



LIFE16-CCA IT 000011

Commercial plan Italy:

Sumac (Rhus Coriaria)

Appendix to the Action C7-3







DESERT ADAPT, LIFE16-CCA IT 000011

2022



LIFE Project Number: LIFE16-CCA IT 000011

LIFE Project name: DESERT ADAPT

Data Project

Project location:	Italy, Portugal and Spain	
Project start date:	01/09/2017	
Project end date:	01/09/2022 Extension date: : 01/09/2023	
Total budget:	€ 4.075.040	
EU contribution:	€ 2.439.761	
(%) of eligible costs:	60%	

Data Beneficiary

Università degli Studi della Campania "Luigi Vanvitelli" (IT)	
Ms Simona Castaldi	

Report information

Name	Commercial plan: Sumac (Rhus Coriaria)	
Related action	C7-3	
Produced by	FSG	
Original delivery time	31-12-2022	
Actual delivery time	31-12-2022	
Version number	1	





Table of content

TA	BLE OF CONTENT	3
1	TYPE OF PRODUCT OR SERVICE	4
2	POTENTIAL USES OF THE PRODUCT OR SERVICE, AND PRICES	5
	TARGET CUSTOMERS, MARKETS AND COMPETITORS	
	MARKET FORECAST	
	YOUR OPPORTUNITIES & THREATS, AND HOW TO SELL IT.	
	POTENTIAL CUSTOMERS	
b	PUTENTIAL CUSTUMERS	. 12

This commercial plan is one in a range of similar documents. List of commercial plans available:

Spain	Italy	Portugal
L5/L6*: Aromatics , Jara (all uses, including oil), Honey . L7: Nuts (Pistachio), Tourism (Bulls & cows)	L1: Aromatics L2/11: Honey + beekeeping in general (selling/buying bee colonies & queens), Wild asperges, Pistachio L4: Sumac (Rhus Coriaria), Prickly pear (all products like Fibre, (frozen) juice, fruits etc).	L8: Tourism . L9: Carob tree . L10: Strawberry tree. Hunting (link with national hunting orgs, photo hunting options).

^{*} L numbers are the landowners in Life Desert-Adapt project that sell these products.



1 Type of product or service

Sicilian Sumac (*Rhus Coriaria*) is a flowering shrub that belongs to a family of plants known as *Anacardiaceae*. Other common members of this family include cashew and mango plants. Sumac thrives in subtropical and temperate climates and grows all over the world, including various parts of the Mediterranean, Asia, and Africa. The plant will grow in any type of soil that is deep and well-drained. It cannot grow in the shade.

There are more than 200 different species of sumac, all of which belong to the genus Rhus. However, *Rhus coriaria* — or Syrian/ Sicilian sumac — is the variety people most frequently cultivate as a culinary spice. People have also used it in traditional herbal medicine practices for centuries.

Sumac is characterized by the large, dense clusters of bright red, pea-sized berries (3 mm) it produces. People can steep the fresh fruits to make tea, but more often they dry and powder them for use as an herbal supplement or culinary seasoning. The dried fruits are also used, in combination with other spices, in the mixture called $\underline{\text{Za'atar}}$. The leaves and the bark were traditionally used in tanning and contain tannic acid. Dyes of various colours, red, yellow, black, and brown, can be made from different parts of the plant. Oil extracted from the seeds can be used to make candles. The immature fruits are sometimes used as caper substitutes. The seeds can also be used as an appetizer in a similar manner to mustard.

The sumac spice should not be confused with poison sumac (*Toxicodendron vernix*). Though poison sumac is related, it's distinctly different. Poison sumac produces white-coloured fruit and can cause allergic reactions similar to those from poison ivy or poison oak.

Traditionally there are the following main uses still in use.

- **Dried powder.** Or 'ground sumac'. Herbal supplement for culinary seasoning, herbal medicine or Za'atar.
- Crushed fresh berries or fresh berries. For tea.
- **Dried seeds**. For essential oil production or seeds as a mustard ingredient.







2 Potential uses of the product or service, and prices.

The following are the most interesting uses of this specie.

