

COST Short Term Scientific Mission Report

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Abbreviations and acronyms

FSC Forest Stewardship Council
GHG Greenhouse Gases
IFOAM International Federation of Organic Agriculture
ISO International Organization for Standardisation
LOHAS Lifestyles of Health and Sustainability
PDO Protected Designation of Origin
PEFC Programme for the Endorsement of Forest Certification
PGI Protected Geographical Indication
TSG Traditional Speciality Guaranteed
UNOPS United Nations Office for Project Services

1 Purpose of the STSM and description of the work carried out during the STSM

The Short Term Scientific Mission (STSM) related to the COST action FP1203 European Non-Wood Forest Products was conducted at the Ruralia Institute of the University of Helsinki¹, in Seinäjoki (Finland), between the 3^d and 31th of March 2014.

Ruralia Institute is an independently administrated multidisciplinary institute at the University of Helsinki. The mission of the institute is “to improve the welfare of rural people and develop the sources of livelihood in the rural areas through research, development, education and training”. The responsables of the STSM in the host institute were Prof. Sami Kurki and the researcher/project manager Anne Matilainen.

The purpose of the mission was to understand the role of labelling in the commercialization of berries and berry products in the Finnish market. The STSM aimed at describing which are the labels present on berries and berry products in Finland (with a special focus on third-party labels) and for what extent these labels are considered important by consumers and have an impact on their purchasing decisions.

The research was designed to be carried out in two times: the first was constituted by a literature and website analysis and by interviews to some key actors. The following persons were interviewed:

- Dr. Rainer Peltola of the MTT² Agrifood Research Finland’s Lapland regional unit. MTT is Finland's leading research institute in the field of agricultural and food research and agricultural environment research. It operates under the Ministry of Agriculture and Forestry. The research at MTT promotes consumer well-being, the competitiveness of agriculture and the food industry, the sustainable use of natural resources, the quality of the production and living environment, and the vitality of the countryside. MTT performs researches on berries, food chain, rural enterprises and industries;
- Dr. Jukka Lahteenkorva, Programme Director at the Foodwest. Foodwest³ is an independent company of experts in the field of food development. It is a national Food Development Centre of Expertise appointed by the Finnish government. The Centre of Expertise programme is especially designed to help develop companies. They focus on the quality of the production and on the factors affecting competitiveness and the consumer perception;
- The Finnish Nature-based entrepreneurship⁴ association is a national cooperation network of entrepreneurs and organization aiming at developing and promoting nature-based entrepreneurship. The association provides information and administers a data portal for nature-based entrepreneurship;
- Katja Misikangas of the Lapcream⁵ company. Lapcream is a company based in Narkaus, near Rovaniemi specialized in nature-based and berries cosmetic products. The raw materials come from Lappish organic forests.

¹ http://www.helsinki.fi/ruralia/index_eng.htm

² https://portal.mtt.fi/portal/page/portal/mtt_en

³ <http://www.foodwest.fi>

⁴ www.luontoyrittaja.net

⁵ <http://www.lapcream.com/>

The information collected with the literature analysis and the interviews served for the second part of the research, the preparation of an online questionnaire, which will be submitted, within the next month, to the students of the University of Helsinki. The students are representatives of the young, educated and urban segment of consumers and in our opinion it would be interesting to understand their attitudes toward labelling on berries and berry products.

In the light of the STSM's vision, which aims at strengthening networks and fostering collaborations between researchers, the mission has been also the occasion for collaborating at an ongoing project in the Ruralia Institute, the Erika project⁶. Erika project aims at investigating how EU Novel Foods Regulation is affecting the entrepreneurship in non-wood forest products sector. The research is being conducted in a number of European Union countries, among which there is Italy. In Annex II the analysis of the Italian case-study is reported.

In order to sharing knowledge and experiences between Italy and Finland in the non-wood forest products sector, during the STMS a seminar has been conducted. In Annexes III and IV the programme of the seminar and the presentation are reported.

⁶ <http://novelfoodsregulation.blogspot.fi/2014/03/natural-plants-in-entrepreneurship.html>

2 Background - Key factors influencing the berry marketing

Berries are commercialized all over the world and different geographical regions produce their own special varieties. Some species largely dominate the market (e.g. strawberries and raspberries) and they are sold as mass products: they have a low level of differentiation, they are widely available, price sensitive and they reach a large number of consumers (Pettenella et al., 2006). However, during the past decade, interest for less known, niche, berries has increased. These berries have high added values, they are very well differentiated products, and they often come from unique territories and bring high innovation (Pettenella et al., 2006).

Companies may develop different strategies for promote their berries: beverage, ingredients, cosmetics, supplement strategies etc. and the market of berries has different drivers and elements to take into account, according to the strategies adopted (Figure 1). For instance for the fresh berries, the three main drivers are availability of the product, cost and quality. Availability depends on factors as seasonality, life span of the product, conservation methods. The cost of production is managed through the selection of high yielding varieties, delocalization, more efficient methods of picking, improved logistical infrastructure (SITRA, 2008). Another strategy can be those one of beverages. Beverages, as juices, have the advantages of being easy to consumate (they can be single-served) they are convenient, they can be conserved and stored, they are available to be consumed all year round, and there can be a packaging innovation. Packaging is a strong element in the beverage strategy, because it catches the consumer's attention.

Ingredients as purees, powders and extracts of berries are other important strategies for the berries. Berries are processed in convenient forms and in particular extracts enable the active compound to be used in a concentrated form. The berries mostly used in dietary supplements are bilberry and cranberry. Berries are also used as ingredients in cosmetics as extracts, oils, compounds (SITRA, 2008).

Berries are important dietary sources of fibres and essential vitamins and minerals. They also contain a large number of other phytochemicals that may have marked bioactivities with potential health benefits, as effects on oxidative damage, detoxification enzymes, the immune system, blood pressure, antiinflammatory, antibacterial, and antiviral responses (Duthie et al, 2003 as cited by Schnettler et al., 2011). For this reason and because they are practice to eat (small and need no peeling) convenient and tasty, berries are one of the healthy eating trend's beneficiaries (SITRA, 2008). Consumers are becoming more aware of the importance of eating fruits and

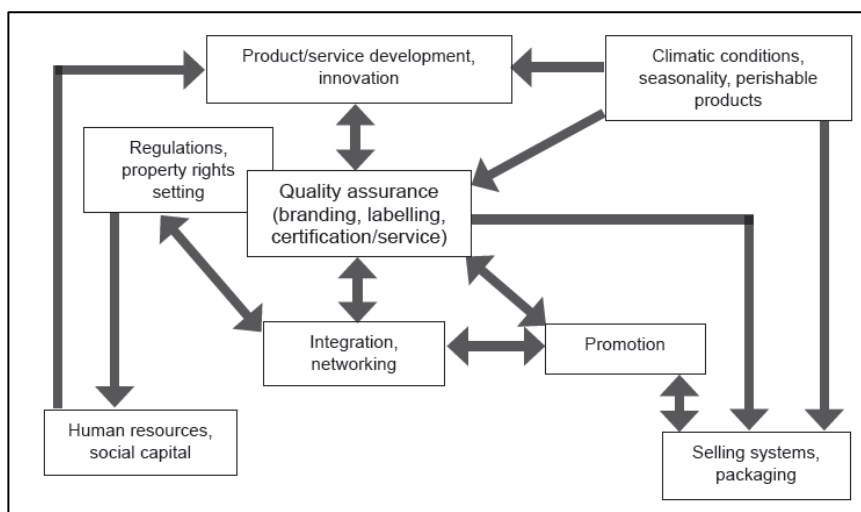


Figure 1 Key factor influencing the marketing of berries (Source: Pettenella et al., 2006)

vegetables to avoid chronic diseases, also thanks to campaigns like the World Health Organization “5-a-day campaign” ⁷.

In the healthy nutritional market, schematised in the graphic (Figure 2) many products start on the left, focusing on consumers who look for products with effective technology or a unique health benefit. “Technology consumers” are more interested in functionality than at food. The products are usually sold to the technology consumers in limited quantities and with premium prices. Over time,

the volumes of these products increase and at the same time the prices decline, reaching the lifestyle area. Lifestyle consumers are the segment who is the first in trying new trendy benefits. They support the concept of health beneficial ingredients, including it in their lifestyle. They usually

claim and show this consumer behaviour as a component of their identity and of trendsetters. They demonstrate loyalty to a product (or a brand) as long as it support their lifestyle (SITRA, 2008). At the end of the curve, the prices of the products fall down and they become massmarket products. The mass market consumers are motivated when the new benefits become a standard. They are mostly motivated by food, and the health benefits in food are only secondary benefits (SITRA, 2008).

In terms of health, most berries are positioned in the lifestyle area. Many companies deliberately target the lifestyle consumers, creating niche products and maintaining premium prices (SITRA, 2008).

Jointly to the health issue, consumers are giving increasing consideration to the environmental and social sustainability of products and processes. For example, according to a large multicountry survey by McKinsey, 87% of consumers are interested about the environmental and social impact of the products they buy, 33% and 54% care about the environment, and want to help fight climate change (Toppinen et al., 2013). A growing body of literature shows that many consumers perceive an additional benefit associated with the social and environmental sustainability linked with products they buy, possibly associated with corporate social responsibility of the suppliers (Auger et al. 2008 as cited by Toppinen et al., 2013).

The acronym LOHAS, Lifestyles of Health and Sustainability, describes a market segment focused on health and fitness, the environment, personal development, sustainable living, and social justice.

For their healthy properties, for being “green” products and traditional local products, and for promoting a slow food culture, berries can be beneficiaries of the LOHAS market trend.

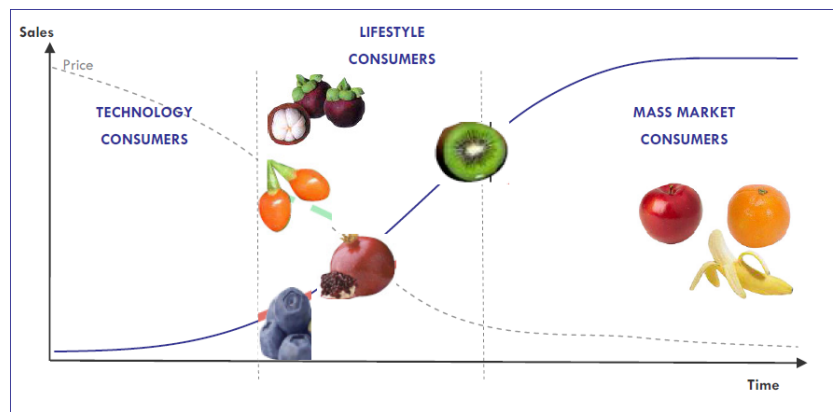


Figure 2 The positioning of fruits in the healthy nutrition market (Source: Sitra 2008)

⁷ <http://www.who.int/dietphysicalactivity/fruit/en/>

2.1 Labelling

Among the factors affecting the berry marketing, packaging and selling systems have a high importance. In particular, labels are strong tools for promotion and advertisement (Pettenella et al., 2006). Certification and labels are fundamental for assuring (and communicating) the quality of the products. Globalization and the development of international trade expose both producer and consumer to a wide variety of products and brands coming from diverse origins. However, facing with such a plethora of products, the consumer has to be judge (Courvoisier, 2005 as cited by Jeddi and Zaiem, 2010). The product's identity it is a crucial asset for its success on the market place. The label has become one of the most important issues to discriminate between products, because it immediately helps the consumer to evaluate and assures him about their quality (Giraud, 2005 as cited by Jeddi and Zaiem, 2010). According to Larceneux (2004), the label capital can be defined as being "a set of associations and behaviours on the part of consumers of labelled products, which favours in a strong and differentiating way the products which are labelled over those which are not" (Jeddi and Zaiem, 2010). More specifically, third party certifications and labels have become much more widely used. Third-party certifications and labels are a way of proving and communicating the environmental quality of products and supporting customers in their choices.

