

# CHAPTER 5

## PHYSICOCHEMICAL AND ANTIOXIDANT PROPERTIES OF FERMENTING *NEPHELIUM LAPPACEUM* (RAMBUTAN) FLORAL VINEGARS

*Low Siah Von, Noor Hafizoh Saidan and Seri Intan Mokhtar*

### INTRODUCTION

Global food and beverage research have shown that two primary factors that have the capacity to influence food and beverage acceptability are colour, and flavour. Sensory evaluation of rambutan vinegar has shown that taste of rambutan vinegar obtained the highest, followed by the aroma, while the colour was rated last (Rosshille & Kristine, 2016).

Rambutan vinegar may face difficulty competing with other fruit vinegar in the global market due to a lack of attractive colour. *Nephelium lappaceum* L. (Rambutan) vinegar has a light yellow colour that is not attractive enough to compete with other fruit vinegar in the market although it has a high nutrition value and acceptance rate.

Butterfly pea extract has a flavour, which is similar to unsweetened green tea. Like green tea, Butterfly Pea flower extract is full of potent antioxidants, and has even been studied for its ability to help protect the skin against premature aging (Chayaratanasin et al., 2015). Butterfly pea not only contained anthocyanin but also contained a significant amount of flavonoid compounds such as p-coumaric acid and ferulic acid (Rabeta, 2013).

In addition, flowers and bract of bougainvillea being rich in phenolic and flavonoid can also provide a good source of antioxidant