



**MARKET ACCESS SECRETARIAT  
Global Analysis Report**

***Health and Wellness Series***

**Rhodiola Rosea**  
in Packaged Food and Beverages

**November 2016**



**EXECUTIVE SUMMARY**

Rhodiola Rosea is one of the most popular plants to be used in Europe for health and wellness reasons. It is a multipurpose medical plant with adaptogenic activities that increases the body's resistance and ability to normalize its functions in response to different emotional, mental, and physical stressors (Phytochemistry Reviews, 2016). Due to these characteristics there are growing opportunities for Rhodiola Rosea to be used in new product innovation as there are expected growth in both the consumer health and health and wellness sectors.

The consumer health industry in Europe is expected to reach an estimated retail value of US\$57 billion in 2020 with a compound annual growth rate (CAGR) of 5% (from 2015 to 2020). Similar to a continued increase in health and wellness sector, where products with energy boost and wellbeing positioning is expected to grow by 20% and 18% from 2015 to 2020.

From June 2006 to June 2016, there were 61 new products launched globally that contained Rhodiola, 31 of which contained Rhodiola Rosea as an ingredient. In total, Europe accounted for 33% of the new product launches containing Rhodiola as an ingredient in the world.

In an effort to combat the risk of Rhodiola Rosea going extinct due to over harvesting for their valuable pharmacological substances, there are several strategies developed for the preservation of Rhodiola Rosea. These strategies include field cultivation and micropropagation with aim to restoring Rhodiola Rosea to its natural habitats.

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## INTRODUCTION

Rhodiola Rosea has gained substantive popularity worldwide and is one of the most popular plants to be used in Europe for health and wellness reasons. It is a multipurpose medical plant with adaptogenic activities that increases the body's resistance and ability to normalize its functions in response to different emotional, mental, and physical stressors (Phytochemistry Reviews, 2016). With the confirmation of its safety and its effectiveness as a psychostimulant, general strengthener, and anti-stressor agent, more than 46 companies world-wide are selling Rhodiola Rosea products. In addition to over 30 companies supplying them as food ingredients, alcoholic extracts, tablets, capsules or combination with other medical plants and/or honey. This steady growth in popularity and product distribution is occurring at a time when there are growing concerns for consumer health and health and wellness products in Europe (Phytochemistry Reviews, 2016).

## CONSUMER HEALTH

Global consumer health is a growing industry at a pace of 3%, almost 0.25 percentage point above from the previous year (Euromonitor International, 2015). In Europe, despite a recent decrease in growth, the consumer health industry is expected to reach an estimated retail value of US\$57 billion in 2020 with a compound annual growth rate (CAGR) of 5% (from 2015 to 2020). This trend confirms the importance of consumer health industry as a key driver that is influencing consumer behaviour (Euromonitor International, 2016).

Nutritional products such as sports nutrition, dietary supplements/vitamins, and herbal traditional products keep growing at the fastest of 9.9%, 3.7%, and 4.1%, while in Europe they are expected to grow at 9.7%, 5.7%, and 5.3%.

**Consumer Health Retail Sales by Categories in US\$ Billion and Period Growth (%),  
Current Prices - Fixed 2016 Rates**

