIP:

- Be aware that many of the environmental and social sustainability issues take place at farm level (which may not be a part of your company). Think about how to assure responsible business at the premises of your suppliers. To test to what extent your farmers are sustainable, you could ask them to fill in the Farmer Self-Assessment by the [Sustainable Agriculture Initiative](#).

QUALITY REQUIREMENTS

KITHUL FLOUR COLOUR

Food manufacturers generally use flours such as kithul flour for their functional property: thickening. They prefer white, tasteless powders which are flowable and do not affect any other properties of their finished product besides the thickness. A major challenge for the marketing of kithul flour is its pinkish colour. According to a study on the colours of kithul flours from Sri Lanka, 'pale yellow' is the most common colour, as defined in the Universal Colour Language (UCL). Colours of other kithul flours from Sri Lanka include 'pale orangish yellow' and 'yellowish white'. Moreover, during thermal processing, colour intensifies to dark brown. This affects the colour of the finished product, which is undesirable.

KITHUL SYRUP PURITY

According to a study published in the Sri Lanka Journal of Social Sciences, kithul producers often add sugar to kithul sap when the moisture content in the sap is high or when the amount of sap harvested is low. European importers regard such a practice as adulteration. Adulteration lowers the quality and value of kithul syrup. Through laboratory testing, importers are able to detect adulteration and will usually reject the affected lot.

TIPS:

- Minimise time between harvesting and processing of the sap. Producers can increase efficiency by cooperating in additional processing steps.
- Keep tools and facilities clean to prevent contamination and degradation of quality.
- Prevent contamination by dirt and undesired plant parts by training collectors to cut and collect properly, and by keeping facilities, storage rooms and equipment clean. To prevent contamination of your kithul syrup by smoke, use chimneys when heating the kithul sap.
- To prevent yeast from forming, you can smoke the collection containers (such as pots) before use by putting them upside down on smouldering leaves and then cleaning them before use. If you use natural herbs to enhance the quality of pholeum sap, be aware that this increases yeast growth and that you will need to maintain a high temperature during boiling to eliminate the yeast.
- Clean processing and packaging equipment before packaging the syrup.
- Protect the syrup from moisture during loading.
- Keep temperatures and humidity low during transportation by means of good ventilation conditions.
- Protect the cargo from pests such as beetles and moths.
- Minimise significant discrepancies in quality by following strict grading and sorting standards for raw materials selection.
- Standardise and minimise significant variations in your product's quality by closely monitoring harvesting practices through regular inspections and by blending kithul syrup or flour from different harvests (e.g. early and late harvests, or different areas). Always make sure that the quality of the standardised product (blend) matches the requirements of your buyer.
- Be clear on what quality you can supply continuously. Once you develop a quality standard, you must be able to maintain that same level of quality, also when up scaling your production.
- Prevent adulteration and contamination by foreign materials to preserve your reputation. Importers regularly analyse products for adulteration.
- If you can identify or specify your product in detail, for example on origin or properties; this can add value in terms of both marketing and product specifications.

LABELLING REQUIREMENTS

Labelling of products for export is mandatory and mainly serves traceability and safety during transport and storage.

As an exporter, facilitate traceability of individual batches with markings on each container and registration in an administrative system, whether they are produced by blending or not.

Use the English language for labelling unless your buyer has indicated otherwise.

Labels of bulk products must include the following:

- Product name
- Batch code
- Place of origin
- Name and address of exporter
- Date of manufacture
- Best before date
- Net weight
- Recommended storage conditions

For *organic* certified kithul products specifically: add Name/code of the inspection body and certification number.

When supplying kithul syrup in consumer packaging, be careful not to make health claims relating to the low GI of kithul syrup, as European legislation does not allow this.

PACKAGING REQUIREMENTS

Bulk liquids imported to Europe and intended for industrial use are common packed in steel or plastic drums of 200 litres. The metal drums must be painted on the outside and lined on the inside. Depending on buyer preferences, you can use plastic bags (e.g. polyethylene) or other materials for lining. Many buyers strongly prefer steel drums over plastic drums because of handling and quality. Due to the weight of syrup, plastic drums may collapse when stacked. In practice, this also means that storage of plastic drums requires more space. Moreover, importers' equipment is not always suitable for plastic, which may break as it is less durable. Plastic is also more permeable, which means that syrup is more easily contaminated by, for example, materials/liquids on the floor.

