AMIC – INFOSERIES – 9
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Underexploited Trade Potential of White Pepper

Introduction

Black pepper, known as the King of Spices is one of the oldest agricultural commodities of commerce. It is valued for its characteristic pungency and flavour, as an ingredient in food preparations and also as a spice. India is the second largest producer of pepper in the world after Vietnam. The major pepper producing States in India are Kerala, Karnataka and Tamil Nadu.

Commercial Products

Currently, pepper is mostly traded as black pepper, either in the ungarbled or in the garbled form. Green pepper, white pepper and pepper oil and oleoresin are also traded. Black pepper is the whole dried fruit of the plant, while white pepper is the dried seed after removing the pericarp of the berries. White pepper is the most remunerative value-added form of pepper, which is an elegant culinary agent.

Commercial Potential of White Pepper

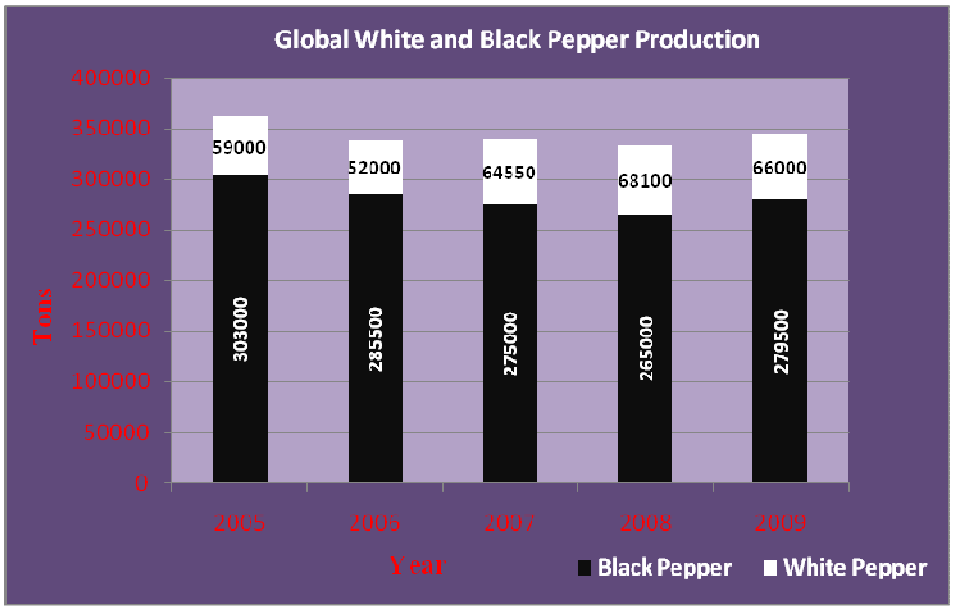
White pepper is obtained by removing the outer skin, viz., pericarp and outer portion of the mesocarp of the ripe or matured green berries or dried black pepper. There are chemical, biological and physical methods for the conversion of pepper into white pepper. Traditional retting is the main method followed for making white pepper from black pepper where the berries are kept under running water for 7 to 9 days to soften their pericarp. After removing the pericarp by scrubbing, the white peppercorns are washed and dried. Major limitations of this retting process include quality deterioration of the product.

White pepper is also produced by decortication of the outer skin of black pepper. A limited quantity of white pepper is also being produced through selective decortication of ripened fresh pepper berries. But all these traditional methods compromise on the quality of white pepper and are therefore less hygienic.

National Institute for Interdisciplinary Science and Technology (under CSIR), Thiruvananthapuram has patented an environmental friendly biological process which is cost-

effective and yields superior quality white pepper within a short span of time as compared to the conventional methods. The microbial process uses enzymes to degrade pectins, the cementing tissues present in between the skin and oil glands on the pepper kernel. The process also generates methane gas as a by-product.

Fig 1: Global White and Black Pepper Production



The International Pepper Community estimates global pepper production for 2012 crop season is 3.20 lakh tons, out of which 2.48 lakh tons is estimated to be black pepper. Total white pepper production is estimated around 0.719 lakh tons, which is 22.47 per cent of the total global production. According to the World Spices Congress (2010), the annual world production of white pepper is around 66000 metric tons, which works out to 19.27 per cent of the total pepper production (Fig1).