International market

Type of use	Explain what it means
Dried powder.	Dried powder, or ground sumac, is made from the berries. This powder can be sold for various purposes: Herbal supplement for culinary seasoning, herbal medicine or Za'atar. It is sometimes mixed with salt. Sumac dry powder is sold for €17/kg consumer price, or €6,8/Kg producer price (40% of consumer price, standard factor). The price depends a bit of the granular size. Very fine powder can be much more
	expensive. There are limited sources about production/hectare but one source say around 1850 kg/ha can be harvested. First year of harvest is 4 years after planting. This means an income of €12.580/ha. However, harvesting (small berries), cleaning (dense berry clumps), drying and making the powder should not be underestimated. The ground sumac is a niche market, it is not readily available in many shops around the EU. Za'atar herb mix (besides Sumac many other herbs) is usually sold for
Dried seeds/	around €25/kg consumer price, or €10/Kg producer price (40% of consumer price, standard factor). The Za'atar herb mix can easily be bought in all EU countries. It is a common product, not a niche market. Dried seeds by themselves are not really sold. However, essential oils
/oils	can be found on the market. Like many other essential oil this can be an expensive product, up to €2300/litre consumer price or €920/litre producer price (40% of consumer price, standard factor). There are only very limited sources that say something about the yield of Sumac berry-seeds to oils.
	Sumac was initially considered as an essential oil-poor plant as the yield of the oil using the available hydro-distillation method was around 0.1% (of the complete plant). Several improved analytical techniques which include microwave-aided extraction has greatly increased sumac oil yield to about 13.5%. At this moment the real yield, and the income per hectare, cannot be estimated properly. When compared to herbs, like thyme, rosemary, lavender, these are in general at 20 litre of oil/ha.







Local, national or regional market

Local, national of regional market			
Type of use	Explain what it means		
Crushed fresh	Fresh fruits can be harvested and sold, just like normal strawberries.		
berries or fresh	, , , , , , , , , , , , , , , , , , ,		
berries.	An average tree produces 3 Kg fruit after 8 years (literature ranges between 2,5-6Kg because of changes between the years). They are small trees and 635/hectare (4*4 planting grid) can be used. This leads to 1875 Kg/ha.		
	The average market price is difficult to say. Biological fruits are sold <u>fo</u> <u>€12/Kg</u> in Portugal. But the average price in Portugal seems to be <u>a</u> <u>€1,80/Kg</u> . This means an income of €3.375/ha.		
	However, do not underestimate the costs of harvesting. These are small delicate fruits so it takes time to pick them at the right time and pack them safely. Birds love the berries of Arbutus unedo as well.		

Used literature:

- <u>Life Desert-Adapt species database</u>.
- Pfaf database of species.
- <u>Handbook of Herbs and Spices</u>. Sumac (page 430)
- Gernot Katzers' spice pages. Sumac.
- <u>Just ingredients Trade</u>. Sumac prices.





3 Target customers, markets and competitors

International market

Market types				
Name of solution, product or service	Best target customers for each product: Explain your preferred target groups; consumers, retailers (shops), distributors, other landowners, wholesales, catering industry	Best target market for each product: Local, regional, national, international	Include basic information about the competitors. How big are they? Where are they located?	
Dried powder.	Production companies that use the powder for various ingredients (as mentioned in chapter 1). Consumers, & retailers, through online sales platforms, ready-made products by yourself.	International Because there is demand for this product is in each EU country (and outside the EU).	Very small number of competitors. Your main competition comes from the Southern EU countries. But it is small.	
Dried seeds /oils	Consumers, & retailers, through online sales platforms, ready-made products by yourself.	International Because demand for this product could grow in each EU country (and outside the EU).	Hardly any competition. The few companies offering this are from Bulgaria.	

Local, national or regional market

Market types			
Name of solution, product or service	Best target customers for each product: Explain your preferred target groups; consumers, retailers (shops), distributors, other landowners, wholesales, catering industry	Best target market for each product: Local, regional, national, international	Include basic information about the competitors. How big are they? Where are they located?
Crushed fresh	To be sold in Italy,	Local, regional,	This is a rare product
berries or fresh	France and Germany	national,	with few local
berries.		international	competitors





Used literature:

- Market news USDA (Sumac is not mentioned at the moment)
- All recipes. What Is Za'atar and How Do You Use It?

 ResearchGate. Phytochemistry, Pharmacological Properties and Industrial Applications of Rhus Coriaria.
- HealthLine. Sumac benefits.
- Foundation Diet and Health. Sumac. (how to make the powder).
- <u>Instructables</u>. How to make sumac powder and sumac lemon pepper.





4 Market forecast

International market

	Market forecast					
Name of solution, product or service	Describe the current market conditions. For example the forecasted growth or for example a regulation with direct influence on the market. Small/medium/big markets. Small/medium markets	Demand. What do you expect? What information is it based on? 150kg/year	Price development. What do you expect? What information is it based on? 20€/kg for raw material			
Dried powder.	This is a medium size market at the moment. There are maybe up to 5 small/medium companies or websites offering such products in a more professional way in each of the EU countries. Nevertheless they still need to buy the powder somewhere.	We expect a steady & growing market for the years to come. Research have shown the potential of the specie and it is only a question of time when this is turned into real products on a larger scale. The powder is also multipurpose which makes in flexible where and how to sell it. This is the right time to step into this market.	Current prices are high. This is caused by the labour intensive harvest but also because there are hardly any plantations or steady supply. Prices remain high in the years to come and will probably only increase in the next 10 years.			
Dried seeds /oils	There is hardly any market.	We expect a steady & growing market for the years to come. Research have shown the potential of the specie and it is only a question of time when this is turned into real products on a larger scale.	Current prices are extremely high. This is caused by the labour intensive harvest but also because there are hardly any plantations or steady supply. Prices remain high in the years to come and will probably only increase in the next 10 years.			