Categories	2010	2011	2012	2013	2014	2015	CAGR*(%) 2010 - 2015
<b>Worldwide Consumer Health</b>	<b>184.1</b>	<b>201.9</b>	<b>207.8</b>	<b>213.8</b>	<b>218.6</b>	<b>210.6</b>	<b>2.7</b>
Over the Counter (OTC) Remedies	92	99.8	100.9	103.2	104.5	98.2	1.3
Sports Nutrition	6.6	7.5	8.3	9.2	10.1	10.6	9.9
Vitamins and Dietary Supplements	73.6	81.4	85.1	87.3	89.8	88.3	3.7
Weight Management	12	13.2	13.5	14.1	14.2	13.5	2.4
Herbal/Traditional Products	29.3	32.5	33.7	35.2	36.4	35.8	4.1
Allergy Care	4.3	4.8	5.0	5.1	5.2	5.0	3.1
Paediatric Consumer Health	7.3	8.1	8.4	8.7	9.0	8.7	3.6
<b>Europe Consumer Health</b>	<b>46.3</b>	<b>50.3</b>	<b>48.9</b>	<b>52.2</b>	<b>52.3</b>	<b>44.2</b>	<b>-2.0</b>
Over the Counter (OTC) Remedies	29.6	32.1	31.1	33.1	32.9	27.7	-2.3
Sports Nutrition	1.2	1.4	1.5	1.6	1.8	1.7	2.5
Vitamins and Dietary Supplements	12.9	14	13.6	14.5	14.6	12.3	-2.0
Weight Management	2.5	2.8	2.8	2.9	2.9	2.5	-2.2
Herbal/Traditional Products	7.4	8	7.7	8.1	8.1	6.8	-2.5
Allergy Care	0.9	1	1	1.1	1.1	0.9	-2.1
Paediatric Consumer Health	1.6	1.7	1.7	1.8	1.9	1.5	-2.5

Source: Euromonitor International, 2016



**Forecasted Consumer Health Retail Sales by Categories in US\$ Billion and Period Growth (%),  
Current Prices - Fixed 2016 Rates**

Categories	2015	2016	2017	2018	2019	2020	CAGR*(%) 2015-2020
<b>Worldwide Consumer Health</b>	<b>210.6</b>	<b>220.5</b>	<b>233.7</b>	<b>247.5</b>	<b>261.4</b>	<b>276.2</b>	<b>5.6</b>
Over the Counter (OTC) Remedies	98.2	101.4	106.4	111.6	116.9	122.6	4.5
Sports Nutrition	10.6	11.7	12.9	14.2	15.6	16.9	9.8
Vitamins and Dietary Supplements	88.3	93.2	99.3	105.5	111.8	118.4	6.0
Weight Management	13.5	14.2	15.1	16.1	17.1	18.2	6.2
Herbal/Traditional Products	35.8	37.9	40.7	43.5	46.5	49.6	6.7
Allergy Care	5	5.2	5.4	5.6	5.9	6.1	4.1
Paediatric Consumer Health	8.7	9.2	9.8	10.4	11	11.6	5.9
<b>Europe Consumer Health</b>	<b>44.2</b>	<b>45.5</b>	<b>48</b>	<b>50.7</b>	<b>53.5</b>	<b>56.8</b>	<b>5.1</b>
Over the Counter (OTC) Remedies	27.7	28.4	29.7	31.2	32.8	34.6	4.5
Sports Nutrition	1.7	1.9	2	2.3	2.5	2.7	9.7
Vitamins and Dietary Supplements	12.3	12.7	13.4	14.3	15.1	16.2	5.7
Weight Management	2.5	2.5	2.7	2.8	3	3.2	5.1
Herbal/Traditional Products	6.8	7.1	7.4	7.9	8.3	8.8	5.3
Allergy Care	0.9	1	1	1	1.2	1.2	5.9
Paediatric Consumer Health	1.5	1.7	1.7	1.8	1.9	2.1	7.0

Source: Euromonitor International, 2016

## HEALTH AND WELLNESS PRODUCTS

Health and wellness products are on a steady rise in Europe, where a growing number of consumers are increasingly focusing on healthier options. As a result of this, the health and wellness sector in Europe is seeing an increase in product position for energy boosting, general wellbeing, and weight management. This trend is expected to continue where products with energy boost and wellbeing position is expected to grow by 20% and 18% from 2015 to 2020. The evolution of clean eating trend may see the emergence of new ingredients that provide health benefits that are in the growing health and wellness prime product positioning categories (Euromonitor International, 2016).

