

**CHAPTER 4**  
**TOTAL PHENOLIC CONTENT AND**  
**SENSORY EVALUATION OF NATURAL**  
**FLAVOURING AGENT FROM *ARTOCARPUS***  
***HETEROPHYLLUS* L. FRUIT**

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**INTRODUCTION**

Flavouring agents are used all around the world for food, cosmetics and even pharmaceuticals. They are developed over the years to provide the original flavour of raw material to food and drinks. Addition of flavouring agents can make the food or drink more palatable and flavouring agents can be developed synthetically or from natural raw materials like fruit juices, fruit concentrates, citrus oils, herbs and spices. In today's food and beverage industry, flavourings are added to nearly all products ranging from confectionery, soft drinks, alcoholic beverages, and even chewing gum.

Most of the flavouring agents that are available today are synthetically made as natural flavouring agents have a higher cost and more complex processes. As consumers are becoming more conscious about their food intake, the demand for natural flavouring agents has increased.

Worldwide, they currently represent a value of almost 7 billion US\$ a year, a figure which increases each year. Financially this means 25% of the total food additives market (Dubal et al., 2008). Besides that, natural flavours for the beverage industry are showing steady growth, which is forecast to continue. In the western European market, food and drink estimated the synthetic flavouring market at about €726 million and the natural flavouring market at €571 million