CBI Product Factsheet:

Fruit-seed oils for cosmetics in Europe
Introduction

Fruit juice producers have a great opportunity to diversify their production by obtaining oil from by-products such as fruit seeds. The resulting fruit-seed oil has wide applications in cosmetic products and different types are becoming increasingly popular. A good marketing campaign is essential to support the exotic image of fruit-seed oils.

Product description

Fruit-seed oils are vegetable oils that are extracted from the seeds of fruits and are typically a by-product of the fruit processing industry. Often these oils are obtained by cold pressing the seeds. Some examples are papaya seed oil, oils of the seeds of different red berries (e.g. raspberry, strawberry) and apricot kernel oil. Fruit-seed oils are used for various applications in the cosmetic industry, which will be discussed later on.

Classification of fruit-seed oils:

- Harmonised System (HS): within the European Union (EU) and the European Free Trade Association (EFTA)¹ there is no separate HS code for fruit-seed oils. They would be categorised under HS code 1515.9040/60, crude and non-crude fixed vegetable oils and fats and their fractions, for industrial uses.
- In Cosing, the European Commission database with information on cosmetic substances and ingredients, many specific fruit-seed oils are listed. Examples include papaya seed oil (Carica papaya), strawberry seed oil (Fragaria ananassa) and guava seed oil (Psidium guajava).

Quality

How to identify suitable species for fruit-seed oils

- If you produce fruit juice or other fruit products, investigate the fruit seeds to see if they are interesting for fruit-oil production. This depends on potential yield of oil from the seeds, buyer interest in the seeds, production possibilities and costs, interesting compounds and marketing potential.
- As already mentioned, the oil is often extracted from fruit seeds by cold pressing. However, the oil content of some seeds is too low and therefore solvent extraction is required. For example, the market encompasses a number of fruit seed oils that are obtained using CO₂ extraction techniques (e.g. passion fruit or watermelon seeds).
- An important determinant of quality is the oil’s composition. As such, testing is needed to draw up a product specification of the fatty acid profile, as well as acid value, iodine value, and peroxide and moisture content. Developing Country exporters can work together with a local university department to test their fruit seed oil.

Tips:

- Work together with a local university department or laboratory to test your fruit-seed oil. These can help in determining the chemical profile of the oil to be included in product documentation, including a basic safety assessment.
- Conduct a feasibility study to determine whether a new fruit-seed oil has sufficient potential on the market. This study needs to examine the oil’s functionality (efficacy), safety, and market opportunities (also based on price and availability).

Quality determinants of fruit-seed oils

- Quality of the oil depends on the freshness and age of the oil and proper storage. They are of higher quality if they are freshly pressed and are stored in closed packaging as listed below. This is to prevent oxidation, which turns the oil rancid.
- Buyers test the peroxide level of the oil, if this is too high it implies that the oil is old or has been left open.
- The drying process used is vital. Drying speed and appropriate process management are needed to reduce the probability of moulds, fungi and oil rancidity.
- In most cases, cosmetic buyers prefer odourless and colourless oils. Fewer buyers are interested in scent properties of fruit-seed oils, as they would achieve the scent they require by applying specific fragrance ingredients.
- Importers of fruit-seed oils test for possible adulteration of the oil.
- Cosmetics manufacturers need oils with a minimum of impurities (e.g. mineral matter, gums and carbohydrate substances, such as vegetable fibres, and protein). A basic step is to ensure that the oil is filtered (see above). Further processing steps depend on the quality, available volumes and needs of the buyer.