TIPS:

- Always consult your buyer for specific packaging requirements.
- Facilitate the re-use or recycling of packaging materials by, for example, using containers of recyclable material (e.g. metal).
- Store the containers in a dry, cool place to prevent quality deterioration.
- Organic kithul products should remain physically separated from conventional products.

WHAT COMPETITION DO YOU FACE?

MARKET ENTRY

The European market has some of the highest requirements for food products. Minimum requirements such as a HACCP-based food safety management system, compliance with strict limits for contaminants and documentary requirements already prevent many small producers from other countries to export to Europe.

FIGURE 2:
BULK PACKAGING IN METAL DRUMS AND PALLETS WITH BOXES OF A PRODUCT IN CONSUMER PACKAGING



Source: ProFound

PRODUCT COMPETITION

Direct competition of kithul syrup with white sugar or even raw cane sugar is impossible due to very low prices of these sugars. Refer to the section on prices for price indications. Moreover, due to consumer demand for less sugar, disassociation from sugar is a preferable market strategy.

Relevant competitors for kithul syrup are coconut blossom syrup, maple syrup, agave syrup and oat syrup. All these syrups offer similar functionality and are often positioned as natural alternative sweeteners. The main differences are their origins and taste profile.

Although kithul flour contains protein, the protein concentration is only 1%. Other relatively cheap products such as soy, maize and wheat have much higher protein concentrations which makes protein extraction from these products more cost-effective. There is a possibility that proteins from kithul flour have unique properties that would make them more valuable and thereby increase cost-effectiveness. For example, if proteins from hemp have a higher retention in the body than certain highly processed proteins. Research on proteins from kithul flour will have to determine if these proteins have unique properties which would increase the potential of kithul flour as a protein source.

TIP:

- Instead of assigning such research to expensive research institutes, consider sending protein samples to food manufacturers with testing capabilities to retrieve feedback on the properties of kithul proteins.

THROUGH WHAT CHANNELS CAN YOU GET YOUR PRODUCT ON THE MARKET?

MARKET SEGMENTS

Fine foods

Besides the existing stable market segment comprising Sri Lankan diaspora, the fine foods and gourmet foods segment offers many opportunities to increase kithul exports to Europe. Fine foods are generally premium and exclusive products with exceptional qualities targeted at consumers with a refined taste and a high disposable income.

The Slow Food movement is an important driver of the market in Italy and France for fine foods from foreign small-scale producers. Their inclusion of kithul syrup in the Ark of Taste has been a valuable contribution to position kithul as a fine food.

In the fine foods market, stories about the origin of products are important for product promotion. Some of the stories around kithul that may serve promotional purposes include the following:

- Kithul extraction is a 2000-year old Sri Lankan tradition and secret techniques for tapping the kithul trees are passed on from generation to generation throughout the centuries.
- In traditional societies of Sri Lanka, tappers carry out lengthy rituals before tapping the kithul trees. With these rituals, the tappers worship the trees to show their gratitude for the many health benefits that kithul products bring.
- Kithul jaggery is also used in the preparation of the dish 'chakkarai pongal' during the Thai Pongal festival. The Tamil people in Sri Lanka and India celebrate Thai Pongal when the harvesting season begins.
- Centuries ago, kithul jaggery of elephant and peacock shapes had been used as gift items in Sri Lanka, when paid a courtesy visit to influential persons in villages (Source: Kehelpannala, 1898).

In fact, the market research company Innova Market Insights identified storytelling as a top trend in the European food ingredients market for 2020. Storytelling is increasingly important, as consumers want to know where products come from.

TIPS:

- In the United Kingdom, the [Specialty and fine food fair](#) offers opportunities for Sri Lankan exporters to position kithul as a fine food.
- Use attractive stories about the origin of kithul and traditional uses to promote kithul as a fine food.