A number of quality assurance labels can be applied on berries products, jointly to labels which can be applied on packages.

2.1.1 Environmental performance

It is known that food production and consumption have a significant impact on the environment (Hartikainen et al., 2013). Globally, about 40% of the land area is used for agriculture (Foley et al., 2005 as cited by Hartikainen et al., 2013) and agriculture generates also substantial nitrogen and phosphorus emissions. Due to population growth, the demand for food is expected to increase and thus the environmental impact of food is likely to increase in the future too. Food therefore represents an opportunity for consumers to reduce their personal impacts on environment (Hertwich, 2005 as cited by Hartikainen et al., 2013).

One way to inform consumers about the environmental impacts of food, and also of other products, as cosmetics, is environmental labelling.






There are many labels and declarations of environmental performance, which should be referred to as environmental labels. "Ecolabels" are a sub-group and they respond to special criteria of comprehensiveness, independence and reliability (UNOPS, 2009). An ecolabel is a label which identifies overall, proven environmental preference of a product or service within a specific product/service category. In contrast to claim statements developed by manufacturers, the most credible labels "are based on life cycle considerations and they are certified by an impartial third-party in relation to certain products or services that are independently determined to meet transparent environmental leadership criteria"(Global Ecolabelling Network⁸).

The International Organization for Standardisation (ISO) has identified three types of voluntary labels. Ecolabelling is under the Type I. There is a fourth group, that under the UN system

⁸ <http://www.globalecolabelling.net>

procurement is called “Type I-like”. This type of labels requires a verification and certification process similar to that of ecolabels (independent third party certification) but it focuses on single issues such as energy consumption, sustainable forestry, etc. (Table 1). Type I and Type I-like labels are the typologies recommended for use in UN system procurement (UNOPS, 2009).

Table 1 Voluntary environmental performance labelling according to the ISO Definitions

Type	Description	ISO standard	Examples
Type I	A voluntary, multiple-criteria based, third party program that awards a license that authorises the use of environmental labels on products indicating overall environmental preferability of a product within a particular product category based on life cycle considerations	Ecolabelling schemes : ISO 14024:1999	  
Type I like	A voluntary, multiple-criteria based, third party program that awards a license that authorises the use of environmental labels on products indicating environmental preferability of a product within a particular product category based on life cycle considerations. It focuses on a single issue (e.g sustainable forestry).	Ecolabelling schemes : ISO 14024:1999	 
Type II	Informative environmental self-declaration claims		CFC free, dolphin friend
Type III	Voluntary programs that provide quantified environmental data of a product, under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by that or another qualified third party. There is only verification, no evaluation	Life-cycle data declarations : ISO 14025:2006	

2.1.1.1 European Union ecolabel

The Regulation (EC) No 66/2010 defined the rules for the EU Ecolabel. The EU Ecolabel⁹ is a voluntary label which helps in identifying products and services that have a reduced environmental impact throughout their life cycle, from the extraction of raw material through to production, use and disposal. Among the categories of products and services awardable with the EU



Figure 3 The EU Ecolabel

⁹ http://ec.europa.eu/environment/ecolabel/index_en.htm

Ecolabel food is not included. Avoiding an EU Ecolabel for food has been defined as a “victory” of International Federation of Organic Agriculture (IFOAM). IFOAM states that an ecolabel for food “would have caused consumer confusion and unfair competition for the organic label. Maintaining recognition of the most environmentally friendly and sustainable food system available was key to this success”. On berries products Ecolabel can be used on other categories of products, as “soap, shampoos and hair conditioner”, and on packages.

2.1.1.2 Carbon labelling

Carbon labelling serves to communicate carbon footprint measurement and reduction of the organisation's products and services. This is important to consumers wishing to minimize their footprint in term of greenhouse gases emissions (GHG) and contribution to global warming made by their purchases.

Originally published in 2008 as the world’s first framework methodology for product carbon footprinting, PAS 2050, (now in the version 2050:2011) is a publicly available specification providing a method for assessing the life cycle greenhouse gas emissions of goods and services. Food is included in the list of the products that can be commercialised with carbon labelling.

2.1.1.3 FSC and PEFC

For berries products, the label of the certification of forest management can be applied. The FSC (Forest Stewardship Council) and the PEFC (Programme for the Endorsement of Forest Certification) schemes have criteria for the sustainable management of non-wood forest products. According to Vantomme (2010) certification of an NWFP species requires not only its sustainable use, but also provides a way to assess the abundance of other species that it is ecologically linked to”. Certification provides an opportunity to assess at least a part of the biodiversity of the forest. FSC and PEFC labels can be used also on packages.



Figure 4 The FSC and the PEFC labels

2.1.2 Organic

In the Western societies there is an increasing concern about how some products can be harmful to the environment. This has led to a higher demand for sustainable products and stricter regulations from governments (Gurău and Ranchhod, 2005 as cited by Ruiz de Maya et al., 2011). Environmentally and social friendly behaviour has become increasingly relevant to countries, companies and consumers (Kaufmann et al., 2009; Kletzan et al., 2006, Low and Davenport, 2005 as cited by Ruiz de Maya et al., 2011). Some consumers have indeed changed their purchasing behaviour, favouring organic products (Kassaye, 2001 as cited by Ruiz de Maya et al., 2011).

Organic agriculture is defined as “a holistic production management whose primary goal is to optimize the health and productivity of interdependent communities of soil, life, plants, animals and people” (UNCTAD, 2006 as cited by Ruiz de Maya et al., 2011). Organic products respect the environment and are produced without the use of synthetic pesticides, herbicides, chemical fertilizers, growth hormones, antibiotics or gene manipulation (Chen, 2009 as cited by Ruiz de

Maya et al., 2011). Certified organic food products are controlled and certified by independent organizations and usually labelled, to assist consumers in the purchase (Thogersen, 2010).

The term “organic” and organic labels have strong emotional importance for the consumers, in terms of personal wellbeing and health and in the context of benefits to the environment (Padel and Foster, 2005).

Worldwide, the market for organic food products is experiencing a fast growing (Aschemann et al. 2007, Richter et al. 2007 as cited by Thogersen, 2010). However, organic food has been much more successful in some countries than in others (Thogersen, 2010). Consumer behaviour varies across countries, so it is worthwhile to identify international market segments that are more interested to choose organic products (Ruiz de Maya et al., 2011). Cross national researches reveal that organic food’s share of total food consumption strongly depends on regulation, legal definitions, standards, national labelling system, financial support to farmers. Other structural factors are soil conditions, the distribution system, the premium price asked for organic food products. Very important issues are the food culture in a country and the culture’s level of environmental concern (Thogersen, 2010) (Figure 5).

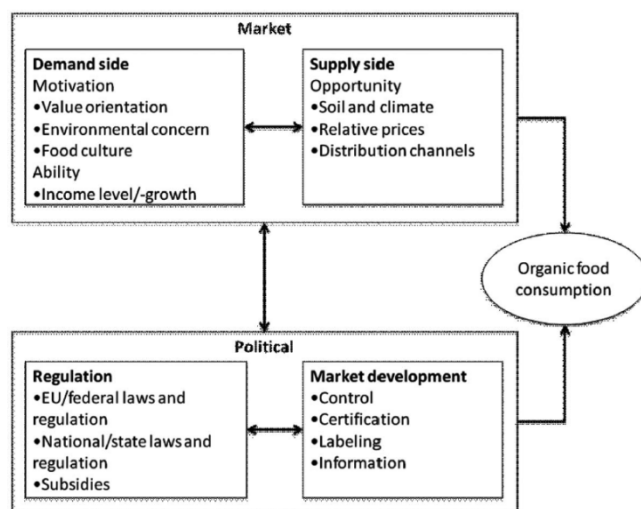


Figure 5 Determinants of organic food consumption (Source: Thorgesen, 2010)

So far, organic berries constitute only a small market. The growth has, however, come from the rising number of ethical consumers who are more aware of where berries comes from and how they are produced. The demand is expected to grow. (SITRA, 2008).

2.1.2.1 European Union organic label

In 2007 the European Council of Agricultural Ministers defined the Council Regulation (EC) No 834/2007 on organic production and labelling of organic products.. Foods can only be marked as "organic" if at least 95% of their agricultural ingredients are organic. Organic ingredients in non-organic food may be listed as organic in the list of ingredients, as long as this ingredient has been produced following the organic legislation¹⁰.

According to the Council Regulation (EC) No 834/2007, wild plants and parts thereof (that is, berries as well) are eligible to be labelled with the organic logo: “The collection of wild plants and parts thereof, growing naturally in natural areas, forests and agricultural areas is considered an organic production method provided that: those areas have not, for a period of at least three years before the collection, received treatment with products other than those authorised for use in organic production under Article 16; the collection does not affect the stability of the natural habitat or the maintenance of the species in the collection area”.



Figure 6 EU Organic logo

¹⁰ <http://ec.europa.eu/agriculture/organic/organic-farming>

In addition to the Council Regulation, two Commission Regulations were adopted in 2008 regulating organic production, the import, the commercialization and the labelling. From the 1 July 2010, the producers of packaged organic food must use the EU organic logo (Figure 6). The new logo replaced the old voluntary EU logo. The use of the logo on organic foods from third countries is optional. Organic products bearing the EU logo can also include a national organic certification logo.




2.1.3 Territorial branding

Globalization exposes many parts of the world to similar influences and leads to an uniformization of tradition and cultures (Simon, 2004 as cited by Messely et al., 2008). The local identity can be threatened and this cultural insecurity leads people to look for recognizable points of reference, in their nearby places. Region specific features, such as regional products are assigned great value and they are used to emphasized identity (Messely et al., 2008). Place of origin becomes more important. More and more national/regional/local products are entering the market (Messely et al., 2008). There are several examples of NWFP labelled with territorial logos. NWFP can become imago products for a specific territory, linking traditions, locality and environmental sustainability. The territorial branding can be developed at different scales. Hereafter the European Union schemes are reported.

2.1.3.1 EU Geographical indications and traditional specialties

Three European Union schemes PDO (protected designation of origin), PGI (protected geographical indication) and TSG (traditional speciality guaranteed) promote and protect names of quality agricultural products and foods (Table 2).

Table 2 EU geographical indications and traditional specialties

Name	Description	Logo
Protected Designation of Origin - PDO	Covers agricultural products and foodstuffs which are produced, processed and prepared in a given geographical area using recognised know-how	
Protected Geographical Indication - PGI	Covers agricultural products and foodstuffs closely linked to the geographical area. At least one of the stages of production, processing or preparation takes place in the area	
Traditional Speciality Guaranteed - TSG	Highlights traditional character, either in the composition or means of production	

3 Results of the literature analysis and the of the interviews

The results of the literature analysis jointly with the information obtained with the interviews are reported. Along the text, boxes containing ideas for the questionnaire are shown.

3.1 Berries in Finland

Finland has the most extensive forest area in Europe: forests cover about 23 million hectares, representing 11% of the forest area in Europe (Metla, 2012). On the total value provided by forests, non-wood forest products and services (nature tourism, game meat, wild berries, mushrooms, lichens etc.) are estimated to represent the 30% (Metla, 2012).

In Finland, wild berry picking is a popular recreation activity (Turtiainen and Nuutinen, 2012 as cited by Manninen and Peltola, 2013). The picking of berries is free and it is an integral part of the Nordic principle of *jokamiehenoikeus* (everyman's right), the right of public access to nature (La Mela, 2014). Everyman's right is embedded in ancient traditions that regulate the use of nature, and these habits have been handed down through generations (Pouta and Sievänen 2011, as cited by La Mela, 2014).

Today approximately 60% of the Finnish population participate in berry picking every year (Saastamoinen et al. 2000, Pouta et al. 2006 as cited by Turtiainen and Nuutinen, 2011). Berries are collected for both household use and sale. For the majority of people the berry picking is a leisure activity; however, especially in sparsely populated eastern and northern areas of the country, berry picking and the sale provides additional income for the population. (Saastamoinen 1996, as cited by Turtiainen et al., 2011). Consequently, the relative importance of wild berries, is different in different parts of the country (Turtiainen et al., 2011).