¹ Member States of EFTA are Iceland, Liechtenstein, Norway and Switzerland.
Tips:
- Include information on the composition of the fruit-seed oil in your promotion and in the Technical Data Sheet (TDS).
- Keep moisture content in the seeds low to decrease the chance of mould infestation during storage.
- Prevent adulteration and contamination by foreign matter (e.g. dust) by keeping facilities and equipment clean.
- Ensure that the oil is filtered to remove particles of press cake. Use plate and frame filters for unrefined oils, and other filter systems to achieve 2 microns or less for use in manufacture, depending on your buyer’s specification and downstream processing.
- Do not blend or add additives to the oils unless requested by the buyer; buyers prefer pure oils and need to know if any preservatives have been added.
- Always ensure that you can offer a standardised product with a well-defined specification. Standardise your product’s quality by blending seeds or oils from different crops (e.g. early and late crops, or different slopes/areas) and by closely monitoring cultivation and harvesting practices.

Labelling
- Enable traceability of individual batches with markings and a registration system, whether or not they are produced by blending.
- Use the English language for labelling unless your buyer has indicated otherwise.
- Labels must include the following:
  - Product name/INCI name
  - Batch code
  - Place of origin
  - Name and address of exporter
  - Date of manufacture
  - Best before date
  - Net weight
  - Recommended storage conditions
- **Organic and/or fair trade:** Name/code of the inspection body and certification number.
- Ensure the buyer can access the following documentation:
  - Technical Data Sheet (TDS) or Specification, including CAS number. For new oils, the exporter will need to apply for a CAS number.
  - Safety data sheet (SDS), check the following example of an SDS for blackcurrant seed oil
  - Certificates of analysis to support the claims of the specification, check the following example of almond oil
  - GMO certificate (if requested)
  - Certificate of origin
  - Product information sheet
  - Allergen declaration (protein content), check this example of apricot kernel oil

Hazard labels
- Some vegetable oils can be classified as hazardous and have a UN number. In that case, include the relevant hazard symbols (as shown on the right) to show that the product is hazardous for the environment (N), harmful (Xn) or flammable.
- Depending on the UN number, also include the relevant risk and safety phrases.
- Refer to CBI Buyer Requirements for information on classification, labelling and packaging (CLP).
Packaging

- Always consult your buyer for specific packaging requirements.
- If your vegetable oil is hazardous and has a UN number, use UN approved packaging.
- Ensure preservation of quality of fruit-seed oils by:
  - Using containers of a material that does not react with constituents of the oil (e.g. lacquered or lined steel, aluminium).
  - Cleaning and drying the containers before loading the oil.
  - Filling the headspace in the container with a gas that does not react with constituents of the oil (e.g. nitrogen or carbon dioxide).
- Enable 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 vegetable oils should remain physically separated from conventional vegetable oils.
- Refer to CBI Buyer Requirements for information on classification, labelling and packaging (CLP).

What is the demand for fruit-seed oils in Europe?

(!) No specific trade statistics are available for fruit-seed oils. The following trade statistics are based on HS code 1515.9040, ‘other vegetable oils’, crude fixed vegetable oils and fats and their fractions, for industrial uses. These data exclude the main commodity products such as soy, coconut, palm, sunflower and rape.

(!!) In addition, please note that most vegetable oils are not only imported for cosmetic use, but also, and in many cases predominately for food (estimated at over 60% in 2012). Therefore, care should be taken when drawing conclusions based on the figures below with respect to the import of cosmetic ingredients.

Imports

Figure 1: Leading European importers of “other vegetable oils”, in 1,000 tones

Source: Eurostat, 2015

The total volume of European (EU + EFTA) imports of “other vegetable oils” fell by an average 6% per annum between 2010 and 2014, reaching 36 thousand tonnes (with a value of € 38 million) in 2014. Please note that this data covers a broad category of vegetable oils, and import trends for specific vegetable oils may be different. The fall in imports was mainly due to declining imports by Austria, the main importer, which was responsible for 82% of all European imports in 2014. While the volume of European imports fell, their value remained relatively stable in the period under review, reflecting a rise in the unit import price.

Tip:

- Find potential buyers by identifying finished products on the EU market that already use fruit seed oils. For example, check websites such as In-Cosmetics or Cosmetics Analysis.
European countries where imports rose between 2010 and 2014 included Lithuania, Belgium, Denmark and Sweden.

