ABSTRACT

Banana that has been processed to be flour, in order to make longer lifetime, will be easier in packaging and delivering, more practice in making diversification of processing product, giving value added of the banana, and making business opportunity at some villages. The banana flour is used as substitutive matter in making tasteless bread usually using wheat flour. Tasteless bread is processed to add various application of banana flour, beside that, the tasteless bread is easy processed and cheap. The target of the tasteless bread is volume of bread that are swell, soft in the texture, and delicious in the taste. This research was purposed in understanding the interaction between drying temperature and ripe level of the banana on quality of flour, as well as knowing the substitutive influence of the banana flour on the quality of tasteless bread.

This research was performed between May 2007 and October 2007, at THP laboratory, Fisheries Laboratory, Medical Biometric Laboratory and Chemical Laboratory of Muhammadiyah University of Malang. The research was worked by means of Group Random Program that was factorial arranged comprising of two factors with three times of repetition. Factor 1 was level of ripe of the banana (unripe, semi-ripe, ripe) factor 2 was Drying Level (40°C, 50°C, and 60°C). The second step of research to the substation of banana flour, namely by adding banana flour where the concentrations used are 0%, 10%, 20%, 30%, 40%, 50% and 60%.

In the stage of making banana flour the interaction of ripe level and temperature on rendemen, water content, protein content, reduction sugar content, white color level, and appearance are documented. The best treatment was resulted at the treatment of semi-ripe level of banana and 60°C of temperature (T2S3), where the protein content is 8.224%, white level \( W \) was 363.297, the aroma was 4.33 (the characteristic of banana), the appearance was 4.40 (attractive). The addition of banana flour had significant influence on water content, ash content, protein content, reduction sugar content, fat content, swell volume level, texture and taste. The best treatment was resulted at the treatment with 10% of banana flour substitution where the taste score was 3.67 (delicious), the volume of swelling was 207.72% (big), the texture was 2.92 mm/g/sc (soft).