



RESEARCH PAPER

Branding of paprika oleoresin in chilli – Challenges and opportunities

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Abstract : Chillies are integral and the most important ingredient in many different cuisines around the world as it adds pungency, taste, flavour, and colour to the dishes. Commercial red chilly oleoresins are mainly used as a spice supplied in pungency ratings between 80,000 and 500,000 Scoville units (approximately 0.6-3.9% capsaicin w/w) and a wide range of colour. Four companies based in Kerala controls more than 80 per cent of India's Rs. 2000 crore spice paprika oleoresin. In view of the competition from the China in international trade and the expanding domestic food sector in terms of readymade foods, ready to cook foods etc. revisiting the business strategy of expanding oleoresin exports felt essential. This paper identified GI granted Byadgi chilli which is essentially sweet and not so spicy and its oleoresin uses in food, cosmetics, confectionery and beverage industry. As the global oleoresin market is expected to reach USD 1.69 billion by 2022, a brand canvas was contemplated with brand elements like logo (BYOL), Slogan (Make tastier and Colorful your dishes), Packaging 100 and 500 grams tinned packaging with display of logo, slogan, USFDA and FSSAI certification, ingredients, usage, manufacturing and expiry date, ASTA number and batch mark, AGMARK etc. with a long term perspective to tap European and Middle East market.

Key Words : Paprika oleoresin, Chilli, Challenges, Opportunities

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INTRODUCTION

Spices constitute an important group of agricultural commodities, which are virtually indispensable in the culinary art. They can be primarily defined as farm products used in various forms *viz.*, fresh, ripe, dried, broken, powdered *etc.*, which contributes aroma, taste, flavour, colour and pungency to food, rather than a lone food seasoning factor. Spices may be bark, buds, flowers, fruits, leaves, rhizomes, roots, seeds, stigmas and styles or the entire plant tops. Chillies are known from the pre-

historic times in Peru. It is considered as one of the most important spice crops comes under the genus capsicum and family solanaceae. It is an important part of the human diet since 7500 BC. Chili is a natural vegetable growing in different climatic conditions of various geographical areas. There are three different stages of chilli *i.e.*, green, red ripe, red dry. It is an annual tropical plant growing all over the world. The top ten chilli producing countries are India, China, Ethiopia, Myanmar, Mexico, Vietnam, Peru, Pakistan Ghana and Bangladesh

contributing 85 per cent of the world production. Among this, the major share is holding by India. India is not only the largest producer but also the largest consumer in the world. It is cultivated in all the states and union territories of the country. Chillies are integral and the most important ingredient in many different cuisines around the world as it adds pungency, taste, flavour, and colour to the dishes. It is using in salads, baked dishes, stuffed dishes, stew, salsa, pizza, cheese and pickles in various forms. The native land of Chili is considered to be Mexico with secondary origin in Guatemala. Chili imparts pungency and color to the dishes. It is an important ingredient in day to day curries, pickles and chutneys. It is also a rich source of Vitamin A, C, E and P assists in digestion. It also prevents heart diseases by dilating blood vessels. It is also called as hot pepper, red pepper, cayenne pepper, capsicum, etc.

Evolution of oleoresin :

Oleoresin is an extraction from chillies. Normally called as Paprika Oleoresin. Scientifically Paprika Oleoresin is extracted for Indian red chillies (*Capsicum frutescens*). Paprika Oleoresin is USDA approved (The Food and Drug Administration, a federal agency of United States). Four companies based in Kerala controls more than 80 percent of India's Rs. 2000 crore Spice Paprika Oleoresin. Oleoresin capsicum will be obtained from the longer, moderately pungent Capsicum used in the production of red chilly. Commercial red chilly oleoresins are mainly used as a spice supplied in pungency ratings between 80,000 and 500,000 Scoville units (approximately 0.6-3.9% capsaicin w/w) and a wide range of colour.

Chilli oleoresin :

Spice oleoresins are the natural flavors which can meet the modern demand of the food industries. Oleoresins are essentially the concentrated liquid form obtained from spices. Its recovery from plant materials is generally carried out by solvent extraction, super critical fluid extraction (SCFE) , ultra sonication, membrane adsorption , molecular imprinting or by enzyme-assisted extraction.

Market environment :

The global oleoresin market is expected to reach USD 1.69 billion by 2022. India exported chili oleoresin worth USD 38.44 million with total quantity of 2.48 tons. China is the largest buyer of chili oleoresin accounting

for exports worth USD 35.04 million followed by South Korea and United Kingdom USD 2.34 million and USD 0.29 million respectively. Various studies show that there is increasing trend in use of spices like 80 percent increase in interest in spicy foods in the USA and around 60 percent in Europe Middle East and Africa, 45 per cent in Asia Pacific and 40 per cent in Latin America. Chillies are subjected to solvent/ super critical extraction to obtain oleoresins of various pungency and colour unit grades. These are further used in manufacturing of flavours and seasonings.

Business scenario :

India is the largest producer of chilli and has the largest area under chillies in the world followed by China and Pakistan. Continent wise details of Chilli producing countries are given in Table 1. Major Importers for Green Chilli are USA, Germany, UK, Russia, France.

Table 1: Details of chilli producing countries

Continent	Countries
Asia	India, China, Indonesia, Korea, Pakistan, Turkey and Sri Lanka
Africa	Nigeria, Ghana, Tunisia and Egypt in Africa
The Americas	Mexico, Argentina, Peru, United States of America
Europe	Yugoslavia, Spain, Romania, Bulgaria, Italy and Hungary.