Tip:
- Focus your exports on growing importers of “other vegetable oils”, such as Lithuania, Belgium, Denmark and Sweden.

Imports of “other vegetable oils” from developing countries were low, when compared for example with those of the product group “Fixed vegetable fats and oils” or specific vegetable oils produced in developing countries. The main importers from developing countries were Italy and France, which together accounted for 99% of all such imports. Both countries imported more from developing countries during the period under review, whereas the value of Italy’s imports fell by an average 14% per annum, reflecting a drop in the import unit price. Of these two importers, France mainly imported high-value oils from developing countries: 77% of the value of these imports from developing countries ended up in France. Italy, on the other hand, mainly imported low-value oils.

Figure 2: Leading suppliers of other vegetable oils, in 1,000 tonnes

Source: Eurostat, 2015

The main suppliers of this product group were European (EU + EFTA) countries such as Italy, Germany, the Czech Republic and Poland. Smaller, non-European suppliers included Vietnam, Russia, South Africa and Morocco.

Tip:
- Consider analysing export data of countries which produce similar or competing fruit-seed oils to find competitors and export markets for your products. In many cases, more (specific) export statistics are available from local statistics offices. For example, check the websites of the Department of Commerce in the respective countries.

Exports

The volume of European exports of vegetable oils rose by an average 12% annually in the period 2010-2014, reaching 22 thousand tonnes (with a value of €29 million) in 2014.

The main exporters in 2014 were Portugal, Italy and France. Of these, Portugal and Italy experienced the highest growth, though their exports were much smaller in 2010. Exports by most countries increased, apart from those coming from Greece and Austria, which fell by around 40% per annum from 2010 to 2014.

The main destinations in 2014 were other European countries, including Spain, Austria, Lithuania, Germany and France.

Tip:
- Refer to CBI Trade Statistics for natural ingredients for cosmetics for more trade statistics.
What trends offer opportunities on the European market for fruit-seed oils?

**Exotic oils**: ongoing consumer interest in speciality exotic oils forms an opportunity for fruit-seed oil from regions that have connotations of “exotic”, “mystical” or “luxury” for consumers. These are of interest to cosmetic producers, who are increasingly developing unique and unusual products in order to differentiate their products from the competition. Examples include Polynesian/Tahitian, Amazon, Andes and Himalayan oils, such as açai oil, or baobab oil with its iconic tree.

**Tips:**
- For exotic fruit-seed oils, focus on the area of origin in your marketing, for example in terms of storytelling about the product’s provenance.

**Ethical sourcing**: a growing interest in ethically sourced products is an opportunity for fair trade and organically certified fruit-seed oils. A market report by Transparency Market Research on "Organic Personal Care Products Market" indicated that global demand for organic cosmetic products is expected to grow by a constant 10% from 2012 to 2018. In addition, consumers are interested in the story beyond ethical certification. Wild-collected fruit-seed oils, such as marula, ximenia and baobab are of increasing interest, with the benefits to local communities of collectors being emphasised in the marketing story. In their marketing, cosmetic producers actively communicate the best stories for their ingredients, to improve the connection with the consumer. Communication is done graphically, with short stories on the product, or in the producer’s corporate image.

**Tips:**
- Check the possibility of obtaining certification for ethical sourcing. See Market Segments and Additional Requirements elsewhere in this Factsheet for more information.
- In addition to certification, in your promotion focus on the story behind your fruit-seed oil. Especially with regard to wild-collected oils this offers opportunities to cosmetic producers to differentiate their products on the European market. It is an advantage to help cosmetic producers in communicating these stories, for example by providing pictures.

**Trends in fruit-seed oils**: the cosmetics industry demands more in terms of the varieties of vegetable oils. Fruit-seed oils from different fruits can be in fashion at different times. Currently, various berry-seed oils are increasingly popular, such as cranberry and red berry seed oil. Exotic fruit-seed oils, such as papaya and guava seed oil are also rather popular. Others include the seed oils of raspberry, strawberry, blackberry, blackcurrant, baobab, marula, moringa and goji berry.