There are 37 species of edible wild berries in Finland (Metla, 2012), and the most widely collected species are Bilberry (*Vaccinium myrtillus* L.) and lingonberry (*Vaccinium vitis-idaea* L.) (Maaseutuvirasto, 2012 as cited by Manninen and Peltola, 2013), followed by crownberry, cloudberry, raspberry, cranberry and sea buckton (Arctic Flavours Association¹¹).

In the period 1997-2008, the average annual yields of bilberry and lingonberry were approximately 180 and 260 million kg, respectively (Turtiainen et al. 2011 as cited by Manninen and Peltola, 2013). The national utilization rates are on average 6% of the annual yield for bilberry and 10% for lingonberry (Turtiainen et al. 2011 as cited by Manninen and Peltola, 2013). These data are related to data collected before migrant pickers came in Finland in 2005; they therefore may underestimate the present use of berries (Manninen and Peltola, 2013). However, the newer estimations report that 3.1 million kg of bilberry and 8.5 of lingonberry was bought by biggest companies in Finland in 2011, which are more than average for the last three decades (Maaseutuvirasto, 2012, as cited by Manninen and Peltola, 2013).

In Finland there are researches institutes, associations and theme groups directly focusing on berries (and broadly on non-wood forest products).

The variable
"do you pick
berries"? will be
included

The geographic
provenience of
the respondent
will be included

¹¹ <http://www.arctic-flavours.fi>

The Finnish Forest Research Institute (Metla)¹² is a specialist research organisation which develops solutions to the challenges posed by the care, utilisation, products, services and intangible value of forests. Metla is a governmental research institute, subordinate to the Ministry of Agriculture and Forestry. The Institute promotes through research the economical, ecological, and socially sustainable management and use of forests. The research focuses also on entrepreneurial and business activity based on forests. The service “Metinfo Multiple Use of Forests” provides information and links about the recreational use of forests and non-wood forest products with forecasts about the amount of forest berries (only in Finnish).

MTT² is Finland's leading research institute in the field of agricultural and food research and agricultural environment research. It operates under the Ministry of Agriculture and Forestry. The research at MTT promotes consumer well-being, the competitiveness of agriculture and the food industry, the sustainable use of natural resources, the quality of the production and living environment, and the vitality of the countryside. MTT performs researches on berries, food chain, rural enterprises and industries.

Foodwest³ is an independent company of experts in the field of food development and food market. It is a national Food Development Centre of Expertise appointed by the Finnish government. The Centre of Expertise programme is especially designed to help develop companies. They focus on the factors which can affect competitiveness and the consumer perception.

Food Development Cluster¹³ is a part of the National Centre of Expertise Programme (OSKE) administrated by the Ministry of Employment and the Economy of Finland. Food Development Cluster works for the Finnish food industry on the consumer's terms. It develops products, technologies and services to enhance customers' wellbeing and it works on food safety and sustainability in food chain. There is a specific cluster on berries within which in 2009 was started the project “Lingonberry, superfruit”, participated by ten companies in the berry industry.

The **Finnish Nature-based entrepreneurship**⁴ association is a national cooperation network of entrepreneurs and organization aiming at developing and promoting nature-based entrepreneurship. The association provides information and administers a data portal for nature-based entrepreneurship.

The **Arctic Flavours Association**¹¹ is a “nation-wide natural products industry association specialised in wild berries, mushrooms, herbs and special natural products. The aims of the association are to promote the gathering, processing and use of natural products as well as to improve their quality.” The vision of Arctic Flavours association is to produce services that support the development of the natural products industry for the benefit of companies, stake-holders in the industry and citizens. Among the functions they have, they compile and disseminate information regarding natural products, promote gathering and consumption of natural products, they organise projects, they assist members in building networks, they organise development projects. It is interesting to notice that in promoting berries and other natural product the association uses, directly in the name, the adjective **Artic** (Arktiset). The adjective Arctic directly reminds to the Northern zones of the country, and it is strictly connected to a pure environment, with uncontaminated spaces and clean air. It could have appeal on the consumers.

“Arctic” will be included

¹² <http://www.metla.fi>

¹³ <http://www.oske.net>

The **Non-wood forest products theme group** is a working group approved by the Rural Policy Committee. This team of experts focuses on improving coordination and cooperation and promoting network in the field.

A large variety of berries and berry products are present on the Finnish market, from frozen berries, to berry beverages, to berry jams, to berries in powder, to cosmetics containing bioactives derived from berries.

Many of these products are sold with private labels. Many consumers are used to buy a product because of the loyalty they have toward that specific company, without taking care on any other labels.

The preference for a specific company will be included

3.2 Environmental performance labels in Finland

In addition to the EU Ecolabel, in the Finnish market products labelled with the Nordic Ecolabel are present. The Nordic Ecolabel is the official Ecolabel of the Nordic countries (Figure 7). It was established in 1989 by the Nordic Council of Ministers with the objective of providing an environmental labelling scheme that would contribute to a sustainable consumption. It is a voluntary ISO Type I label of products and services that evaluates the impact on the environment throughout the whole life cycle. Among other things, it guarantees that climate requirements are taken into account, and that GHG emissions are limited. It can be applied on 63 categories of products, but not on food. There are no labels on Finnish food packages that take into account several environmental impacts of the food product itself (Hartikainen et al., 2013). Nordic Ecolabel is applicable on cosmetic products.



Figure 7 The Swan, the official Nordic Ecolabel

A survey conducted on Finnish consumers revealed that more than 60% of the interviewed considered the variable “environmental responsibility” in food products as being very important (Rikkonen et al., 2012)(Figure 8). However, according to a Eurobarometer survey of 2009, 55% of the Finnish respondents believe that they know little or nothing about the environmental impacts of food (European Commission, 2009 as cited by Hartikainen et al., 2013).

EU Ecolabel and Nordic Ecolabel will be included

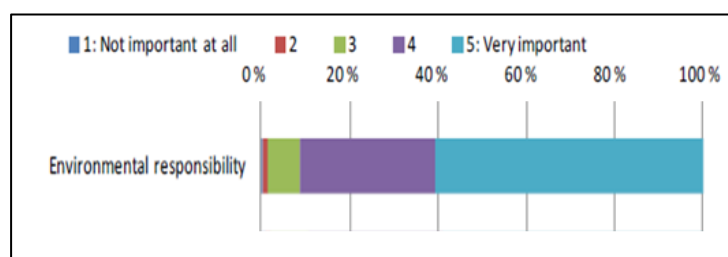


Figure 8 The subjective importance of environmental responsibility, according to consumers (Source: modified from Rikkonen et al., 2012).

The first carbon label in Finland appeared in 2008 and carbon labelling of food products has been expanding steadily in after 2009. At March 2013 more than 40 Finnish food products are carbon labelled (Hartikainen et al., 2013). The study of study of Hartikainen et al.(2013) conducted on Finnish

Carbon labels will be included

consumers showed that the term ‘product carbon footprint’ is familiar to many, but there is substantial misunderstanding of its meaning. Only 7% of the respondents linked ‘product carbon footprint’ to GHG connected with the product and other 5% of the respondents coupled it to climate change. There are positive attitudes towards carbon labels: 90% revealed that a carbon footprint would have at least a little impact on their purchasing decision, but it became meaningful only when many other purchasing criteria (such as price and taste) are satisfied.

3.2.1 FSC and PEFC

PEFC is the leading forest certification system in Finland, with about 95% of Finnish production forests certified under the system. FSC certification plays a minor role. It would be interesting to investigate whether consumers give a preference to berry products certified under these labels.



FSC and PEFC labels will be included

3.3 Organic in Finland

The EU legislation on organic farming is implemented by Statue No 846/2008, while the control system is entirely based on designated public inspection authorities. The Finnish Food Safety Authority Evira is responsible for the monitoring and it supervises manufacturers of organic food. Organic farms are under the supervision of the Centres for Economic Development, Transport and the Environment (ELY-centres), while Finnish Customs supervises organic products imported to Finland (an exception is the province of Åland, where the Åland Government oversees organic production)¹⁴(Evira, 2014¹⁵).

In addition to the EU Organic label, In Finland there are two national organic labels, the Ladybird label and the Luomu label (Table 3). Additionally, there are other organic labels such as the Demeter biodynamic label controlled by the Finnish Biodynamic association which follows standards set out by international Demeter standards.

Table 3 Finnish national organic labels

Name of the label	Description	Certification	Logo
Luomu Sun Sign	Denotes controlled organic production. The official label of the Finnish inspection authorities; owned by the Ministry of Agriculture and Forestry.	Conformity with Luomu Sun Sign's standard is verified by an independent organization (third party).	
Luomuliitto - The Ladybird label	It is granted to farmers, food processors and farm input manufacturers who produce organic products according to the standards of Luomuliitto. The standards require a certified quality control system and that at least 75 per cent of the ingredients of the	Conformity with Luomuliitto - The Ladybird label's standard is verified by an independent organization (third	

¹⁴ Other key institutions are Finnish Association for Organic Farming Luomuliitto(www.luomuliitto.fi/in-english/), Finnish Biodynamic Association (www.biodyn.fi), Organic Food Finland, (www.organic-finland.com), Pro Luomu, marketing support and promotion (www.proluomu.fi)

¹⁵ <http://www.evira.fi/portal/en/>

Source: Ecolabel index (2014)

Organic farmers in Finland receive support through different rural development measures. The Finnish Government launched the Organic Production Development Programme in May 2013, aiming at getting at least 20 % of the cultivated area farmed organically by the 2020. This objective has already been surpassed in the provinces of Åland, Kainuu and North Karelia. (IFOAM, 2014¹⁶)

At present, the Finnish organic sector in Finland enjoys a favourable climate in terms of market conditions and the public attitude (IFOAM, 2014¹⁶). In 2011 and 2012 the organic market grew very fast, by 46 % in 2011 and 24 % in 2012 (IFOAM, 2014¹⁶). According to Pro Luomu, the value of the Finnish organic market was EUR 202 million in 2012. In 2013, the economic crisis slowed down the growth. In 2013, the market share of organics was 1.6% (Ministry of Agriculture and Forestry, 2014).

According to the Ministry of Agriculture and Forestry (2014), a quarter of Finns buy organics weekly and appreciate purity, environmentally friendly production and good taste. The most frequent users live in Helsinki area and in families with small children. Quarter of Finns use organics seldom and appreciate purity and domestic production. They are mainly adults who live in the cities. About half of Finns buy organics only occasionally or not at all (Figure 9).

Attitude toward
"Organic" in
general (and the
preference for the
different labels)
will be
investigated

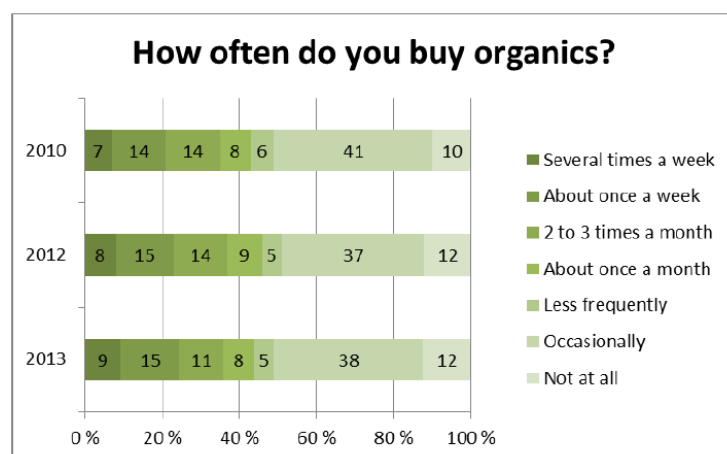


Figure 9 Finnish attitude in buying organic products (Source: Ministry of Agriculture and Forestry, 2014)

In 2013, there were 4 284 organic farms in total in Finland and the organically cultivated field area was 206 000 hectares. Organic fields cover 9.0 % of the total field area. It increased by 4 % compared with the previous year (Evira, 2014)¹⁵.

