

Development of Food Seasoning Powder from Subgrade Fish Cracker with Red Spinach (*Amaranthus tricolor* L.)

ABSTRACT

The subgrade of fish crackers known as amplang refers to some parts of amplang that do not meet the standard but can still be consumed and sold at a lower price, so it has contributed to the decrease in company profits. This study intends to develop a food seasoning powder created from the subgrade of amplang fish crackers with the addition of red spinach (*Amaranthus tricolor* L.). Five formulations were developed with amplang powder and red spinach powder in the range of 36.66% to 66.66% and 0% to 30%, respectively. The best formulation is chosen based on sensory evaluation, followed by nutritional analysis and storage stability. Formulation 4 was chosen as the best, which consists of 41.60% subgrade amplang powder with 25% red spinach powder. The proximate analysis showed the F4 contained 6.18% moisture, 0.64% ash, 9.83% crude fat, 12.69% protein, 9.88% crude fibre, 47.27% dietary fibre, 61.46% carbohydrate, and a calorie content of 404.83 kcal/100 g, which significantly increased in ash, protein, and crude fibre contents compared to the control sample. Water activity (AW), colour and microbiological status showed no significant changes ($p > 0.05$) throughout the eight weeks of storage indicated that sample was stable during storage periods. Therefore, the development of this seasoning powder can be used as an alternative for amplang subgrade to be upgraded with better acceptability and enhance its nutritional value, which is beneficial to the consumer.