

ABSTRACT

Dragon fruit skin has a weight of 30%-35% of the weight fruit that can not to be utilized and only disposed of as waste so that it can cause environmental pollution. The dragon fruit skin contains a natural dye that also functions as an antioxidant. Effervescent is a tablet diluted in water first before drinking, this tablet out CO₂.

The object of this research was to determine a comparison of sweeteners type and the percentage powder of dragon fruit skin which produce "effervescent" fruit drink of red dragon fruit with the best characteristic. This research used a 3x3 factorial experimental design in a randomized complete block design (RAK) method, and repeated 3 times, where the factors that tested are the comparison of sweeteners type (J) with different concentration : j1 sucrose : stevia (1:0), j2 sucrose : stevia (1:1), j3 sucrose : stevia (0:1) and percentage powder of dragon fruit skin (K) with different concentration : k1 (40%), k2 (45%), and k3 (50%). The response in this research is chemical response that covers the total of water content, vitamin C content and the total of acid content. The physical response covers the time needed to dissolves. The organoleptic response covers the color, odor, and taste, also examination of anti-oxidant activity and total sugar content in the selected sample. The main research of sweeteners comparison factor significantly affected the total of water content, vitamin C content and the total of acid content color and odor. And The main research of percentage powder of dragon fruit skin factor significantly affected the total of water content, vitamin C content and the total of acid content color, odor, and taste. Selected sample is red dragon fruit skin effervescent with the comparison of sweeteners stevia 3% and the concentration of percentage powder of dragon fruit skin 45% shows the amount of anti-oxidant activity in 1032,55ppm and total sugar content in 39,524%.

Key words : red dragon fruit skin effervescent, sweeteners comparison, powder of dragon fruit skin percentage.