The preference
for "wild or
cultivated"
berries will be
investigated

In addition to the agricultural land, in Finland there are 9 million hectares of wild collection areas, where wild berries are collected. The majority is situated in Lapland. Finland has the world's largest non-agricultural organic area in Europe (Evira, 2014)¹⁵. If industrial fertilizers or herbicides have not been used in the past three years, the area can be

Attitude toward
"Organic" berry
products will be
investigated

¹⁶ <http://www.ifoam-eu.org/en/country-reports/finland>

used as the collecting area of organic wild food. Blueberry and lingonberry are the best sold organic wild berries. In 2013, were sold about 0.86 million kg and 0.76 million kg. The amount of organic cloudberry was less than 5 000 kg (Ministry of Agriculture and Forestry, 2013).

Obtaining the status of organic for forest area demands forest owner such activity. Most of them have not done this. This is the case with Anne Rauhamäki, coordinator in the Central Union of Agricultural Producers and Forest Owners (MTK)¹⁷, forest owner and an active consumer of organic products. She states that she does eat non-statuted organic labelled berries from her own forest with a good conscious. She is confident that the berries have already all the qualities of the organic-labelled berries, so there is no need of certification.

It would be interesting to understand whether young and educated consumers, supposedly often not strictly connected with forests and countryside, but leaving in urban areas, have the same perception toward organic berries coming from the forest.

The presence of connection “berries-forest-organic” will be investigated

3.4 Territorial marketing

The demand for locally produced food products has increased in Finland in recent years. A survey conducted on Finnish consumers revealed that more than 55% of the interviewed considered the variable “local market presence” as being very important (Rikkonen et al., 2012).

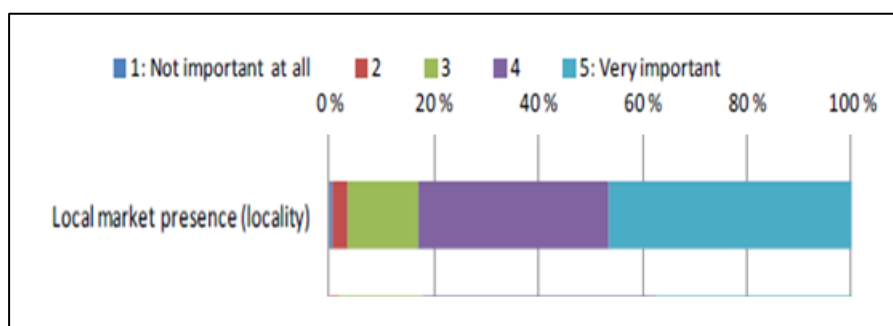


Figure 10 The subjective importance of local market presence, according to consumers (Source: modified from Rikkonen et al. 2012).



3.4.1 EU Geographical indications and traditional specialties

In Finland there are totally ten registered products under the PDI, TSG and PGI schemes. The number is relatively low, if compared with other countries (e.g Italy counts 297 registered products). EU schemes seems not having particular appeal in the Finnish market. There are not raw berries registered under the EU schemes, but on the ten registered products, two contain berries (Table 4).

Even if EU schemes are not widely present in Finland, they will be included

¹⁷ <http://www.mtk.fi>

Table 4 EU Geographical indications and traditional specialties made with berries in Finland

Scheme	Name of product	Description of the product	Berries contained	Date of registration	Producer group	Image
PGI	Kainuun rönttönen	A small (about the size of the palm of a hand) open faced pie consisting of a crust made of barley or rye dough, filled with a sweetened mashed potato and berry (most often Lingonberry) filling.	Berries in particular lingonberry	12/11/2008	Kainuun leipomoliikkeen harjoittajary	
TSG	Sahti	Sahti is a traditional beer from Finland made from a variety of grains, malted and unmalted, including barley, rye, wheat, and oats; sometimes bread made from these grains is fermented instead of malt itself. Traditionally the beer is flavored with juniper berries in addition	Juniperus berries	09/02/2002	Suomen Sahtiseura ry	

3.4.2 Made in Finland

A number of labels connected to the “Made in Finland” are present on the market. The **Uniquely Finnish (Maakuntien parhaat)**¹⁸ label (Figure 11) is a national quality label for small entrepreneurs. ProAgria Association of Rural Advisory Centres grants the label to qualified foodstuff, handicraft and rural tourism companies based on applications. The criteria of the Uniquely Finnish companies are having an approved quality management system, assessed at least every three years, a high degree of domestic origin (at least 80 per cent of the cost of the product (including work and materials) and the most important ingredients of foodstuffs and meals provided by service



Figure 11 The Uniquely Finnish

¹⁸ <http://www.maakuntienparhaat.fi>

companies must be 100 per cent domestic. The product or service must be accepted by a panel of experts.

There are 9 companies which commercialize berries and berry products with the Uniquely Finnish label.

The **Hyvää Suomesta**¹⁹ label (Figure 13) is a designation of origin for Finnish packaged foods. The label may be used by food industry companies that manufacture their products in Finland using Finnish ingredients. It is owned and administered by Ruokatieto Yhdistys ry (Finfood - Finnish Food Information), an association whose membership includes companies that use the label. The label may be printed on the product package or package label of a food product that is manufactured and packaged in Finland and contains no less

than 75 per cent Finnish ingredients. The label is currently in use by some 260 food producers

The organization **Kotimaiset Kasvikset**²⁰ works for increasing the consumption of fruit and vegetables in Finland, from the current level of 350 grams per person to 500 grams (the figure includes berries). The other goal is to improve the quality of the products in the supply chain of fruit and vegetables. The logo may be voluntary applied on plant raw materials coming from Finland.

The **Avainlippu**²¹ is the association for the promotion of the Finnish work. The association governs symbols and online services working to promote Finnish work and advocates innovation and entrepreneurship.



Figure 13 The Hyvää Suomesta label



Figure 12 The Sirkkalehtilippu label



Figure 14 The Avainlippu label





¹⁹ <http://www.hyvaasuomesta.fi>

²⁰ <http://www.kasvikset.fi>

²¹ <http://www.avainlippu.fi>

In Table 5 the information are summarized.

Table 5 Finnish voluntary labels with made in Finland indication

Name of the Label	Domestic material	Work	Control	Logo
Hyvää Suomesta	The label may be printed on the product package or package label of a food product that is manufactured and packaged in Finland and contains no less than 75 per cent Finnish ingredients.	Up to 100% of domestic (as well as manufacturing and packing)	Audit every 3 years	
Avainlippu	No claim of the raw material being domestic	Made in Finland	No audit	
Kotimaiset Kasvikset Sirkkalehtilippu	Plant raw material domestic, processed products, other raw materials is not the criteria	Plant raw materials cultivated in Finland	Audit	
Maakuntien parhaat- Uniquely Finnish	The main raw material, 100% domestic. The degree of domestic product by at least 80% (and not just the raw material, also involved in the labor share)	At least 80 per cent of the cost of the product (including work and materials)	Audit every 3 years	

Alongside the labels, there are campaigns as the “**Food from Finland**”²² and **Fresh! from Finland**²³, which have section related to berries, aiming at promoting the idea that the Finnish food is good and pure. The message they give is “the genuine taste of Finnish food derives from our pure lakes, farmlands and forests. Berries and berry products are real health boosters and our berries are healthier than most”

Made in Finland labels will be included in the questionnaire

²² <http://www.foodfromfinland.com/>

²³ <http://www.freshfromfinland.com>

3.4.3 Example of regional/local branding

Some regions of Finland, more than others, are promoted with territorial branding. This is the case of Lapland, which is promoted with the message “pure and clear environment”, with the “Arctic” adjective and with the official logo “above the ordinary”. Berries can be advantaged by this kind of labelling. The preference in berries purchasing for a specific region will be investigated (Figure 15).

“From a specific region” preferences will be included in the questionnaire



Figure 15 An ensign in Rovaniemi

4 Future collaboration with host institution and foreseen publications/articles to result from the STSM

The collaboration with the Ruralia Institute is expected to continue during the data collection from the online questionnaire and the data analysis period.

The results of the research will be submitted for publication in a scientific journal.

5 Chronoprogram

Day	Week day	Activity
3	Monday	Venice-Helsinki flight
4	Tuesday	Helsinki- Seinäjoki train trip
5	Wednesday	Literature and websites analysis
6	Thursday	Literature and websites analysis
7	Friday	Literature and websites analysis
8	Saturday	
9	Sunday	
10	Monday	Literature and websites analysis
11	Tuesday	Literature and websites analysis
12	Wednesday	Seinäjoki -Rovaniemi train trip
13	Thursday	Interview with Katja Misikangas of Lapcream company; visit of natural products shop
14	Friday	Interview with Rainer Peltola at MTT
15	Saturday	Visit to organic forest in Narkaus
16	Sunday	Rovaniemi-Seinäjoki train trip
17	Monday	EU Novel Food research
18	Tuesday	EU Novel Food research
19	Wednesday	Preparation of the presentation for the seminar in Ähtäri
20	Thursday	Seminar in Ähtäri
21	Friday	Literature and websites analysis
22	Saturday	
23	Sunday	
24	Monday	Literature and websites analysis
25	Tuesday	Jukka Lähteenkorva interview at Foodwest, Seinäjoki
26	Wednesday	Finnish Nature-based Entrepreneurship Association interview; Questionnaire preparation
27	Thursday	Questionnaire preparation
28	Friday	Seinäjoki –Helsinki train trip
29	Saturday	
30	Sunday	
31	Monday	Helsinki-Venice flight

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10th of April 2014

CERTIFICATION

This is to confirm that **Giulia Corradini** from the University of Padova, Italy carried out her STSM related to the COST Action *FP1203 European non-wood forest products (NWFPs) network* at the University of Helsinki Ruralia Institute in Seinäjoki, Finland between March 4th, 2014 and March 28th 2014.

During the STSM Corradini focused on studying branding related to NWFP sector in Finland and prepared ideas and data collection to joint sub-group idea with Ruralia Institute for the COST Action mentioned above.

10th of April 2014 in Seinäjoki

Sami Kurki
director
University of Helsinki Ruralia Institute

Anne Matilainen
project manager
University of Helsinki Ruralia Institute

EU Novel Food Regulation and plants- the case of Italy

Sommario

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Purpose of the Erika project and of the research

The Commission considers foods and food ingredients that have not been used for human consumption to a significant degree in the EU before 15 May 1997 novel foods and novel food ingredients. They are therefore subjected to risk assessment and to long bureaucratic processes, which can affect the entrepreneurship in the sector. This is the case of Finland, where in many cases there is no official evidence of the use of some plants, which on the contrary for long time been used.

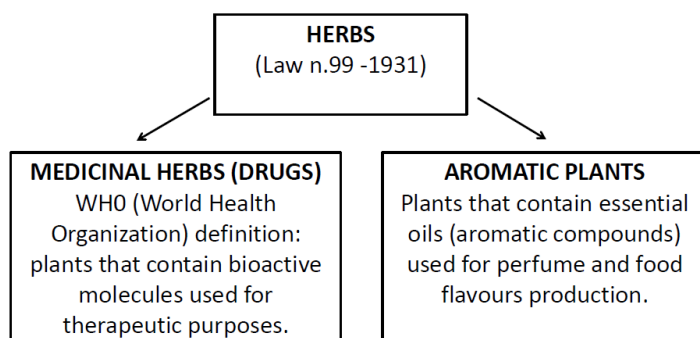
Erika Project aims at understanding the entrepreneurial effects of the Novel Food Regulation and instructions concerning it. In particular it investigates how edible plants are used in other European Union countries and how different EU-countries instruct and oversee the use of edible plants.

Purpose of the research has been investigating the Italian case study. In particular, for a list of herbs an analysis on their presence or not in the Italian legislation/official list has been conducted.