Table 1: Global white pepper production in metric tons

	INDONESIA	MALAYSIA	VIETNAM	CHINA	OTHERS	TOTAL
2005	13000	3000	10000	30000	3000	59000
2006	9000	3000	12000	25000	3000	52000
2007	12000	4000	11000	35000	2550	64550
2008	10000	4000	12000	40000	2100	68100
2009	9400	3500	23000	28000	2100	66000

Asian destinations like China and Japan, West Europe and North America constitute the major markets for white pepper. China and Vietnam are the leading producers of white pepper (Table 1). Indonesia converts about 50 per cent of its pepper to white, while Malaysia and Brazil convert about 10 per cent and 5 per cent respectively of their total pepper

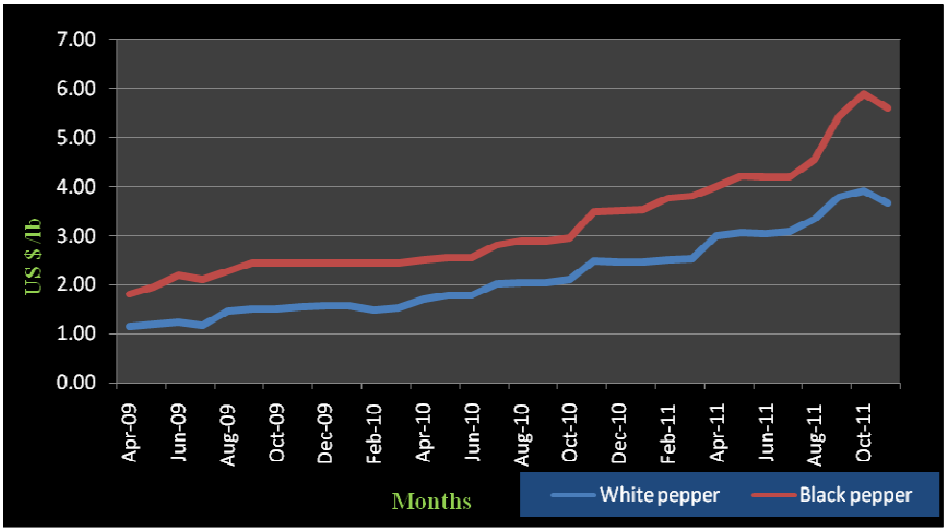
production to white pepper. Although India is a major producer of pepper and Indian pepper fetches top price in the world markets, we are out of frame in the global production of white pepper. Out of the estimated total production of 43,000 tons of Indian pepper for the crop season 2012, white pepper production is estimated to be 1000 tons only. It works out to a mere 2.33 per cent of total pepper production of Indian origin.

Table 2: Yearly average spot prices of black and white pepper in international markets

Year	Black Pepper (US $/lb)	White Pepper (US $/lb)	Price Difference US $/lb)
2005-06	0.77	1.16	0.39
2006-07	1.19	1.73	0.54
2007-08	1.84	2.47	0.63
2008-09	1.58	2.42	0.84
2009-10	1.42	2.29	0.87
2010-11	2.16	3.10	0.94
2011-12	3.36	4.76	1.40
Mean	**1.76**	**2.56**	**0.80**

White pepper fetches a premium price in international markets when compared to black pepper. It may be noted that white pepper is fetching on an average three times higher price than black pepper in the international market (Table 2). This is a big opportunity missed by India. A comparison of monthly average spot prices of black and white pepper in international markets for the period from April'09 to Oct'11 indicates that white pepper is not only fetching consistently higher price than black pepper, but also the price difference between the two is widening over time (Fig. 2).

Fig 2: Monthly average spot prices of black and white pepper in international markets



Conclusion

The rising global demand for white pepper and a marked price difference between white over black pepper in the international market offer tremendous trade potential for the product. As Indian pepper is recognised as globally best in terms of quality parameters, there is ample scope for white pepper marketing and export in the future. A shift in production to white pepper will signal not only a shift in value addition, but is expected to support the price of black pepper tremendously in the domestic as well as international market. It calls for concerted efforts to step up the hygienic production of white pepper through advanced technologies and establishing entrepreneur clusters near production centres.

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