**Health and Wellness by Prime Positioning in US\$ Billion and Period Growth (%),  
Current Prices - Fixed 2016 Rates**

Categories	2010	2011	2012	2013	2014	2015	CAGR* (%) 2010 - 2015
<b>Worldwide Health and Wellness by Positioning</b>	<b>495.3</b>	<b>545.8</b>	<b>566.2</b>	<b>589.0</b>	<b>608.5</b>	<b>596.9</b>	<b>3.8</b>
Brain Health and Memory	0.4	0.4	0.4	0.3	0.3	0.3	-5.6
Endurance	17.8	18.8	19.5	19.5	19.9	20.8	3.2
Energy Boosting	22.4	26.6	29.6	31.9	33.9	35.1	9.4
General Wellbeing	319.8	355.2	372.9	391.8	408.5	404.6	4.8
Weight Management	134.9	144.8	143.8	145.5	145.9	136.1	0.2
<b>Europe Health and Wellness by Positioning</b>	<b>151.9</b>	<b>165.1</b>	<b>160.5</b>	<b>169.9</b>	<b>171.5</b>	<b>341.4</b>	<b>17.6</b>
Brain Health and Memory	0	0	0	0	0	0.0	0.0
Endurance	2.2	2.4	2.2	2.1	2.1	4.2	13.8
Energy Boosting	5.4	6.4	6.6	7.2	7.5	14.7	22.2
General Wellbeing	95.3	103.4	100.8	107.3	108.3	215.6	17.7
Weight Management	49	52.9	50.9	53.3	53.6	106.0	16.9

Source: Euromonitor International, 2016



**Forecasted Health and Wellness by Prime Positioning in US\$ Billion and Period Growth (%),  
Current Prices - Fixed 2016 Rates**

Categories	2015	2016	2017	2018	2019	2020	CAGR* (%) 2015-2020
<b>Worldwide Health and Wellness by Prime Positioning</b>	<b>596.9</b>	<b>645.3</b>	<b>703.3</b>	<b>770.6</b>	<b>848.3</b>	<b>938.8</b>	<b>9</b>
Brain Health and Memory	0.3	0.3	0.3	0.3	0.3	0.3	0
Endurance	20.8	23.2	26.2	29.8	34.2	39.4	14
Energy Boosting	35.1	39.1	43.4	48.5	54.5	61.4	12
General Wellbeing	404.6	439.8	482.2	531.1	587.5	653.7	10
Weight Management	136.1	142.9	151.2	160.9	171.8	184.0	6
<b>Europe Health and Wellness by Prime Positioning</b>	<b>184.20</b>	<b>190.90</b>	<b>198.50</b>	<b>206.60</b>	<b>215.20</b>	<b>421.8</b>	<b>18</b>
Brain Health and Memory	0.0	0.0	0.0	0.0	0.0	0.0	0
Endurance	1.7	1.7	1.7	1.8	1.9	3.7	17
Energy Boosting	6.6	7.0	7.4	7.9	8.3	16.2	20
General Wellbeing	92.7	96.5	100.5	104.8	109.3	214.1	18
Weight Management	45.4	46.4	47.5	48.8	50.1	98.9	17

Source: Euromonitor International, 2016

## NEW PRODUCT ANALYSIS

This section analyses new product launches that contain Rhodiola as an ingredient, from June 2006 to June 2016. For the purpose of this analysis Rhodiola Rosea is classified under Rhodiola within the Mintel, Global New Product Database (GNPD). The children ingredients under Rhodiola are Rhodiola Crenulata Extract and Rhodiola Extract. This analysis provides an example of how Rhodiola is being used and marketed in a variety of food and drink products, as well as ideas for Rhodiola ingredient opportunities in Europe.

From June 2006 to June 2016, there were 61 new products launched globally that contained Rhodiola, 31 of which contained Rhodiola Rosea as an ingredient. The United States saw the most new product launches, with a total of 19 products. Most of the country's products were in the following subcategories: meal replacements and other drinks, energy drinks, and sports drinks. Taiwan launched the second largest, with the majority of its products launched in the energy drinks, meal replacements and other drinks, and tea category.