**Tip:**
- Keep up to date with developments in fruit-seed oils by checking In-Cosmetics and Cosmetics Design Europe.

**Natural products**: in Europe, there is increasing consumer interest in natural ingredients in cosmetics. The global natural cosmetics sector is estimated to continue to grow, with France, Italy, Switzerland and Germany as the main markets. Being a natural ingredient, fruit-seed oils can be used in natural cosmetics. Fruit-seed oils with low rancidity issues, and limited needs for further refinement, such as moringa and marula, are of particular interest in natural cosmetics, as fewer preservatives are needed.

**Tips:**
- In your promotion, stress the potential of fruit-seed oils in natural cosmetics.
- Determine the oxidation level of your fruit-seed oil, which depends on the oil’s content of free radicals. Use this in your marketing message aimed at producers of natural cosmetics: if your oil has a low oxidation level, and hence does not go rancid quickly, cosmetics companies including this oil as an ingredient can use fewer preservatives.

**Functional and active properties**: although the marketing value of fruit-seed oils is considered of main importance, fruit-seed oils do have specific functional and active properties with potential for cosmetics. In general, higher quantities of the oils are used if they are applied as active ingredients. However, as price levels of many fruit seed oils are comparatively high, they are generally used in lower quantities in the product, making it more difficult to make health claims. Examples of oils with active properties are baobab seed oil (moisturising properties) and papaya seed oil (can provide emollient and conditioning in skin and hair care products). Various fruit-seed oils also contain high levels of omegas and are popular for this reason.
What requirements should fruit-seed oils comply with to be allowed on the European market?

EU Cosmetics Regulation:

Cosmetics Regulation include requirements (physical-chemical, microbiological and toxicological) for substances/ingredients to be included in each ‘Cosmetic Product Safety Report’ and ‘Product Information File’. Cosmetic manufacturers and ingredient producers are increasingly making compliance with this regulation the responsibility of their suppliers.

Tips:
- Check with your buyers what information they require and in what format. For new oils, documentation on the toxicological profile will be expected, including local toxicity (e.g. skin and eye irritation).
- Comply with relevant legislation. Read more about the Marketing conditions for cosmetic products and the Cosmetics Regulation on the EU Export Helpdesk.
- Refer to the CBI Buyer Requirements module for a full list of requirements for cosmetic ingredients.

REACH:

In principle, ingredients used in cosmetics are bound to legislation on chemical substances. Therefore, they need to be registered with the European Chemicals Agency under REACH (Registration Evaluation and Authorisation of Chemicals) legislation. Certain exemptions from REACH registration exist, such as non-chemically modified vegetable oils. Moreover, if volumes remain lower than 1 tonne per importer, registration is not required. In all cases, the burden of proof lies with the EU manufacturer/importer that wishes to use this exemption (an absence of information on the properties of a substance does not mean an absence of hazardous properties).

Tips:
- Familiarise yourself with REACH regulation, annexes IV and V list details of exemptions from registration. The European Chemicals Agency (ECHA) offers guidance on exemptions.
- Check the REACH registration status of your cosmetic ingredient. If your product is not registered, it may need to be (subject to exemption status). REACH registration is an expensive procedure and must be initiated by European manufacturers, EU importers or by an Only Representative of a non-EU manufacturer (hazardous chemicals imported or manufactured in the highest volumes have to be registered as a priority).
- Refer to the website of the ECHA, which includes a database on classification and labelling. You can use this database to determine which symbols and warning phrases apply to your product. Additionally, you can access information on CLP through the European chemical Substances Information System (ESIS).
- Refer to the EU Export helpdesk for more information on REACH and CLP.

Tips:
- Familiarise yourself with REACH regulation, annexes IV and V list details of exemptions from registration. The European Chemicals Agency (ECHA) offers guidance on exemptions.
- Check the REACH registration status of your cosmetic ingredient. If your product is not registered, it may need to be (subject to exemption status). REACH registration is an expensive procedure and must be initiated by European manufacturers, EU importers or by an Only Representative of a non-EU manufacturer (hazardous chemicals imported or manufactured in the highest volumes have to be registered as a priority).