Local, national or regional market

Local, Hacional of	regional market			
Market forecast				
Name of solution, product or service	Describe the current market conditions. For example the forecasted growth or for example a regulation with direct influence on the market. Small/medium/big markets.	Demand. What do you expect? What information is it based on?	Price development. What do you expect? What information is it based on?	
Crushed fresh berries or fresh berries.	300-500kg/year	Product for pastry shops	from 8 to 12€/kg	

Used literature:

- <u>Amazon</u> (search per specie) https://www.etsy.com (search per specie)
- Amazon. Sumac essential oils. Prices.
 ResearchGate. Iranian Rhus coriaria (sumac) Essential Oils Extraction.
 ResearchGate. The Essential Oils of Rhus coriaria L. (Sumac).



5 Your opportunities & threats, and how to sell it.

International market

Your potential advantages and threats by selling this				
Name of solution, product or service	Explain opportunities by targeting this product or service.	Advise what the best ways are to sell this product or service (the marketing mix). Think about added-values, packaging, web-shops or not etc	What are the current threats to the market?	
Dried powder.	Good prices and growing market. You should enter the market now and also tell the story about the healthy characteristics of this specie. Maybe you can even combine it with tea or other products (see chapter 1). Make a small Sumac assortment of products (nobody does that yet).	Direct linking to producers of various ingredients (see chapter 1). Directly to consumers or retailers throughout online sales platforms. No need to sell to intermediate chain segments.	Direct competition with other producers. This is a niche market and have to be sold like this (unique product with a good story). In this the story is more important as the product.	
Dried seeds /oils	Good prices and growing market. You should enter the market now and also tell the story about the healthy characteristics of this specie. See above.	Directly to consumers or retailers throughout online sales platforms. No need to sell to intermediate chain segments.	Unknown product. Product is not yet very well known in the rest of Europe so you have a good story to tell and create your own market. This will take time and effort.	

Local, national or regional market

Market forecast				
Name of solution, product or service	Describe the current market conditions. For example the forecasted growth or for example a regulation with direct influence on the market. Small/medium/big markets.	Demand. What do you expect? What information is it based on?	Price development. What do you expect? What information is it based on?	
Same as above.				





6 Potential customers.

List the potential customers for each products. List at least 5 potential customers for each product or service.

International market

Customers					
Name of solution, product or service	Name and location	website	Why?		

Dried powder. If you prefer to sell fruits to other companies for ingredients you could target many traders in each EU country. Just to give you an example (note; most sites are in local language):

Organic Nature, Portugal. <u>YouHerbIt</u>, Greek (sells leaves). <u>Lia Incenses</u>, Portugal. <u>Just ingredients Trade</u>, UK. <u>Eko Plaza</u>, Netherlands. <u>Natural Spices</u>, Netherlands. De <u>Kruidenshop</u> (Belgium). <u>Bügel</u> Germany. <u>Bremer Gewurzhandel</u>, Germany. <u>Épices Rœllinger</u> (France). <u>Italia Spezie</u> (Italy). <u>SpeciaTé</u>. Italy. <u>La Tienda de las Especias</u>. Spain. <u>Sosa</u>, Spain.

If you sell this yourself you can use the normal sales platforms around. See below.

a)	Amazon	https://www.amazon.com	Online sales platform, search for the specie.
b)	Etsy	https://www.etsy.com	Online sales platform, search for the specie.
c)	Tofillo	https://tofillo.com	Herbs and tea trader.
d)	Ebay	https://www.ebay.com	Search the specie and see what is online now.
e)	Lazada	https://www.lazada.com.ph	Search the specie and see what is online now.

Dried seeds//oils.

If you sell this yourself you can use the normal sales platforms around. See above. You could also try to approach the ones below for their interest.

	T		
a)	Decléor	https://www.decleor.co.uk	Perfumery
b)	Farmaline	https://www.farmaline.be	Medical use
c)	Puressentiel	https://uk.puressentiel.com	Company in line with 'Nature' values and a good story.
d)	Eden botanicals	https://www.edenbotanicals.com	Serious trader with much experience.
e)	Osmanthos	https://osmanthos.com/perfume- ingredients	Buys ingredients for making your own parfume.

Local, national or regional market

Market forecast

Not relevant, small scale locally.