In Europe, 15 new products were launched that contained Rhodiola and 9 of which contained Rhodiola Rosea, of the total new products launched, Russia and the UK accounted for 40% of the new product launches. Most of which were in the energy drinks, tea, and coffee subcategories.



**New Products with Rhodiola by Top Five Markets and Category  
From June 2006 to June 2016**

Country	Category	Number of Products
<b>Total Products</b>		<b>37</b>
USA - 19	Sports & Energy Drinks	9
	Other Beverages	8
	Snacks	1
	Hot Beverages	1
Taiwan - 8	Sports & Energy Drinks	5
	Other Beverages	2
	Hot Beverages	1
China - 4	Meals & Meal Centers	1
	Hot Beverages	1
	Juice Drinks	1
	RTDs	1
Russia - 3	Hot Beverages	2
	Juice Drinks	1
UK - 3	Sports & Energy Drinks	2
	Hot Beverages	1

**New Products with Rhodiola by European Markets and Category,  
From June 2006 to June 2016**

Country	Category	Number of Products
<b>Total Products</b>		<b>15</b>
Russia	Hot Beverages	2
	Juice Drinks	1
UK	Sports & Energy Drinks	2
	Hot Beverages	1
Czech Republic	Hot Beverages	1
	Other Beverages	1
Italy	Sports & Energy Drinks	2
Spain	Sports & Energy Drinks	2
Finland	Hot Beverages	1
Sweden	Hot Beverages	1
Ukraine	Alcoholic Beverages	1

**New Products with Rhodiola in Europe by Subcategories,  
From June 2006 to June 2016**

Subcategory	Number of Products
Energy Drinks	6
Tea	3
Coffee	3
Flavoured Alcoholic Beverages	1
Meal Replacements & Other Drinks	1
Fruit/Flavoured Still Drinks	1

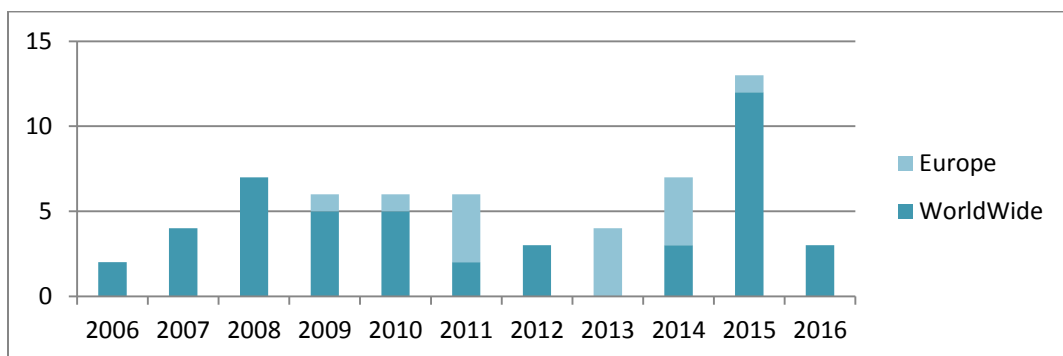
**Source for All:** Mintel Global New Product Database (GNPD), 2016



The market for products containing Rhodiola has been on a steady rise since 2012, with the highest launches of new products containing Rhodiola occurring in 2015 (with 10 product launches). In total, Europe accounted for 33% of the new product launches in the world.

From 2009 to 2015, there were at least 2 to 4 products launches each year with the exception of 2012 where there was no new products containing Rhodiola. Most of the new launches occurred in Russia, the UK, Czech Republic, Italy, Spain, and Finland.

**New Product Launches with Rhodiola from June 2006 to June 2016**



Source: Mintel Global New Product Database (GNPD), 2016

## PRODUCT CLAIMS

There are more products claiming to contain naturally-derived ingredients in their formulation as to reduce consumers concern about chemical toxicity (Euromonitor International, 2015). The application of wholesome ingredients derived from plants such as Rhodiola Rosea, and other natural sources are on a rise, especially in nutritional supplements and excipients. As a result, the top claims for products containing Rhodiola (including Rhodiola Rosea) are no additives/preservatives, other (functional), and antioxidant.