Herbs in Italy

In Italy medicinal and aromatic plants are called “official herbs”. The term derives from cultural and historical Italian tradition and the definition was for the first time used in the legislative context in the Law 99/1931 (Figure 1).

Figure 1 Official herbs in Italy



The Law 772/1932 lists the officinal plants which can be cultivated and commercialised. The Law “Aniasi” 1/1981 introduced two annexes: the first listing the plants which can be sold by pharmacists, the second the plants saleable also by others. This law is now superseded but the distinction is still based on the finality of the effect, distinguishing the products in:

- Products for a phytoterapic use, which are compared to medicines (regulated by Law 219/2006, which executed the Reg. 2001/83/CE and Reg. 2003/94/CE”;
- Products with physiologic effects, with healthy purposes, which are covered by food legislation (regulated by Reg. 178/2002/CE . (Ministero della Salute et al., 2013).

Another important law is Law 169/2012 “Disciplina dell’impiego negli integratori alimentari di sostanze e preparati vegetali” which defines vegetable substances and products admitted in the sector of food supplements and additives (Ministero della Salute et al., 2013).

At regional level there are other specifications:

- *Regione Val d’Aosta* – Legge Regionale 7 dicembre 2009, n.45 (Disposizioni per la tutela e la conservazione della flora alpina. Abrogazione della Legge Regionale 31 marzo 1977, n.17), Bollettino Ufficiale n.1 del 5 gennaio 2010.
- *Regione Piemonte* – Legge Regionale del 3 agosto 1993, n.38 (Norme relative alla coltivazione ed alla commercializzazione delle piante officinali peculiari della Regione Piemonte), Bollettino Ufficiale 11 Agosto 1993, n.32.
- *Regione Liguria* – Legge Regionale del 30 gennaio 1984, n.9 (Norme per la protezione della flora spontanea), Bollettino Ufficiale del 15 febbraio 1984, n.7.
- *Regione Friuli-Venezia Giulia* – Deliberazione del Presidente della Giunta n.0244 del 3 luglio 2001.

- *Provincia Autonoma di Trento* – Legge Provinciale 28 marzo 2003, n.4 (Sostegno dell’economia agricola, disciplina dell’agricoltura biologica e della contrassegnazione dei prodotti geneticamente modificati, art. 43 ter, che disciplina la coltivazione, la raccolta, la preparazione, la trasformazione, il confezionamento e il commercio di piante officinali coltivate in Trentino).
- *Regione Toscana* – Legge Regionale 6 aprile 2000, n.56 (Norme per la conservazione e la tutela degli habitat naturali e seminaturali, della flora e della fauna selvatiche – Modifiche alla legge regionale 23 gennaio 1998, n.7, Modifiche alla legge regionale 11 aprile 1995, n.49), Bollettino Ufficiale 17 aprile 2000, n.17.
- *Regione Campania* – Legge Regionale n.40 del 25 novembre 1994, (Tutela della flora endemica e rara), Bollettino Ufficiale del 29 novembre 1994, n.58.
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- *Regione Sardegna* – Legge Regionale 7 giugno 1989, n.31 (Norme per l’istituzione e la gestione dei parchi, delle riserve e dei monumenti naturali, nonché delle aree di particolare rilevanza naturalistica ed ambientale).
- *Regione Sicilia* – Legge Regionale 23 maggio 1994, n.9 (Norme per l’esercizio delle attività professionali erboristiche), Bollettino Ufficiale del 25 maggio 1994, n.25.

The actors involved in the cultivation, processing and trade are mainly associated in federation and association (Figure 2).

Figure 2 Main actors in the cultivation, processing and trade of herbs

MAIN ACTORS

CULTIVATION-TRASFORMATION-TRADE



**Italian Federation of
farmers who cultivate
medicinal herbs**

ASSOERBE

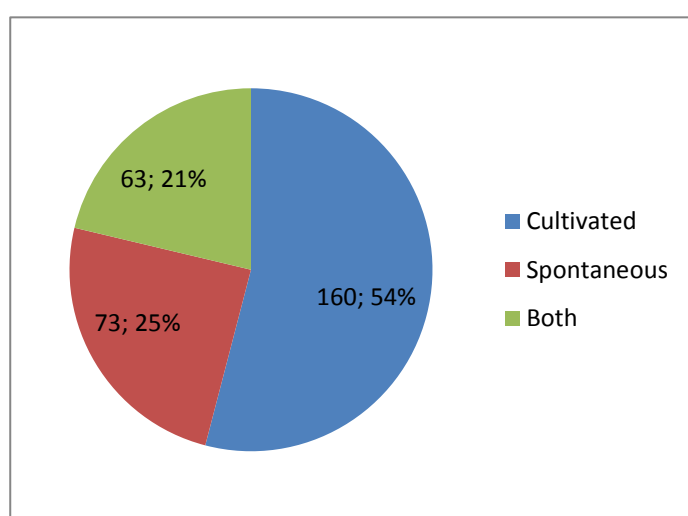
**Italian Association of
farmers, harvester,
processors, importers,
exporters of medicinal
herbs**

The list of herbs which are cultivated or can be cultivated in Italy is realized in collaboration with Italian Federation of farmers who cultivate medicinal herbs (Federazione Italiana Produttori Piante Officinali –

FIPPO)¹, Italian association which represents farmers, harvesters, processors, importer, exporters, representatives of foreign companies of herbs (ASSOERBE)² and Italian Society of applied sciences to medicinal plants and healthy products (Società Italiana Scienze applicate alle piante officinali e ai prodotti per la salute-SISTE)³. With the same associations the census of the main important herbs for the international market has been realized. (ISMEA-Osservatorio Economico delle Piante Officinali, 2013)

In Italy 296 different species from different countries are used as medicinal herbs. They are cultivated, spontaneous or both cultivated and spontaneous (Figure 3). Of these, 142 species (48%) are cultivated or can be cultivated in Italy. (ISMEA-Osservatorio Economico delle Piante Officinali, 2013).

Figure 3 Official herbs used in Italy



Source: data from ISMEA-Osservatorio Economico delle Piante Officinali, 2013

Novel Food Regulation in Italy

According to the Reg. 258/97, novel food must follow inside the following categories:

1. products or food ingredients with a new primary molecular structure, or voluntarily modified
2. products or food ingredients constituted or isolated from microorganisms, fungi, algae
3. products or food ingredients constituted by vegetables or isolated from vegetables and food ingredients isolated from animals
4. products or food ingredients subjected to a production process non commonly used, which lead to significant changes in the composition and in the structure of the products and food ingredients in terms of nutritive value, metabolism, and amount of undesirable substances

GMO products and food ingredients are excluded, because already disciplined by EC REG 1829/2003.

¹ <http://www.fippo.org>

² <http://www.assoerbe.eu/>

³ <http://www.sisteweb.it>

Some categories of novel foods are subjected to monitoring therefore have to be notified:

- Authorized aliments for the addition of phytosterols;
- aliments added with lycopene.

Responsible

Direzione generale per l'igiene e la sicurezza degli alimenti e la nutrizione

General Director: Dr. Silvio Borrello

Address: Viale Giorgio Ribotta, 5 - 00144 Roma

Phone: 0039 0659946616

E-mail: sicurezza.alimenti@sanita.it

Procedure⁴

The authorization has to be asked to the Health Minister (Ministero della salute). The Minister, according to a scientific evaluation, prepares the “initial evaluation report” to be sent to the European Commission. The European Commission transmits the report to the other member states, in order to collect observation. The final act is a decision of authorization (or rejection) published on the Official Gazette of EC. In case of positive first evaluation and no objections by the other Member States, the authorization can be done by the Member State which received the application.

Who can apply for

Operators in the food sector.

What is needed for the application

- Form “ Complete authorization as Novel Food” (Autorizzazione completa come novel food) filled ([doc](#));
- receipt of the payment to the Minister of Health:

How to present the request

- **Traditional mail**

Office: Direzione Generale per l'Igiene e la Sicurezza degli Alimenti e la Nutrizione (DGISAN) - Uff.04

Alimentazione particolare ed erboristeria ex DGSAN

Address: Viale G. Ribotta, 5 00144 ROMA

- **Hand delivery**

Address: Viale Giorgio Ribotta, 5 00144 Roma

How long is the procedure?

4

90 Days

How much does it cost?

Euro € 3098,74

Payments system

- **Bank Transfer**

Recipient: Tesoreria Provinciale dello Stato - Viterbo

IBAN: IT 32 Y 07601 032 000000 11281011

Reason: Richiesta autorizzazione completa come novel food e nome del prodotto

Other instruction: swift/bic BPP II TRR

- **Mail form**

Number Current account: 11281011

Recipient: Tesoreria Provinciale dello Stato - Viterbo

Reason: Richiesta autorizzazione completa come novel food e nome del prodotto

How the result is communicated

No communication of the result

Where the result is published

Official Gazette

Office responsible for the procedure

Direzione Generale per l'Igiene e la Sicurezza degli Alimenti e la Nutrizione (DGISAN)

Uff.04 Alimentazione particolare ed erboristeria ex DGSAN.

Substantial equivalence procedure

In some cases the procedure is simplified and it consists in the recognition of the “substantial equivalence” of the product already authorized. It can be asked for the categories already authorized as novel food and for attesting the equivalence of a novel food with a traditional food present on the market ([Substantial equivalence procedure](#) (in Italian)).

Novel food: an issue in Italy?

There is a limited number of articles related to Novel Food as an issue which can affect entrepreneurship in Italy. Some of the articles founded refer to the food from the chemistry and medicinal point of view. One article and one book, which are for sale, are specifically targeting the problem.

A number of seminars and conferences on the specific were held in different Italian cities.

A telephonic interview with Dr. Valeria Dusolina Di Giorgi Gerevini, Director Pharmacist of the Health Minister, General Executive Office for the Safety of Food and of Nutrition, reveals that the Minister received a very limited number of applications. Dr. Di Giorgi Gerevini says that in her opinion the **Novel Food regulation has not a negative impact on the Italian entrepreneurship, because in Italy there is a list of plants allowed for edible uses and generally all the products produced and commercialised in Italy contain only that specific plants**. She refers that the same happens at least in Spain and in France.

List of plants and herbs investigated

Here below the results of the analysis on the given list of plants. Almost all the plants are present in the Italian legislation/official list, **revealing that they have been used for human consumption to a significant degree in the EU before 15 May 1997**. In the **Italian case seems that Novel Food Regulation does not affect the edible plant sector**. The plants are listed in the Annex I of the Decreto 09 luglio 2012 Disciplina dell'impiego negli integratori alimentari di sostanze e preparati vegetali. (12A07895) (G.U. Serie Generale , n. 169 del 21 luglio 2012)".