Classification, Labelling and Packaging of chemicals (CLP):

The EU sets requirements on the packaging of chemical substances, as well as required symbols and phrases warning users and providing safety advice that should be used on the labels. These requirements have been adopted from the United Nations’ Globally Harmonised Systems (GHS).

Tips:
- Refer to the website of the ECHA, which includes a database on classification and labelling. You can use this database to determine which symbols and warning phrases apply to your product. Additionally, you can access information on CLP through the European chemical Substances Information System (ESIS).
- Refer to the EU Export helpdesk for more information on REACH and CLP.
CITES regulates the trade in (among other things) wild-collected endangered plants and gives a detailed list of species for which trade is prohibited, restricted or bound to certain rules. If your fruit-seed oil is listed on Annex A and B of Regulation (EC) 338/97, you need to obtain export and import permits before you can export it.

**Tip:**
- Check in the Annexes whether import and export permits are required for your product. Another resource is the Cites Checklist. You can also contact your local CITES authority for more information. For more information on the requirements and procedures of CITES in Europe, refer to the information on CITES from the EU Export Helpdesk.

**Access and Benefit Sharing (ABS):**

ABS refers to the rules and principles governing the use of genetic resources and associated traditional knowledge, established by the Convention on Biological Diversity. Countries regulate access to genetic resources in different ways and requirements can be quite stringent, either in terms of reaching "prior informed consent" with governments or in terms of how benefits (financial, knowledge) are shared. These “mutually agreed terms” detail the terms and conditions of access and use of genetic resources and/or traditional knowledge between the company seeking plant material for research and development, and the collectors, growers, or associations that would be able to supply such material. The Union for Ethical Bio Trade (UEBT) provides much information on the practical implications of ABS.

**Tip:**
- Put a procedure in place to check whether ABS applies to your fruit-seed oil.

**Quality:**

European buyers expect a good, reliable level of quality. Most of them expect suppliers to follow the Hazard Analysis & Critical Control Points (HACCP) principles for food processing as a minimum. The following requirements are also often referred to.
- Good Manufacturing Practices (GMP) are not obligatory for cosmetic ingredient producers, but compliance can provide a competitive advantage.
- Good Agricultural and Collection Practices (GACP), even though legally binding for medicinal plants, are common practice for farming and wild collection of cosmetic ingredients, prior to processing.
- Quality standards such as ISO are referred to in buyers’ product specifications, to assure the quality of cosmetic ingredients. ISO22716 is a good reference. Even though it is intended for finished cosmetic products, it also includes guidelines for ingredients that manufacturers need to refer to.
- Buyers will also have their own requirements.

**Tips:**
- At the very least, follow HACCP principles.
- Ascertain whether you can help your buyer comply with GMP principles for producers of cosmetics. This may give you a competitive advantage. The guide developed by the European Federation for Cosmetic Ingredients (EFICI) gives a detailed explanation of these principles.
- Comply with the World Health Organisation’s GACP guidelines, even though they are only legally binding for medicinal plants. Compliance gives you a competitive advantage from a marketing perspective.

**Sustainability:**

European buyers prefer suppliers that can demonstrate good standards in sustainability. This involves social and environmental responsibility as well as sustainable sourcing practices. Buyers may not require compliance with certification standards to prove sustainability. However, they are looking for suppliers who demonstrate that they have incorporated sustainability into their operations.
Documentation:

Buyers need well-structured product and company documentation. Buyers generally require detailed specifications supported by certificates of analysis and Safety Data Sheets (SDS). Documentation should include information on allergens. Compared to essential oils, allergen declaration for vegetable oils is more straightforward. Allergenic properties of vegetable oils are related to their protein content. If there is no detectable protein, then the allergen risk is very low. Buyers will set their own standards for protein content in vegetable oils.

