

## ABSTRACT

### ULTRAFILTRATION PROCESS FOR CLARIFICATION PASSION FRUIT JUICE (*Passiflora quadrangularis*) WITH USING CERAMIC MEMBRANE

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It has been done ultrafiltration of passion fruit juice using ceramic membrane thickness variation. Result show that aquades flux value in 25 minutes for membrane 1,5; 2,0; 2,5; 3,0; dan 3,5 mm is 17,0135; 19,1947; 10,9061; 10,9061 dan 4,3624 L/h m<sup>2</sup>. Whereas flux value of passion fruit juice at the time for membrane 1,5; 2,0; 2,5 mm is 8,2886; 5,6712 dan 4,3624 L/h m<sup>2</sup>. For membrane 3,0 and 3,5 mm it has not been done because flux value are too small that indicate fouling. Physical and chemical properties parameter in ultrafiltration of passion fruit juice obtained for turbidity and colour very different between passion fruit juice before and after ultrafiltration, whereas reducing sugar and vitamin C didn't have different significant between passion fruit juice before and after ultrafiltration. Determination rejection coefficient values of membrane for turbidity, colour relatively high whereas for reducing sugar and vitamin C are relatively small.

**Keywords:** Membrane Technology, Ceramic Membrane, Fouling, Passion Fruit, Reducing Sugar, Vitamin C.