Table 1 Plants investigated

Scientific name	Common Name	Habitat	Area of production	Cultivated/spontaneous	Use	Parts used	Commercial parts	Annual use (kg)	Mean annual Value (euro/kg)	Value (euro)
<i>Achillea millefolium</i>	Achillea millefolium	Eurasia	East Europe	Cultivated	food, liquors, supplements, cosmetics, medicinal, animal feed	aerial part, flowers, extracts	aerial part with flowers	30.000	2,34	70.200
<i>Aegopodium podagraria</i>					Herba: articulation functionality. Regularity of intestinal transit del transito intestinale. Drainage of body liquids	herba				
<i>Alchemilla alpina</i>					herba: regularity of intestinal transit. gainst Mestrual pain. Throat wellbeing.	herba				

<i>Angelica archangelica</i>	Angelic a	Euro pe	Belgium, Germany	Cultivated	Cosmetic, liquors, food, supplements, animal feed	Roots, seeds, oil, extracts	Roots	60.000	8,45	507.000
<i>Betula nana</i>		Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
<i>Betula pendula</i>					leaves: Drainage of body liquids. Functionality of urinary tract. Body depurative	cortex, folium, flores (amenti) gemma, semen, lymph , resina				
<i>Betula pubescens</i>					leaves: Drainage of body liquids. Functionality of urinary tract. Body depurative	folium, flores (amenti), gemma, lymph				
<i>Calluna vulgaris</i>					herba c. floribus: Drainage of body liquids and functionality of urinary tracts.	cauliculi (young sprout), flos, gemma, herba c. floribus, summitas				
<i>Carum carvi</i>	Carvi	Euras ia	Northern Europe	Cultivated	Supplements, food, flavours, liquors, cosmetics	Fruits, oil	Fruit	62.000	2,15	134.160

<i>Epilobium angustifolium</i> L.					herba: Regularity of intestinal tract. Functionality of the digestive tract. Prostate functionality.	Herba					
<i>Chamaerion angustifolium</i>		Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
<i>Equisetum arvense</i>					herba: Drainage of body liquids. Functionality of urinary tract. Tropism of the connective tissue. Wellbeing of nails and hair	gemma, herba					
<i>Filipendula ulmaria</i> (L.) Maxim	Spirea olmaria	Europe	Balcans, Poland, Hungary	Cultivated/spontaneous	Food, supplements, flavours	Flowers, aerial part, extracts	Aerial part	42.000	1,56	65.520	
<i>Fragaria vesca</i>	Fragola	Eurasia	Balcans, Hungary	Cultivated	food, integrators, flavours, cosmetics	Fruits, leave	Leave??	4.800	2,6	12.480	
<i>Juniperus communis</i>	Ginepro	Eurasia	Balcans, Italy	Cultivated/spontaneous	Food, supplements, flavours, liquors, cosmetics, medicine, animal feed	Fruits, wood, oil, extracts	Fruit	180.000	1,95	351.000	
<i>Matricaria chamomilla</i>	Camomilla	Europe	Cosmopolitan	Cultivated	Food, supplements, cosmetics, flavours, animal feeds	Flower, aerial part, oil, extracts	Flower	426.000	4,55	1.938.300	
<i>Oxyria digyna</i>		Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
<i>Picea</i>		not	not used	not used	not used	not used	not used	not used	not used	not used	not used

abies	used									
Pinus sylvestris					cortex: Antioxidant folium, gemma, semen, aetheroleum: nose and throat wellbeing. Balsamic effect	cortex, folium, gemma, semen, aetheroleum				
Rubus arcticus		Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
Ribes nigrum	Ribes nero	Euro pe	East Europe	Cultivated	supplements, cosmetics, medicine, food, flavours, animal feed	Leave, fruit, oil, extracts	Leave/fru it	12.000/3.600	3,9/2,99	46.800/10.764
Rubus idaeus	Lampon e	Euras ia	East Europe	Cultivated/spontaneous	supplements, cosmetics, medicines, food, flavours, animal feeds	Leave, fruit, extracts	Leave	2.640	1,3	3.432
Rumex acetosa L.					folium: Drainage of body liquids. Recostitutive action. radix: Regularity of intestinal transit.	folium, herba, radix				
Rumex acetosella L.					folium: Drainage of body liquids. Fluidity of bronchus secretion.	folium, herba, radix				
Sorbus aucuparia					fructus: restorative. Drainage of body liquids corporei. Control of gastric acidity semen: Regularity of intestinal transit	fructus, semen				

<i>Taraxacum officinale</i>	Tarassaco	Europe	Balcans, Poland, Hungary	Cultivated	food, flavours, cosmetics, supplements, medicine, animal feed	Aerial part, roots, leave, extracts	Roots/leaves	72000/60.000	7,15/2,86	514800/171.600
<i>Trifolium pratense</i>	Trifoglio	Europe	Balcans	Cultivated	food, flavours, cosmetics, supplements, animal feed	Flower, aerial part, oil, extracts	Aerial flower part	1.080	8,06	8,705
<i>Trifolium repens</i>		Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used
<i>Vaccinium myrtillus</i>	Mirtillo nero	Europe	Notrh Europe	Cultivated/spontaneous	Food, flavours, comedices, smetics, supplements, colorant	Leave, fruit	Fruit	3.614.400	4,16	15.035.904

Novel Food applications

In the table below the Italian applications for Novel Food and for substantial equivalence are listed.

Table 2 Applications for authorisation and their status pdf Updated 25-06-2012⁵

N°	Applicant	Description of Food and Food Ingredient	Initial assesment carried out by	Application date	Status
1	Bioresco Ltd. Bundesstr. 29 CH – 4045 Basel	Gamma-Cyclodextrin	Istituto Superiore di Sanità (IT)	10 April 2001	Withdrawn 5 May 2012

⁵ http://ec.europa.eu/food/food/biotechnology/novelfood/index_en.htm

	On behalf of Wacker Chemie				
2	Myrisana Via Livenza 1 I – 36015 Vicenza	Cetyl Myristoleate	Ministerio della Salute, Dipartimento Sanità Pubblica Veterinaria, Nutrizione e Sicurezza degli Alimenti (I)	24 March 2005	Withdrawn 18 December 2006
3	Myrisana Via Livenza, 1 I – 36015 Schio	Cis-9-cetyl myristoleate	Commissione Unica per la Dietetica e la Nutrizione (I)	25 June 2007	
4	Sigma-tau Industrie Farmaceutiche Riunite S.p.A. Viale Shakespeare, 47 I – 00144 Roma	Glicine propionyl L-Carnitine hydrochloride	Commissione Unita Dietetica e Nutrizione (I)	2 March 2009	

Substantial equivalence

Table 3 Notifications of novel foods, updated 29-04-2013 (substantial equivalence). NOTIFICATIONS PURSUANT TO ARTICLE 5 OF REGULATION (EC) N° 258/97 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL⁶

N°	Applicant	Description of the food and the food equivalence	Scientific evidence	Notification	Transmission to member state
1	Granarolo S.p.a. Via Cadrina, 272 I – 40127 Bologna	Fermented milk (yoghurt) type products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterol esters; a container of beverages will not contain more than	The phytosterol ingredient is the one that was notified by Cognis	26 July 2006	31 July 2006

⁶ http://ec.europa.eu/food/food/biotechnology/novelfood/index_en.htm

		3 g of added phytosterol esters			
2	Molino Vigevano srl Via Matteotti, 10 I – 27029 Vigevano	Rye bread with added phytosterols and/or phytosterol esters a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterol esters; a container of beverages will not contain more than 3 g of added phytosterol esters	The phytosterols are provided by Cognis	28 November 2006	8 February 2007
3	Nutrition & Santé Italia S.p.A. Soggetta a direzione e coordinamento di Sanutri AG Lgo Umberto Boccioni 1 I – 21040 Origgio (VA)	Beverages based on fermented milk with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols; a container of beverages will not contain more than 3 g of added phytosterols	The phytosterols are provided by Cognis	12 February 2007	15 March 2007
4	Bofrost Distribuzione Italia S.p.a. Via Clauzetto, 4 I – 33078 San Vito al Tagliamento (PN)	Beverages based on skimmed milk with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols; a container of beverages will not contain more than 3 g of added phytosterols	The phytosterols are provided by Cognis	17 April 2007	7 May 2007
5	Varvello Pharma Nutrition s.r.l. Piazza Castello 2 I – 20121 Milano	rye bread with flour containing ≥ 50 % rye and ≤ 30 % wheat; and with ≤ 4 % sugar but no fat added with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per	The phytosterols are provided by Cognis	26 May 2009	20 July 2009

		day) of added phytosterols			
6	ABAFOODS s.r.l. Via Cà Mignola Nuova, 1775 I-45021 Badia Polesine (Rovigo)	Soy drinks with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3 g of added phytosterols/phytostanols.	The phytosterol ingredient is the one that was notified by Cargill	3 August 2006	7 September 2006
7	Caseificio Pinzolo Fivà Rovereto S.c.r.l. Via A. Degasperi 12/A I 38075 Favé (Trento)	Yogurt type products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols a container of beverages will not contain more than 3 g of added phytosterols	The phytosterols are provided by Forbes MediTech	3 March 2008	18 March 2008
8	Granarolo S.p.a. Via Cadriano, 27/2 I – 40127 Bologna	Fermented milk (yoghurt) type products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3 g of phytosterols/phytostanols	The phytosterols are provided by the company Triple Crown and the FSA9 (UK) has delivered an opinion that the phytosterols are substantially equivalent “Opinion on the substantial equivalence of a free phytosterol ingredient”	5 August 2005	16 August 2005

9	Molino Vigevano S.r.l. Via Grocco 917/919 27036 Mortara (PV) Italy	rye bread with flour containing ≥ 50 % rye (wholemeal rye flour, whole or cracked rye kernels and rye flakes) \leq 30 % wheat and with ≤ 4 % sugar but no fat added with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols	The phytosterols are provided by VitaeCaps	15 July 2011	11 August 2011
10	Latteria Sociale Merano Via Cava, 5 I – 39012 Merano	Yellow fat spreads as defined by Council Regulation (EC) No. 2991/94, excluding cooking and frying fats and spreads based on butter or other animal fat; milk type and fermented milk type products; yoghurt type products; cheese type products and soya drinks with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3g g of added phytosterols/phytostanols	The phytosterols are provided by PrimaPharm	13 March 2006	27 April 2006
11	trentinalatte S.P.A. Via 4 Novembre, 63 I – 38030 Roverè della Luna	Yellow fat spreads as defined by Council Regulation (EC) No. 2991/94, excluding cooking and frying fats and spreads based on butter or other animal fat; milk type and fermented milk type products; yoghurt type products; cheese type products and soya drinks with added phytosterols a portion will not contain more than 3	The phytosterols are provided by PrimaPharm	3 May 2006	24 May 2006

		g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3g g of added phytosterols/phytostanols			
12	Centrale del latte di Vicenza Contra Carpagnon 11 I-36100 Vicenza	Yoghurt based products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols; a container of beverages will not contain more than 3 g of added phytosterols	The phytosterol ingredient is the one that was notified by Inpharma	1 August 2006	6 September 2006
13	Consorzio Produttori Latte di Trento e Borgo Scarl Via Campotrentino, 9 I-38100 Trent	Fermented milk type products and yoghurt type products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per	The phytosterol ingredient is the one that was notified by Inpharma	30 August 2006	15 September 2006
14	Stuffer S.p.A. Via Copernico 2 I-39100 Bolzano	Milk type products with added phytosterols a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3 g of added phytosterols/phytostanols	The phytosterols are the same as authorised by Commission Decision 2004/333/EC	6 September 2006	15 September 2006
15	Milchhof Meran Schotterwerkstr. 5 I – 39012 Meran	Yellow fat spreads as defined by Council Regulation (EC) No. 2991/94, excluding cooking and frying fats and	The phytosterols are provided by Cargil	10 November 2010	26 November 2010

		<p>spreads based on butter or other animal fat; milk type products such as skimmed and semi skimmed milk type products, possibly with the addition of fruits and/or cereals, fermented milk type products, such as yoghurt and cheese type products (fat content ≤ 12 g per 100g) where the milk fat and or protein has been fully or partly replaced by vegetable fat or protein; milk based fruit drinks; with added phytosterol esters a portion will not contain more than 3 g (in case of one portion per day) or more than 1 g (in case of 3 portions per day) of added phytosterols/phytostanols; a container of beverages will not contain more than 3 g of added phytosterols/phytostanols</p>			
16	<p>FORLIVE srl Via Ravenna, 456 I – 47100 Forli (FC)</p>	<p>Noni juice (juice of the fruits of <i>Morinda citrifolia</i>)</p>	Opinion by DSPVNSA	4 January 2007	31 January 2007
17	<p>Istituto Pirri srl Via Cavour 7 I – 20052 Monza</p>	<p>Noni juice (juice of the fruits of <i>Morinda citrifolia</i>)</p>	Opinion by DSPVNSA	21 December 2006	31 January 2007
18	<p>EFIT Srl Via Bramante 41 I – 05100 Terni</p>	<p>Argan oil</p>	<p>The DGCCRF14 (F) confirmed that the previously issued opinion by AFSSA3 (see No 13) was also applicable to the Argan oil placed on the</p>	11 August 2008	11 September 2008

			market by the company EFIT Sr		
19	Baobab Fruit Company S.a.r.l. Via A. Mondadori 15 I – 46025 Poggio Rusco (MN)	Baobab dried fruit pulp	CUDN Substantial equivalence of the Baobab (<i>Adansonia digitata</i>) dried fruit pulp	17 August 2009	17 September 2009
20	Perfetti van Melle S.P.A. Via XXV Aprile 7 I – 20020 Linate (MI) Italy	Magnolia bark extract	CUDN (I) Opinion on the substantial equivalence of Magnolia bark extract supercritical carbon dioxide extract considered under Article 3 (4) of the Novel Food Regulation 258/97	2 August 2012	14 August 2012

