ABSTRACT

EFFECT OF PARTIAL GELATINIZATION TO SHELF LIFE OF PURPLE SWEET POTATO FLOUR

By

ANJAR ARIANINGRUM

Purple sweet potato (Ipomea batatas L. Poir) contain anthocyanins which act as antioxidant and natural purple coloring. Purple sweet potato can be made into flour. The processing into flour has to be able to maintain the color and anthocyanin of purple sweet potato. Purpose of this study was to determine the effect of partial gelatinization through the process of heating on shelf life of purple sweet potato flour. Shelf life was analyzed using the method of Accelerated Shelf Life Testing (ASLT). This study used a complete randomized block design with a single factor and 4 replications. Treatment using a heating temperature of 90°C for 0, 15, 30, 45, 60, and 75 minutes.

The results showed that the heat treatment had a significant influence on the shelf life of partial gelatinization purple sweet potato flour. Heat treatment of 90°C for 45 minutes had the longest shelf life which is 136 days.

Keywords: ASLT, heating, purple sweet potato flour, partial gelatinization, shelf life