

Effects of physicochemical characteristics of pummelo fruit juice towards UV inactivation of *Salmonella typhimurium*

ABSTRACT

There is substantiated evidence that Ultraviolet (UV) light reduces the level of microbial contamination for a wide range of liquid foods and beverages. However, the major disadvantage of UV light is the limitation of light penetration. Liquid foods have been known to absorb inadequate UV light due to its physicochemical properties. These attributes largely depend on suspended matters, organic solutes and color compounds of liquid foods. Subsequently, these factors will lower the performance efficiency of UV pasteurization. This study examined the effects of physicochemical properties of pummelo fruit juice towards inactivation of *Salmonella typhimurium*.

Keyword: Dean vortex ultraviolet pasteurization; *Salmonella typhimurium*; Absorption coefficient; Pummelo fruit juice