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Legislation for herbs

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- Unione Europea. Regolamento (CE)1924/2006 del Parlamento europeo e del Consiglio, del 20 dicembre 2006, relativo alle indicazioni nutrizionali e sulla salute fornite sui prodotti alimentari. GUCE L404, 30 dicembre 2006.
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- Italia. Legge 6 gennaio 1931, n. 99. Disciplina della coltivazione, raccolta e commercio delle piante officinali. Gazzetta Ufficiale n. 41, 19 febbraio 1931.
- Italia. Ministero della Sanità. Direzione Generale del Servizio Farmaceutico. Prodotti a base di piante medicinali. Circolare "Aniasi" n. 1, 8 gennaio 1981.
- Italia. Decreto Legislativo 24 aprile 2006, n. 219 "Attuazione della direttiva 2001/83/CE (e successive direttive di modifica) relativa ad un codice comunitario concernente i medicinali per uso umano, nonché della direttiva 2003/94/CE. Gazzetta Ufficiale n. 142 , 21 giugno 2006, Supplemento Ordinario 153.
- Unione Europea. Direttiva 2001/83/CE del Consiglio del 6 novembre 2001, recante un codice comunitario relativo ai medicinali per uso umano. Gazzetta Ufficiale delle Comunità Europee L 311/67, 28 novembre 2002.
- Unione Europea. Direttiva 2002/46/CE del Parlamento Europeo e del Consiglio del 10 giugno 2002, per il ravvicinamento delle legislazioni degli stati membri relative agli integratori alimentari. Gazzetta Ufficiale delle Comunità Europee L183/51, 12 luglio 2002.
- Italia. Decreto legislativo 21 maggio 2004, n. 169. Attuazione della Direttiva 2002/46/CE relativa agli integratori alimentari. Gazzetta Ufficiale n. 164, 17 luglio 2004.
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- Unione Europea. Regolamento (CE)258/97 del Parlamento Europeo e del Consiglio del 27 gennaio 1997 sui nuovi prodotti e i nuovi ingredienti alimentari. Gazzetta Ufficiale delle Comunità Europee L 043, 14 febbraio 1997.
- Italia. Decreto Legislativo 27 gennaio 1992, n.111. Attuazione della direttiva 89/398/CEE concernente i prodotti alimentari

Novel food legislation

- Regolamento (CE) 258/97 sui nuovi prodotti e i nuovi ingredienti alimentari e successive modifiche:
 - Regolamento (CE) 1829/2003 relativo agli alimenti e ai mangimi geneticamente modificati
 - Regolamento (CE) 1882/2003 recante adeguamento alla decisione 1999/468/CE delle disposizioni relative ai comitati che assistono la Commissione nell'esercizio delle sue competenze di esecuzione previste negli atti soggetti alla procedura prevista all'articolo 251 del trattato CE (modifica l'art. 13)
 - Regolamento (CE) 1332/2009 relativo agli enzimi alimentari e che modifica la direttiva 83/417/CEE, il regolamento (CE) 1493/1999, la direttiva 2000/13/CE e il regolamento (CE) 258/97
- Regolamento (CE) 1852/2001 che stabilisce precise norme per rendere talune informazioni accessibili al pubblico e per la tutela delle informazioni presentate in virtù del regolamento (CE) 258/97
- Raccomandazione della Commissione del 29 luglio 1997 relativa agli aspetti scientifici delle informazioni a sostegno delle domande di autorizzazione all'immissione sul mercato di nuovi prodotti e nuovi ingredienti alimentari, della presentazione di queste informazioni e della preparazione delle relazioni di valutazione iniziale, in forza del regolamento (CE) n. 258/97 del Parlamento e del Consiglio (97/618/CE)



LUONNONTUOTTEET MATKAILU- JA HYVINVOINTIPALVELUISSA

TERVETULOA Luonnontuotteet matkailu- ja hyvinvointipalveluissa -seminaariin **torstaina 20.3. klo 13.00–16.00 Mesikämmeneen Ähtäriin!**

Seminaarissa tutustutaan luonnontuotteiden käyttöön matkailu- ja hyvinvointipalveluissa. Aihetta valottavat puheenvuoroissaan sekä alan yrittäjät että asiantuntijat. Tapaamisen tavoitteena on nostaa esille luonnontuotteiden tarjoamia mahdollisuuksia palveluissa. Seminaari edesauttaa eri alojen yrittäjien ja toimialojen välisen yhteistyön rakentumista.

Tilaisuuden kohderyhmänä ovat luonnontuotealan toimijoiden lisäksi hyvinvointi- tai matkailupalveluja tarjoavat yritykset sekä alan kehittäjät ja muut sektorin toiminnasta kiinnostuneet.

Seminaari on osa Luonnontuotealan innovaatioverkosto ja toimialan uudet mahdollisuudet (LT-INNO) -hanketta.

AJANKOHTA JA PAIKKA: Torstaina 20.3.2014 klo 13.00–16.15, Mesikämmen, Karhunkierros 149, Ähtäri, www.hotellimesikammen.fi

ILMOITTAUTUMINEN: Pyydämme ilmoittautumaan seminaariin **17.3.2014 mennessä** ja samalla ilmoittamaan mahdolliset erityisruokavaliot. Tilaisuus on maksuton. Ilmoittautumiset puhelimitse **050 382 3022** tai sähköpostitse **info@aitoluonto.fi**

OHJELMA

12.30 – 13.00	Saapuminen paikalle
13.00 – 13.10	Tervetulosanat , Juha Rutanen, LT-INNO -hanke
13.10 – 13.40	Luonnontuotteet Lapin palvelutarjonnassa Katja Misikangas, Lapland Naturals
13.40 – 14.00	Turve hyvinvointimatkailussa Heikki Ruha, Lehtopeat Oy
14.00 – 14.20	Luonnontuotteet ja ekosystemiikka palveluyrittäjän näkökulmasta Kirsti Järvensivu, Ekohoitola VitaRosa
14.20 – 14.50	Kahvi
14.50 – 15.30	Luonnontuotteiden käyttökulttuuri Italiassa Giulia Corradini, Padovan yliopisto, Italia
15.30 – 15.50	Luontoon tukeutuvat matkailun hyvinvointipalvelut Etelä-Pohjanmaalla Jaana Rintala, Seinäjoen Ammattikorkeakoulu Oy, MATKO 3 -hanke
15.50	Keskustelu ja tilaisuuden päättäminen

TERVETULOA!

LT-INNO



LISÄTIETOJA:
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Ähtäri, March 20th, 2014

Nature-based products in Italy: their usage and marketing

Giulia Corradini

Ph.D. student, TESAF Department, University of Padova



TESAF Dipartimento Scienze e Sistemi Agro-Forestali



Group of work and project

Prof. Davide Pettenella



Dr. Enrico Vidale



Dr. Riccardo Da Re



www.star-tree.eu

Multipurpose trees and non-wood forest products, a challenge and opportunity



TESAF Dipartimento Scienze e Sistemi Agro-Forestali



Short Term Scientific Missions (STSM) are aimed at supporting individual mobility, strengthening existing networks and fostering collaborations by allowing scientists to visit an institution in another Participating COST Country



Ruralia Institute



Anne Matilainen

Research on marketing and branding of NWFP, focusing on the use of organic/natural/arctic logos

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Outline

1. Some important nature-based products in Italy
2. NWFP marketing strategies
 - a) Mass products
 - b) Specialties
 - c) Complementary products&services
3. NWFP and territorial marketing

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1. Some important nature-based products in Italy

Chestnuts



- 780.000 ha
- Italy is one of the main producers and exporters of *Castanea sativa* Miller.
- 1° globally for value of exchanges
- 2 nd for volume of exchanges, after China
- Threats:
 - diseases
 - on the foreign market → the Chinese competitors
 - On the internal market → weaknesses in the production organization. Small enterprises in hilly and mountaneous regions and asiatic competitors

Source: Piano del settore castanicolo (2010-2013)

Mushrooms



- Strong tradition of picking and commerce of fresh and dried mushroom → legislation and rules since 1820 under Austro Hungarian domination



Mycophillic country!



A national legislation list with additional regional/province legislation and lists accounting for the local culinary preferences of the population.

Herbs



Herbs
(Law 99/1931)

MEDICINAL HERBS (DRUGS)

WHO: plants that contain bioactive molecules used for therapeutic purposes.

AROMATIC PLANTS

Plants that contain essential oils (aromatic compounds) used for perfume and food flavours production.

- 296 different species from different countries used as herbs
- 142 species (48%) are cultivated or can be cultivated in Italy

Source: ISMEA 2013, Ministero della salute et al. 2013

NAME - DRUG	USE (kg)	NAME - DRUG	UNIT PRICE (€/kg)
blueberry fruit	3.614.400	saffron stigmas	1.170,00
red grape seed	2.439.600	genepi male aerial part with flowers	58,5
ginkgo leaf	2.160.000	genepi female aerial part with flowers	58,5
Milk thistle fruit	1.920.000	Roman chamomile flower	33,8
fennel fruit	480.000	Echinacea angustifolia root	31,2
aerial part of Passiflora incarnata	432.000	mauve flowers	19,5
camomile flower	426.000	violet flower	15,6
onion bulb	360.000	pink pepper fruit	13,33
oregano leaves	360.000	escholia aerial part	13
rosemary leaf	351.600	chives aerial part	12,88
licorice root	348.000	grindella aerial part with flowers	12,55
Wormwood aerial part with flowers	300.000	and. pallida root	12,35
garlic bulb	240.000	bitter orange flower	11,7
coriander seed	240.000	gentian root	11,7
valerian root	240.000	Witch hazel leaf	10,4
anise fruit	216.000	lespedeza capitata aerial part	10,4
sweet clover aerial part with flowers	205.200	withania root	9,36
artichoke leaf	192.000	safflower flower	9,1
rhubarb root	184.800	wild garlic leaf	8,45
aloe juice	180.000	angelica root	8,45

Source: ISMEA 2013, Ministero della salute et al. 2013

2.NWFP Marketing strategies

It may be useful to refer to a distinctions among:

- mass products
- specialties
- complementary products and services

2a. Mass products



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Pine kernels



(from China, Korea, Russia, USA, ...)

22,6 €/kg (price in Italy: 100 €/kg)

Pine Nuts 1KG (Excellent Quality)-Cooking

Item condition: New
Time left: 2d 10h (20 Mar, 2014 23:19:59 GMT)
Quantity: 1 8 available / 2 sold

Price: £18.99

Buy it now

Add to basket

5 watchers

Add to Watch list

Add to collection

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The Telegraph

Cheap Chinese pine nut exports blamed for rare condition

Cheap Chinese exports of pine nuts have been blamed for a rare mouth condition that leaves a bitter aftertaste for weeks.