**New Products Containing Rhodiola by Top 15 Claims, From June 2006 to June 2016**

Claim	Number of Products
No Additives/Preservatives	8
Other (Functional)	7
Antioxidant	4
Brain & Nervous System (Functional)	4
Vitamin/Mineral Fortified	3
GMO-Free	3
Caffeine Free	3
Low/No/Reduced Sugar	2
Digestive (Functional)	2
Immune System (Functional)	2
Ethical - Environmentally Friendly Package	2
Vegan	2
Time/Speed	2
No Animal Ingredients	2
Slimming	2

Source: Mintel Global New Product Analysis (GNPD), 2016

Note: The total number of claims does not equal the total number of products, as a product may have more than one claim.



## COMPANIES

### New Product Launches containing Rhodiola, by Companies in Europe, From June 2006 to June 2016

Country	Company	Brand	Country of Manufacture	#
Russia	Art Life	Art Life Herbal Active	Not Specified	1
	NL Kontinent	Enerwood	Not Specified	1
	Stimul	Fito Guru	Not Specified	1
UK	Energizer Brands	Attitude	Not Specified	1
	HT Health Trade	Go&Fun by Erba Vita	Not Specified	1
	Neal's Yard Remedies	Neal's Yard Remedies	UK	1
Czech Republic	Drink Revolution	Mood Up	Not Specified	1
	Fitness Coffee	Fitness Coffee	Not Specified	1
Italy	Erba Vita	Go&Fun by Erba Vita	Not Specified	1
	Treffe	Yu Drink	Not Specified	1
Spain	Energizer Brands	Attitude	Not Specified	1
	Erba Vita	Go&Fun by Erba Vita	Not Specified	1
Finland	Four Sigma Foods	Four Sigma Foods	Not Specified	1
Sweden	gvm	Fitness Coffee	Italy	1
Ukraine	Skilur	Extreme Alco Energy	Not Specified	1

Source: Mintel Global New Product Analysis (GNPD), 2016

## PRODUCT PACKAGING

### New Product Launches containing Rhodiola Packaging by Company in Europe

Company	Package Type	Package Material	Packaging Manufacturer
Energizer Brands	Can	Metal aluminium	Rexam Beverage Can Europe and Asia (UK)
			Rexam AB (Sweden)
Art Life	Flexible sachet	Metallised Film	Not Specified
Drink Revolution	Flexible	Metallised Film	Not Specified
Fitness Coffee	Metallised Film	Not Specified	Not Specified
NL Kontinent	Glass plain	Not Specified	Not Specified
Stimul	Plastic PET	Not Specified	Not Specified
Treffe	Metal aluminium	Rexam Beverage Can Europe and Asia (UK)	Rexam Beverage Can Europe and Asia (UK)

Source: Mintel Global New Product Analysis (GNPD), 2016





## NEW PRODUCT EXAMPLES

### Intellect Drink

<b>Record ID:</b>	2586609
<b>Company:</b>	Stimul
<b>Brand:</b>	Fito Guru
<b>Category:</b>	Juice Drinks
<b>Sub-Category:</b>	Fruit/Flavoured Still Drinks
<b>Country:</b>	Russia
<b>Store Name:</b>	24 Chasa
<b>Store Type:</b>	Supermarket
<b>Store Address:</b>	Moskva 127642
<b>Date Published:</b>	Aug 2014
<b>Product source:</b>	Shopper
<b>Launch Type:</b>	New Variety/Range Extension
<b>Price in local currency:</b>	RUR128.00
<b>Price in US Dollars:</b>	3.28
<b>Price in Euros:</b>	2.45
<b>Bar Code:</b>	4680006470074