Snack bars

Snack bars are convenient food products for consumption on-the-go. According to Mordor Intelligence, the European snack bar market is expected to grow from € 2.6 billion to € 3.3 billion between 2019 and 2024. The United Kingdom is the major snack bar market within Europe with a total value of € 884 million in 2018.

Snack bars often contain a variety of dry ingredients such as cereals, nuts and dried fruits. These ingredients must be kept together by a binding ingredient. Kithul syrup has potential as a binding ingredient. It can provide the required functionality and provides an alternative to sugar syrup for snack bar manufacturers that aim to respond to consumer demand for less sugar.

TIP:

- Promote possibilities for using kithul syrup in snack bars to benefit from growth in this market segment.

MARKET CHANNELS

Currently, small retailers of ethnic foods from Sri Lanka and India appear to be the major channel to the market for kithul in Europe. These retailers serve the Sri Lankan and Indian diaspora in Europe who are specifically looking for kithul products to use in their traditional recipes from their countries of origin. The retailers buy kithul from importers of ethnic foods such as [India Trading](#) in Italy or [Amutha Brand](#) in Germany. These importers often carry brands which are known in the country of origin and import kithul products in consumer packaging. This offers opportunities for value addition in Sri Lanka.

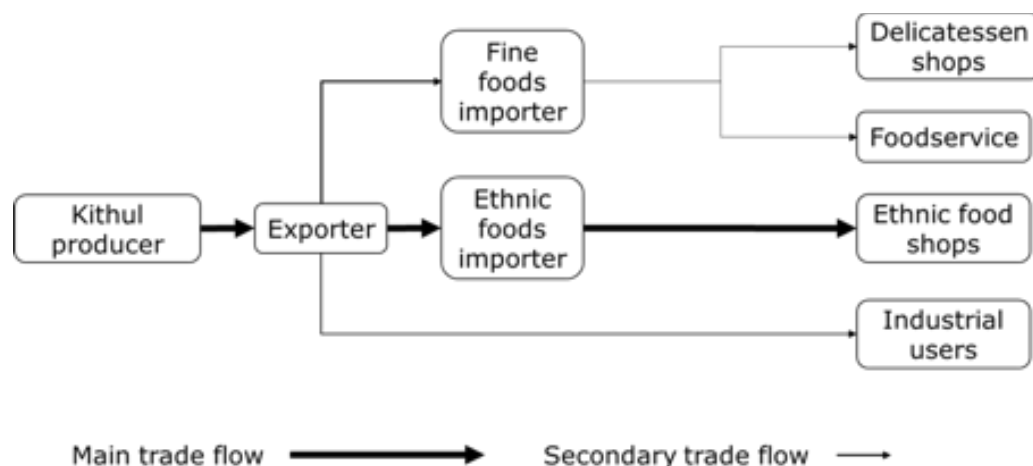
Delicatessen shops and food service providers such as restaurants are an alternative channel to the ethnic food shop. They are mostly interested in kithul products as exclusive fine foods and obtain their products from fine food importers. Many of these fine food importers develop products and packaging themselves to tailor them to the needs of their specific target group. [Guayapi](#) is a good example of such a fine food importer. In only few cases, fine food importers are developing kithul products in partnership with their supplier and adding value in Sri Lanka.

Although there are opportunities to supply European companies focusing on food manufacturing directly, this is the most challenging market channel. Kithul syrup and flour are generally too expensive for food manufacturers such as snack bar manufacturers to use as ingredients and the current lack of stable supplies in large volumes is a high risk for food manufacturers. This distribution challenge implies that the European food industry provides a future market opportunity when trade volumes have increased.

TIPS:

- Benefit from the experience and knowledge of specialised European importers instead of approaching retailers or industrial users directly.
- Visit or exhibit at [ANUGA](#) (Cologne, Germany), [SIAL](#) (Paris, France) or [Specialty and fine food fair](#) (London, United Kingdom) to meet potential European buyers.

FIGURE 3: MAJOR MARKET CHANNELS FOR KITHUL PRODUCTS



TIP:

■ Agents who look for buyers on your behalf are particularly interesting if you do not have a strong sales network. You can look for commercial agents on the website of the [Federation of German Commercial Agents and Distributors \(CDH\)](#). However, once you have established a trade relationship through an agent, you cannot establish a direct relationship with the buyer anymore. The sales network of the agent is protected by law.