Additional requirements

Natural cosmetics:

In cosmetics, the definition of natural cosmetics has been driven by private sector standards, specifically NaTrue and Cosmos. These specify what cosmetic products need to comply with to be certified natural and organic. Often, natural cosmetics are defined as having a certain amount of natural ingredients. Although not directly applicable to ingredient producers, it is important to be aware of these standards in terms of permitted processes and additives.

Tip:

- Include the natural character of your fruit-seed oil in marketing tools. Refer to the specific cosmetics standards for more information on permitted ingredients and thresholds for natural and organic cosmetics.

Organic:

EU legislation specifies what organic production and labelling entails. This legislation is only applicable to food products, but forms the basis of private standards for organic labelling. Examples of such standards are Soil Association (UK), Ecocert (France) and BDIH (Germany).

Tip:

- For more information on the market opportunities for organically certified ingredients, see Market Trends above.

Fair production:

Several standards exist to certify socially sustainable production of natural ingredients for cosmetics. Examples of consumer labels that guarantee fair social practices include Fairtrade and FairWild (wild-collected ingredients).
What competition do I face on the European market for fruit-seed oils?

Market entry
- Fruit-seed oils are interesting by-products of food or juice production. Adding fruit-seed oils to your range of products widens your portfolio and boosts profitability.
- The investment required for an oil press is relatively low, and well within the budget of small and medium-sized enterprises (SMEs). This lowers the barrier to market entry.
- Significant investment may be required, however, if the fruit-seed oil has to be produced by solvent extraction. The type of equipment and technical know-how needed to ensure the right product quality depends on the complexity of the extraction process.
- Fruit-seed oils require a strong marketing campaign. Cosmetics companies are interested in the added advantages (such as social benefits for the local community) and marketing opportunities (such as interesting marketing stories and evidence of Fairtrade or other certification) offered by the oil, in addition to a high quality.

Tips:
- Determine which extraction method is required for the fruit-seed oil and what investment you need to make. If high investment is called for, you can share the investment costs with other fruit-seed oil producers.
- Set aside sufficient funds for a marketing campaign. This may be a costly part of your promotion activities, but it is important to demonstrate the benefits your product offers potential buyers.

Product competition
Be aware that there are “fashions” in fruit-seed oils. European consumers manifest an increasing interest in oils such as guava seed oil, mango kernel oil and papaya seed oil that cannot be grown in Europe but come from more exotic regions; this offers DC producers an export opportunity. Please note however that some of these oils, such as mango kernel oil, are already widely traded and have an established market where new entrants will find it hard to gain access.

Tips:
- Use your promotional campaign to explain the benefits of your fruit-seed oil compared with competing vegetable oils. For example, focus on its origin or special properties. You can also stand out as an exporter, for example by offering additional services or providing reliable delivery. Refer to the CBI Module Top 10 Tips for Doing Business for further tips.
- Keep up to date with developments in fruit-seed oils, for example by checking the websites of Cosmetics-Design and In-Cosmetics. Make sure that the oils you supply are still in demand.

Company competition
Some fruit-seed oils such as citrus fruit seed oils, strawberry and passion seed oils are traded in large quantities and constitute an established market. New suppliers will find it difficult to gain access to these markets because of the strong competition from existing suppliers.

Tips:
- Determine to what extent you are able to compete in the markets for established fruit-seed oils, which require high volumes and where you would face strong competition from established sources.
- Be open and honest in your communication about the quality and quantity of the fruit-seed oil you can supply. This is necessary for potential clients.
- Refer to CBI Competition for Vegetable Oils for more information.
What do the trade channels and market segments of interest for fruit-seed oils in Europe look like?

Market channels
Please refer to the CBI Module Market Channels and Segments for Vegetable Oils, which gives an overview of the market channels in vegetable oils for cosmetics together with information on important trends in these market channels.