China supplies most of the world's pine nuts Photo: ALAMY

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Mass products – mass markets

→ in Italy, as in many Mediterranean rural areas, this is not a winning strategy for promoting sustainable local development, added value, employment, multifunctionality

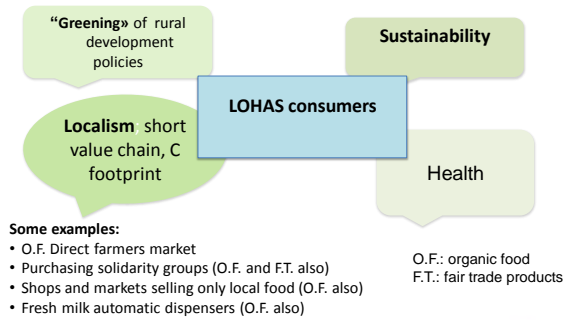
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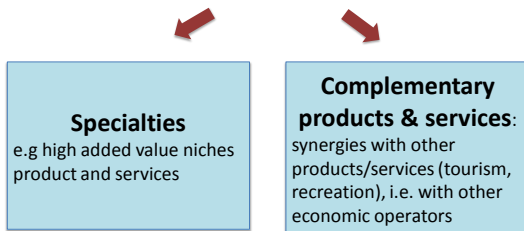
Alternative strategies based on strengths and constraints of the Med region (“competitive advantages”)

- A long tradition of multifunctional forest management systems
- No much space for very extensive forest investments
- A high quality landscape
- A territory rich of culture, traditions, biodiversity
- Presence of highly educated young people (→ entrepreneurial competences?)
- Good connections with the more advanced economies (demand for tourism)
- Rather positive external socio-economic conditions: innovation spreading, greening of the policies (CAP)

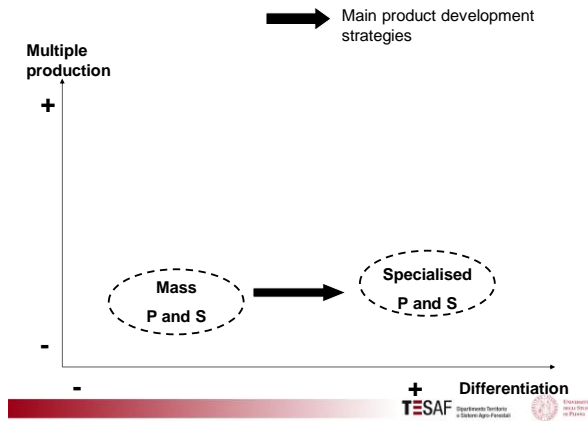
New trends in marketing of food and, in general, products and services from rural areas



2 alternative strategies



2a.Specialities



Specialized products and services

Typically products and services well differentiated, often available in relatively limited quantities (e.g. specialties like truffles) for a target market.

Which marketing mix?

- 4 Ps**
- **Products:** quality assurance, certification, packaging, links with a territory or/and a local tradition
 - Place: direct sales
 - Price: selling systems
 - **Promotion:** local association, e-marketing
- 2P**
- Political power
 - Public support/participation

... getting back to the pine kernel case...

specialities: organic-certified kernel (or from a protected area)

Differentiation: certified chestnuts

Certification under EU regulations

- Registration of Protected Designation of Origin (PDO) (Reg. 2081/92)
- Protected Geographical Indication (PGI)
- Traditional Speciality Guaranteed (TSG) (Reg. 2082/92)



Marron from Castel del Rio, Marron from Mugello, Chestnuts from Monte Amiata, Chestnuts from Montella, Chestnuts di Caprese di Michelangelo

Organic production (Reg. 2092/91, Reg. CE, 834/07 and 889/08 and at national level a D.M. 18354/09.)

Organic Chestnuts flour



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Chestnuts

Fairs, exhibitions, ...



... restoring old building ...

... research:

- diseases, graft and crown care
- recovering of old chestnut orchards
- harvesting techniques



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Truffles



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...museums..



...Sharing the experiences: a network of local municipalities (the Italian Associazione Nazionale Città del Castagno)



<http://www.cittadelcastagno.it/>


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New selling systems

- Direct sales: **"Pick-up your chestnuts"**: selling directly to the consumers the right to collect chestnut for a fixed rate or in relation to the weight of collected fruits
- e-marketing
 - B2B: fresh chestnuts, semi-finished products, ...
 - B2C: jams, dried nuts,...
- **"Adopt your own chestnut tree"**: chestnuts picking and organised picnics under the chestnut tree

<http://adottauncastagno.garfagnana.eu/>



Adopt a chestnut tree: 75 €/year

Adottando un castagno hai diritto a...

- ☒ 5 KG DI CASTAGNE FRESCHE (ritiro diretto presso l'Agriturismo Cerasa in occasione della merenda o nei giorni immediatamente successivi presso lo IAT Garfagnana, per tutti coloro che non avranno ritirato le castagne fresche nella spedizione dei prodotti essiccati sarà aggiunto 1 ulteriore KG di fiamme di nocciu DOP)
- ☒ 1/2 KG DI CASTAGNE ESSICCATE
- ☒ 2 KG DI FARINA DOLCE (fiamme di nocciu)
- ☒ 1 BUONO SCONTO con validità annuale del 10% sul pernottamento per n. 2 persone presso le strutture ricettive aderenti all'iniziativa (esclusi i mesi di Luglio e Agosto). L'elenco completo delle strutture è consultabile sul sito di Adotta un castagno
- ☒ 1 BUONO SCONTO del 10% sull'acquisto dei prodotti dell'Associazione Castagnicoltori presso i punti vendita aderenti
- ☒ 1 BUONO SCONTO del 10% sul menu degustazione con piatti tipici a base di fiamme di castagne valido per due persone nei ristoranti e agriturismo che aderiscono all'iniziativa. L'elenco completo delle strutture è consultabile sul sito di Adotta un castagno

INVITO PER DUE PERSONE alla Merenda in Cerasa organizzata dall'Unione Comuni Garfagnana a metà Ottobre di ogni anno per la raccolta libera e la consegna delle

You help the recovery of the wood and the cultural and traditional territory and panorama

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Novelty: Product development



Dried soft chestnut



Chestnuts liquor

Package for making the traditional *castagnaccio* cake (based on chestnut flour, pine seeds, raisins)



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Specialized products and services

- good income opportunities for a single enterprise
- (= they give the possibility of *premium prices*)

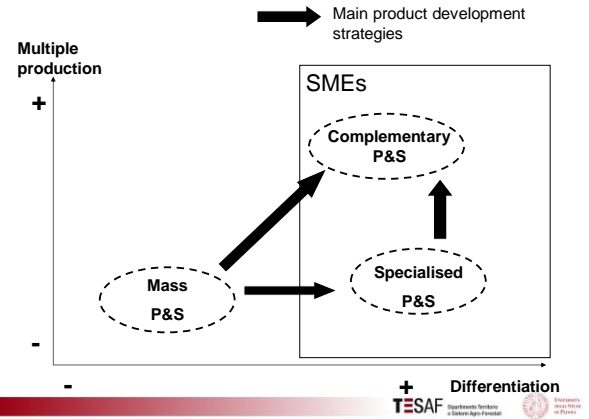
Sometimes good links with a local natural resources, but often:

- seasonality
- no relevant impacts on the local economy
- specialized use of the forest resources (limited multi-functionality)

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2c.Complementary products and services



Complementary products and services

= those specialized NWFP&S that can be sold and used in strict association with other, due to the synergies deriving from their conjoint marketing.

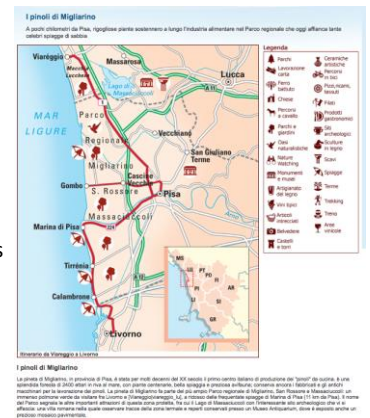


A crucial role of networks

“Network: a mode of organization that can be used by managers or entrepreneurs to position their firms in a stronger competitive stance”

... getting back to the pine kernel case...

complementary products & services: offering the kernel with a larger set of products and services



www.umbradioc.com

CONTRIBUTORS: ADRIANO DI NINO, ANTONIO ARNONE, GIUSEPPE CECILIA, GIOVANNI DE VITO, LUCIANO DI MARCO, MARIO DI MARCO, NICOLA DI MARCO, ROBERTO DI MARCO, SALVO DI MARCO, TIZIANA DI MARCO, UMBERTO DI MARCO, VALENTINA DI MARCO, VINCENZO DI MARCO.

THE TRUFFLE

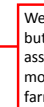


The Umbrian landscape is still to a very great extent unsplotted: today's visitor, at the threshold of the year 2000, can see it just as it appeared to the Romans or to the Etruscans; in this gentile countryside, much of which is hilly, the wood is an important element, rich in many fruits, among which the precious gift of the truffle stands out.

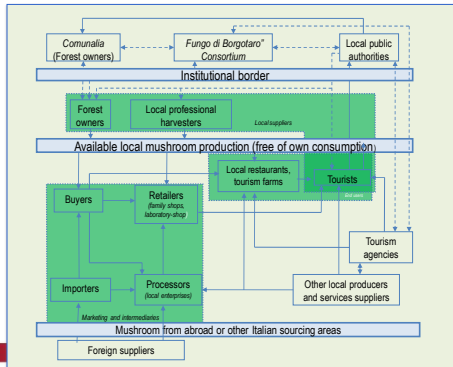
Umbria has an immense truffe-ground, produces various types of truffe: the highly prized black truffe, the "scorzone" summer truffe and the highly-perfumed white variety.

- * What is truffe
- * Umbrian truffe
- The Black
- Summer
- Scorzone
- The White
- * Production
- * Some History
- * Customs and Traditions
- * back

We sell the product,
but also the
associated history,
monuments, events,
farm tourism, ...



Network analysis: the example Borgotaro Network



The instruments of the links: the “road concept” (trail, path, tracks...)

A **linkage** is needed between the imago product (or the main product) and the associated products and services of the same area

The “**road concept**” (i.e. trails, roads, itineraries or pathways) is a very common tool for linking various products and services across a territory



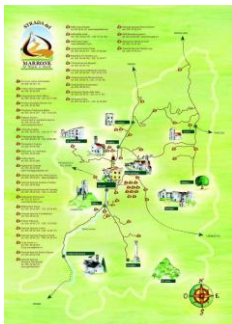
Cultural link
physical, organizational link

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Road, trail, path... the tools for connecting different economic actors

- Chestnuts/Marron road
- Truffle road
- Mushroom road
- Pine Kernel road
- etc



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Elements for a territorial marketing strategy based on forest resources

- *Genus loci* identification (competitive advantage and “brand” of the region-territory)
- NWFP as imago product to present a territory
 - Traditional local products
 - “Green” products
 - “Slow food” culture



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La nostra settimana ideale | programma 2014

NOTTE	POMERIGGIO	SERA
1. I sensi della natura e della città 10.00 - 12.00 MATERIALE: acqua, arancio Piemonte: Piemonte Piemonte: Piemonte	2. A walk in the forest with an herbalist 14.00 - 16.00 A walk in the forest with an herbalist A walk in the forest with an herbalist	3. Nordic walking in the forest 18.00 - 20.00 Nordic walking in the forest Nordic walking in the forest
4. A play in the forest with the mushroom 10.00 - 12.00 A play in the forest with the mushroom A play in the forest with the mushroom	5. A systemic approach: large unique events + weekly events 14.00 - 16.00 A systemic approach: large unique events + weekly events A systemic approach: large unique events + weekly events	6. -morning/afternoon/night -with/without payment -different clients (children, adults, retired person, ...) 18.00 - 20.00 -morning/afternoon/night -with/without payment -different clients (children, adults, retired person, ...) -morning/afternoon/night -with/without payment -different clients (children, adults, retired person, ...)

A walk in the forest with an herbalist

Nordic walking in the forest

A play in the forest with the mushroom

A systemic approach: large unique events + weekly events

-morning/afternoon/night -with/without payment -different clients (children, adults, retired person, ...)

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A question for you:

Something similar in Finland?

Berries (or other nature-based) as an imago product of the Finnish/Lappish/Arctic territory?



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