Canada, Netherlands, Italy, Austria and Poland and Dry Chilli USA, Thailand, Malaysia, Sri Lanka, Spain, Bangladesh, Mexico, Germany, Indonesia and Japan. The SWOC matrix for oleoresin business is presented in Table 2.

Brand building tools :

The oleoresin chilli or paprika by the business need to tap varied modes of communication to succeed in the business

- Business to business
- Business to customer
- Personal selling
- Direct marketing
- Trade show and exhibition
- Public relations
- Media promotion or advertising
- Sales promotion or tapping varied regions
- Awareness programme on products quality and safety through trade fair promotional trips abroad

Table 3 : Brand canvas for paprika oleoresin in India

Touch points	Brand tactics	Core brand message	Relationships	Customer segments
Packaging: 100 and 500 g tinned packaging with display of logo, slogan, USFDA and FSSAI certification, ingredients, usage, manufacturing and expiry date, ASTA number and batch mark AGMARK, etc. Peculiarity of Byadgi chilli : it is essentially sweet and not spicy. Oleoresin extracted from it is used in food, Cosmetics, confectionery and beverage industry. GI tagged: Byadgi chili has been recorded geographical indication in February 2011. GI tag is 144. Dealers and Suppliers Brand personality Brand Name: BYOL (BY for BYAGI and OL for oleoresin) Slogan: Make tastier and Colourful your dishes Health benefits and Ease of use Expenditures 11 per cent turn over 1000 days	Logo:  Referencing and QR Code video	Value proposition: ready to use natural preservatives and colouring agent for cooking. Key motivations Positioned as: A premier colouring, flavouring and preservative agent that aids in the case of cooking. Byadgi Chilly annual sales Rs. 3 billion (\$75 million) Global Trade of Paprika oleoresin is dominated by India (60%) followed by China exports are @Rs 1000 crores. Aflatoxin free spice Metrics for success Sales No.of Dealers and Suppliers	Quality: USFDA and FSSAI Certified	Target Market B2B Present :USA Long Term Perspective To tap European and Middle East market. To export to Pharma and Cosmetics industries.

participation in international fairs etc.,

Gaps and researching possibilities :

– Oleoresins are highly concentrated and so they need to be used in diluted form. While oleoresins can be used for Italian, Mexican and other continental dishes, surprisingly not much has been done to take spice oleoresins to the Indian kitchen.

– Research needs to be done to explore use of oleoresins in dishes like sambar, rasam, lassi and dal. The level of research in these areas has been sub-optimal.

– Increase the popularity implementation of technologies like SCFE (Supercritical Fluid Extraction).

– Need to develop expertise in logistics and supply chain to run the B2C model.

– An aggressive marketing campaign is vital to promote wide awareness.

– Research to find new applications and new markets for spice oleoresins paprika and chilli is lacking and this gap needs to be filled.

Taking into consideration the above issues a brand canvas is designed for example in Table 3.

Situation specific changes in strategies could be contemplated depending on volume of business and target market.

Brand elements and bases of branding :

Brand elements help to express or represent and identify or differentiate the brand. They help to communicate the brand character to market place. A

Table 2: SWOC Matrix of oleoresin business

Challenges	Strategic issues
<ul style="list-style-type: none"> • Aflatoxin • Harmful colour additive • Infections in field and storage • Highly sensitive to light, heat and air. • Residues • Proper drying 	<ul style="list-style-type: none"> • High cost of production • High yearly fluctuations and prices • Cost of storage • Buying and selling decisions
<p>Major driving factors</p> <ul style="list-style-type: none"> • Oleoresins market is increasing popularity and food and beverage industries on global level. • Strong economic growth coupled with rising disposable income and changing lifestyle has been resulted into growing demand for spicy food in India. • Potential semi-tropical herbs 	<p>Branding elements and the bases for branding</p> <ul style="list-style-type: none"> • Natural extract without any antioxidant • Consistency in flavour • Not affected by bacterial contamination • Dence Color: Its red color the most used natural red color in the world. • Pharmacological: Chilli oleoresin possesses anti-oxidant, analgesia, anticancer and anti-inflammation features. It radically reduce free radicals in our body. • Demand from processed food and fragrance industries • Easy blend ability to achieve the desired features • Mostly preferred natural colouring and flavoring agents to artificial ones • Rising consumer awareness towards health benefits of paprika over traditional raw spices (Consumers become increasingly health conscious) • Uses of oleoresins in flavours and seasonings are manifold • High shelf life and product used in the kitchen • Increasing demand for coloring foodstuff • Customers span include flavour and fragrances makers, seasoning companies, spice blenders, meat processors and organic retail chains in cosmetics and fragrances. • High potency of active components which enables their usage in small dosages. • Oleoresins find application in Beverages, Meat Canning, Confectionery, Sauces and Pharmaceuticals.

brand model canvas was worked out for the benefit of the prospective entrepreneurs. Expenditure and Metrics can be varied based on the volume of business and target market.

district of Andhra Pradesh. Seminar proceedings of Agri-business potential in Andhra Pradesh organized jointly by Indian society of agricultural Marketing, Department of Agricultural marketing, Govt. of Andhra Pradesh and A.N.G.R. Agricultural university, Hyderabad.

REFERENCES

Rajendra Prasad, V., Goverdhan, M. and Mohammad, Shaik (2008). Infrastructural needs of chilli farmers in Khammam

WEBLIOGRAPHY

<https://brandidx.online/>

<https://en.wikipedia.org/wiki/Oleoresin>

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