

ABSTRACT

The purpose of this research are to replace synthetic dyes with natural dyes from the skin of the red dragon fruit and to study the influence/effect of the natural dyes through tapioca in order to obtain the good characteristic and it can be used as natural dyes in food, especially beef sausage.

The method of this research used factorial experimental design 3x3 in a randomized complete block design (RAK) in three times repeating. The factors were including: the influence of the concentration of liquid colorant through the frozen of red skin of dragon fruit with aquadest solvent 50C° ratio (1: 1) (P) consist of three levels, p1(20%), p2(30%), p3(40%) and the concentration of tapioca (T) consist of three levels: t1(15%), t2(10%), t3(5%).

The response of this research consisted of chemical and organoleptic response. The chemical response including protein content, fat content, moisture content, and the total of anthocyanin content from the selected product. Further, the organoleptic response color, texture, flavor, and taste.

According to the chemical and organoleptic analysis, this research revealed a selected product of p1t2 (frozen liquid colorant 20% and tapioca 10%). The selected product has protein content at 15,50%, fat content at 6,67%, moisture content at 62,99%, then followed by the total of anthocyanin content at 3,40mL/L, and receives a positive response for organoleptic aspect.

Keywords: the skin of the red dragon fruit, tapioca, beef sausage