ABSTRACT

APPLICATION ULTRAFILTRATION PROCESS FOR CLARIFICATION DUTCH EGGPLANT JUICE (*Chphomandra betacea Sendnt*) WITH USING CERAMIC MEMBRANE

By: SUCI GRIYANI YUSSA (1110412042) Advised by: Dra. Refinel, M.Si and Prof. Dr. Admin Alif, M.Sc

It has been done ultrafiltration of dutch eggplant fruit juice using ceramic membrane thickness variation. Result showed that aquadest flux value in 25 minutes for membrane 1,5; 2,0; 2,5; 3,0; 3,5 mm is 42,82; 26,75; 25,87; 23,68; 11,84 L/h.m² whereas flux value of dutch eggplant fruit juice at the time for membrane 1,5; 2,0; 2,5 mm is 4,82; 4,4; 1,82 L/h.m². For membrane 3,0 and 3,5 mm it have not been done because flux value are too small that indicate fouling. Membrane rejection coefficient value on turbidity high relative whereas on absorbers, reducing sugar and vit c small relative. Sample with 2 mm thickness (s2) is optimum membrane to eggplant juice filtration because the content of reducing sugar and vit c can still be maintained with better colour and turbidity levels to be reduced.

Keywords: Membrane Technology, Ceramic Membrane, Dutch Eggplant Fruit, Reducing Sugar, Vitamin C