Fruit-seed oils exported in crude form
Fruit-seed oils are mostly exported to Europe as crude or refined oil. Some traders import the raw material to produce the oil themselves. As cosmetic producers prefer refined oil, crude fruit-seed oil goes to the refining industry for further processing. This can be done in Europe or in the country of origin. Filtering the oil can often be done at source; whether or not further processing steps are feasible depends on the quality, available volumes and the needs of the buyer.

Tips:
- Research whether the seed oil you supply needs further processing. Make sure that you coordinate activities with your buyer.
- Before you set up installations to refine your fruit-seed oil (for instance by deodorising or decolouring it):
  - Ensure that you can meet your buyer’s requirements in terms of quality, composition, quantity and the cost of the oil.
  - Investigate whether you can expect a sufficient return on investment, or whether working with toll refiners would be more cost-effective.

Exporters that already produce fruit seeds or juices can add seed-oil production to benefit from market diversification.

Tips:
- Diversify your production to make you less susceptible to price fluctuations in one of the markets. This will require the following preliminary actions:
  - Make sure that you comply with quality issues and that there is sufficient demand for the fruit-seed oil.
  - Research whether or not you can meet market prices and secure sufficient quantities for economies of scale.
- Supply a combination of fruit-seed oils, which can make you more interesting to potential buyers.

As certain fruit species grow well in specific climates, fruit-seed oils come from certain regions as well. Various oils originate in South America, such as the acai berry seed oil from the Amazon region. Examples from Africa are baobab and marula seed oil and Kalahari melon seed oil.

For certified oils (organic and Fairtrade), trade channels are usually shorter than for non-certified oils. Importers of certified oils work closely with producers in order to meet the standards of the scheme. Most companies that deal exclusively with natural and certified oils are smaller in size.

Tip:
- Benefit from the experience and knowledge of European importers and agents instead of approaching end-users directly. Refer to the CBI Module Finding Buyers for information on how to conduct this search.
Market segments

Table 1: Major food segments and applications for fruit-seed oils

<table>
<thead>
<tr>
<th>Segment</th>
<th>Sub-segment</th>
<th>Benefits of applying fruit-seed oils</th>
</tr>
</thead>
</table>
| Skin care     | Creams, lotions, facial care, body care          | Base oil for cosmetic products  
Nourishing, moisturising and revitalising effects  
Marketing story; natural and exotic ingredient  
Most interest in specialty fruit-seed oils |
| Hair care     | Shampoo, conditioner                             | Marketing story; natural and exotic ingredient  
Moisturising effects  
Take note of low level of use, especially in shampoo (aqueous formulas). |
| Toiletries    | Soap                                             | Marketing story; natural and exotic ingredient |
| Decorative cosmetics | Makeup               | Marketing story; natural and exotic ingredient |
| Massage oil   | Massage of painful or stressful areas, relaxing therapy | Marketing story; natural and exotic ingredient  
Used at high levels, up to 100% |

Perceived and actual benefits of fruit-seed oils

Fruit-seed oils find applications in practically all cosmetic segments. Often, their applications are comparable to other vegetable oils. Percentages of fruit-seed oils in the final product can vary from less than 1% to 100%. If used as base oils in cosmetic products, they make up a large part of the product. For example, in massage oils, the entire product is made of the fruit-seed oil. In skin or hair care products, usage levels are often much lower. Price is a limiting factor.

Tip:
- In your promotion, include the wide range of products with a potential for fruit-seed oils. In addition, for your specific oil stress the properties and marketing potential in the various segments. For more information on oil properties in cosmetics, check Cosing.

Fruit-seed oils are commonly used in skin care products. In general, fruit-seed oils are primarily used for marketing purposes. In addition, similar to other vegetable oils, they are used for their claimed moisturising effects, provided that the levels of use justify the claim.

There is an opportunity for organic certified fruit-seed oils. For speciality oils, the organic segment has more potential than for conventional oils.

There is a market for Fairtrade certified fruit-seed oils. An increase in demand of ethically sourced products is of importance for this segment. Fairtrade standards for wild-collected cosmetic ingredients are rare, but exist for marula and baobab fruits, which are sources of fruit-seed oils. Industry sources indicate an interest in these oils for specialised cosmetic producers.