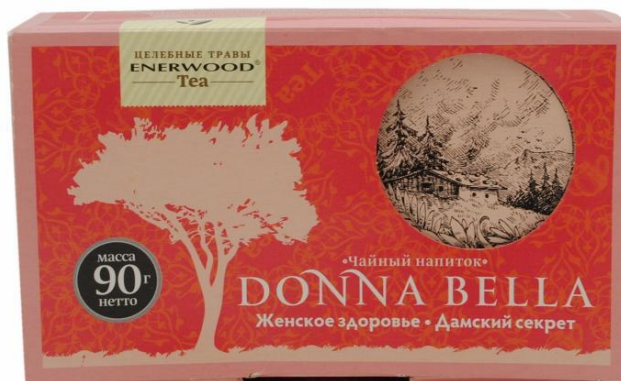


### **Product Description**

Fito Guru Sokosoderzhashchiy Napitok Intellect Granat Chernoplodnaya Ryabina i Melissa (Intellect Drink) is made with pomegranate and aronia juices and Melissa extract and is claimed to help improve blood supply to the brain, thus improving concentration and memory by up to 25%. This drink with clinically proven results contains pomegranate, aronia, Baikal skullcap extract, Melissa extract, Rhodiola rosea extract and Gotu kola extract that are rich in antioxidants and flavonoids and are known for improving blood supply to the brain, normalising blood pressure, improve microcirculation in blood vessels of brain, reduce stress and calm nervous system, improve oxygen and glucose absorption by brain cells which leads to improvement in concentration, memory and brain activity, while also helping make rational decisions, improve physical endurance and prevent premature ageing. The product is free from artificial colours, flavours and preservatives, and retails in a 0.28L pack.

### Donna Bella Tea Drink

<b>Record ID:</b>	2310082
<b>Company:</b>	NL Kontinent
<b>Brand:</b>	Enerwood
<b>Category:</b>	Hot Beverages
<b>Sub-Category:</b>	Tea
<b>Country:</b>	Russia
<b>Store Name:</b>	Utkonos
<b>Store Type:</b>	Supermarket
<b>Store Address:</b>	Moscow 117042
<b>Date Published:</b>	Feb 2014
<b>Product source:</b>	Shopper
<b>Launch Type:</b>	New Product
<b>Price in local currency:</b>	RUR200.00
<b>Price in US Dollars:</b>	5.35
<b>Price in Euros:</b>	4.00



### **Product Description**

Enerwood Chaynyy Napitok Donna Bella Zhenskoe Zdorov'ye (Donna Bella Tea Drink) is targeted at women and is made with herbs that are known to support health, immune system, relax and gently soothe, and is particularly indicated for women in menopause. The product retails in a 90g pack containing 30 x 3g tea bags.

Source for both: Mintel Global New Product Analysis (GNPD), 2016





### Natural Energy Drink

**Record ID:** 1604049  
**Company:** Energizer Brands  
**Brand:** Attitude  
**Category:** Sports & Energy Drinks  
**Sub-Category:** Energy Drinks  
**Country:** Spain  
**Store Name:** El Corte Inglés  
**Store Type:** Department Store  
**Store Address:** Barcelona 08036  
**Date Published:** Aug 2011  
**Product source:** Shopper  
**Launch Type:** New Product  
**Price in local currency:** €0.50  
**Price in US Dollars:** 0.69  
**Bar Code:** 5060170200124



### Product Description

Attitude Refresco con Extractos de Frutas y Plantas (Natural Energy Drink) is suitable for vegans and free from artificial colours, flavours and preservatives. This drink has been designed to give natural physical and mental energy, as well as vitality, without caffeine and taurine. This pasteurized product is retailed in a 250ml can.