CONSUMER PROMOTION

You can trigger demand for kithul syrup and flour by promoting your products directly to consumers. Consumers need information on taste and how to use the kithul product in recipes. Promotion in close collaboration with your partner (importer, wholesaler or retail chain) is most effective. A strong partner knows where and how to promote the product.

Featuring kithul syrup or flour in culinary programmes on tv and online video platforms such as Youtube offers opportunities to provide information to a large number of consumers. Famous cooks such as Jamie Oliver and Gordon Ramsay are known throughout Europe and have a lot of influence on cooking culture. Jamie Oliver’s Youtube channel has nearly 5 million subscribers and Gordon Ramsay’s channel has nearly 13 million subscribers. As these culinary programmes receive many requests for featuring ingredients, programmes with less viewers may be more accessible.

Food blogs and magazines, websites and apps for recipes offer similar opportunities as culinary programmes. Food bloggers use websites or social media to share ideas and insights. Sometimes these include independent or paid product tests. Some European countries organise awards for food bloggers which are useful to identify relevant blogs. For example, [Food Blog Awards](#) in the Netherlands. In Germany, the magazine ‘[Mit liebe](#)’ of retail chain Edeka is an example of a food magazine where kithul products could feature.

In-store promotions which enable consumers to taste the products and learn how to use them are not very common in Europe. The outreach of such promotions is very limited and the costs of organising and implementing such promotions are relatively high. For example, a promotion tour by a distributor in one European country costs around € 15-25 thousand, depending of the scope and duration. This includes hiring a person to hand kithul products out to consumers in the store at an estimated € 250 per day. Hiring a chef to cook with kithul syrup or flour will be even more expensive. In store promotions are most relevant for obtaining consumer feedback on your product to identify USPs and areas for improvement.

TIP:

- Ensure that consumers will be able to find your product in a shop after reading a blogger's report about your kithul.

B2B PROMOTION

Trade fairs and other Business-to-Business (B2B) events offer great opportunities to promote products to European importers and wholesalers. The following events are most relevant for the promotion of kithul products in Europe:

- [ANUGA](#) (Germany)
- [SIAL](#) (France)
- [Food Expo](#) (Denmark)
- [Biofach](#) (Germany; only for organic certified products)

News articles or adverts in magazines and news websites also offer opportunities to bring kithul products to the attention of buyers. Magazines and news websites such as [FoodNavigator](#) are often looking for new content and appreciate corresponding photos with the articles.

WHAT ARE THE END MARKET PRICES?

The average export value of kithul syrup from Sri Lanka to Europe amounted to € 1.67 /kg in 2016 (Source: ITC, 2019). Due to the small scale of European kithul trade, distribution costs for kithul are extremely high and retail prices are mostly a reflection of the lack of efficiency in distributing kithul to European consumers.

TABLE 8: RETAIL PRICES FOR KITHUL IN EUROPE

Name of shop and product	Price per kg in €
Guayapi kithul syrup (375 ml*)	50
Niru kithul treacle (340 ml*)	27
Happy Sugar kithul jaggery (275 gr)	64

* 1 ml kithul syrup equals around 1.5 mg in weight

To compare, prices for conventional refined sugar are around € 0.70 per kg in 2016. Raw cane sugar is priced at around € 5 per kg and palm sugar at around € 15 per kg. This shows that currently kithul syrup cannot compete on price with refined sugar, raw cane sugar or even palm sugar. Kithul can only compete with other sweeteners in niche segments for fine foods.

TIP:

- When pricing your product, consider the maximum price the market is willing to pay for your product, plus demand, cost analysis and break-even analysis. Ensure that the price reflects the quality levels and delivery conditions. Take competing products on the market into account.
- For exporters who are able to position their product above other sweeteners, premium pricing is an option. This can be done through organic certification and a good marketing campaign. For such a campaign to work, you need documentation of the product benefits and applications.

This survey was compiled for IPD by ProFound – Advisers In Development.