Tip:
- Certification is useful if a processor can certify the entire end-product. Therefore, discuss the opportunities for Fairtrade, FairWild or organic certified fruit-seed oil with your buyers. Refer to Additional Requirements above for more information on these certification standards.
What are the end market prices for fruit-seed oils?

**Price depends on quality and type of extract**

Similar to other vegetable oils, the price level of fruit-seed oils generally depends on exclusivity and novelty of the oil, quality, yield, availability and certifications. However, the market for fruit-seed oils is not limited by price, when compared to other vegetable oils. In this sector, high quality and marketing potential are more important to European buyers than price.

**Tip:**
- Certification adds value to your fruit-seed oil, especially in terms of marketing potential in the specialty oil segment.

Prices range between € 8 and in excess of € 50 per kg. In general, fruit-seed oils are placed at the lower end of the price range. However, prices can increase substantially for a new, exclusive and highly demanded oil that is in low supply. Examples of higher priced fruit-seed oils are cherry seed oil (€ 30 per kg), strawberry seed oil (€ 50/kg) and cranberry seed oil (€ 50 per kg). Both the yield and the supply of these oils are very low, while the oil is in increasing demand.

**Tip:**
- For your specific fruit-seed oil, monitor harvests in major production countries to anticipate price developments.

Pricing should be based on a cost-calculation of production (to be a price maker), instead of on the prices of your competitors (to be a price taker).

**Tip:**
- Calculate your production costs by using a detailed cost breakdown. Make sure to take additional costs into account, such as customs, loading/unloading, marketing, samples for chemical analysis and internal transport. After the cost breakdown, add a profit to result in the selling price.

Specialty vegetable oils are sold in smaller volumes with higher margins. In the cosmetic segment, consumers tend to be more willing to pay a higher price. Therefore, the higher price of non-commodity oils is less of an issue. As such, they are more frequently used in the cosmetics industry than in food products.

**Tip:**
- Focus on specialty vegetable oils; this market provides the most opportunities for DC exporters. Although volumes are lower, they can be offset by higher prices.

Yield of the fruit-seed oil depends on the oil content in the seeds. If the yield is low, cost-price increases.

Drying of the seeds increases the yield of fruit-seed oil and improves the quality. Sun-drying of seeds is less expensive than if the seeds are dried mechanically. However, sun-drying requires process management to reduce the probability of moulds and fungi and other contamination.

**Tips:**
- Enhance your price competitiveness by improving production yields. For example by drying the seeds before extraction, by improving the efficiency of extraction techniques or increasing the scale of production and transporting larger volumes.
- Ensure that you can secure sufficient supplies of oil or oilseeds for your cosmetic oil buyers. For example, keep production in your own hands or work through grower schemes. In case of wild collection you can look into the [FairWild](#) standard to ensure sustainable collection.

The following price breakdown shows which costs and margins are applied to fruit-seed oil before it reaches the end-user.
Figure 3: Price breakdown for fruit-seed oils, mark-ups in %

<table>
<thead>
<tr>
<th>Export</th>
<th>Air cargo</th>
<th>Import</th>
<th>Refining</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>+12-60%</td>
<td>+5%</td>
<td>+1-4%</td>
<td>+30%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Profound, 2013

Useful sources

Trade fairs

Visiting and participating in trade fairs is highly recommended as one of the most efficient methods of testing market receptivity, obtaining market information and finding prospective business partners. The most relevant trade fairs in Europe for exporters of fruit-seed oils are:

- **in-cosmetics**, a travelling trade fair
- **Beyond Beauty** in Paris, France
- **SANA** in Bologna, Italy
- **Vivaness** in Nuremberg, Germany (for organic producers)

More information

CBI market information: Promising EU export markets.
International Trade Statistics - [http://www.trademap.org](http://www.trademap.org) – you have to register