### Ground Gourmet Coffee

**Record ID:** 1658351  
**Company:** Fitness Coffee  
**Brand:** Fitness Coffee  
**Category:** Hot Beverages  
**Sub-Category:** Coffee  
**Country:** Czech Republic  
**Store Name:** Vitaland  
**Store Type:** Natural/Health Food Store  
**Store Address:** Prague 14200  
**Date Published:** Oct 2011  
**Product source:** Shopper  
**Launch Type:** New Product  
**Price in local currency:** CZK195.00  
**Price in US Dollars:** 11.12  
**Price in Euros:** 7.91  
**Bar Code:** 8033229470028



### Product Description

Fitness Coffee Ground Gourmet Coffee helps boost energy levels and burn fat. It also supports the metabolism and aids in weight loss. This all-natural product is designed to replenish the body without changing the consumer's passion for coffee and to accelerate muscle regeneration. With over 16 of the healthiest and most beneficial ingredients, Fitness Coffee provides 3.5 times more antioxidants than green tea. The product with nutrient rich herbs and spices is retailed in a 250g pack.

**Source for both:** Mintel Global New Product Analysis (GNPD), 2016



## **CULTIVATION OF RHODIOLA ROSEA**

The natural habitats of *Rhodiola Rosea* are completely exhausted because of over harvesting of *Rhodiola Rosea* plants for their valuable pharmacological substances. As a result there is a high conservation value throughout its area of distribution (Phytochemistry Reviews, 2016). It is one of the priority species for conservation in many European countries where it is a protected species with endangered status in Great Britain, Czech Republic, Bosnia, and Herzegovina, while it is critically endangered in Bulgaria and vulnerable in Slovakia (where its collection is strictly forbidden). It is also included in the Red Data Book of several countries including Bulgaria, Ukraine, and Sweden. To overcome the risk of the plant going extinct, there are several strategies developed for the preservation of *Rhodiola Rosea* which includes field cultivation and micropropagation with aim to restoring *Rhodiola Rosea* to its natural habitats.

Since the first field cultivation of *Rhodiola Rosea* in 1970, many European countries such as Russia, Finland, and Sweden, were able to successfully cultivate *Rhodiola Rosea*. Despite the success of this method, there are many disadvantages that limit the production levels of the plant, such as the accumulation of the secondary metabolites occurring after 5-7 years of cultivation and the adaptation of the plant is difficult due to specific climate conditions (Phytochemistry Reviews, 2016). As a result there is movement towards micropropagation which is a form of tissue culture (the cultivation of plant cells) that increases the amount of planting material to facilitate distribution and large scale planting of species such as *Rhodiola Rosea*. For more information on the two methods of *Rhodiola Rosea* cultivation, refer to *Rhodiola Rosea* by Alain Cuerrier and *Rhodiola rosea L.: from golden root to green cell factories* an article in *Phytochemistry Reviews* (1-22).

## **CONCLUSION**

As the health industry shifts from treatment to the prevention of diseases and chronic conditions more and more stakeholders, such as retailers and consumers are looking for products that use natural ingredients that provide health benefits, specifically for products with prime product positioning such as energy boost, anti-stress and antidepressant properties, and overall wellbeing. Due to these trends and alternative cultivation methods, there are growing opportunities for *Rhodiola Rosea* to be used in new product innovation.



## FOR MORE INFORMATION

International Trade Commissioners can provide Canadian industry with on-the-ground expertise regarding market potential, current conditions and local business contacts, and are an excellent point of contact for export advice.

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- [ats-sea.agr.gc.ca](http://ats-sea.agr.gc.ca)

## RESOURCES

Euromonitor International, 2015, *Consumer Health: An End-of-Year Review of 2015 Performance to Advance Market Strategy in 2016 and Beyond*.

Euromonitor International 2016.

Mintel Global New Products Database, 2016.

Phytochemistry Reviews (2016), *Rhodiola rosea L.: from golden root to green cell factories*. *Phytochemistry Reviews*, 1-22.

Phytomedicine (2016). *The authenticity and quality of Rhodiola rosea products*.

Phytotherapy Research (2015), *The Effects of Rhodiola rosea L. Extract on Anxiety, Stress, Cognition and Other Mood Symptoms*.



## RHODIOLA ROSEA IN PACKAGED FOOD AND BEVERAGES

*Global Analysis Report*

Prepared by: Ranna Bernard, Market Analyst

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