

ABSTRACT

Oranye sweet potato is abundant and needs product diversification to extend its acceptance. In this work, we made it into a gluten-free snack noodles which can also be consumed as instant noodle. This study aimed to determine changes in sensory properties of this product during ten weeks storage at room temperature and in three types of packages (Polyethylene/PE, polypropylene/PP and aluminium foil + polyethylene-terephthalate/PET). Factors influencing overall acceptance were also studied. A completely randomized design factorial (RALF) with two factors, namely the storage time (0, 6, 7, 8, 9 and 10 weeks) and the type of packaging (Polyethylene/PE, polypropylene/PP and aluminium foil + polyethylene-terephthalate/PET) was employed. Sensory testing was done using test differentiator and hedonic test. Data were analyzed by analysis of variance and 'Partial Least Square/PLS' regression. Results showed that the longer the storage, the level of difference among samples with control increased. Aluminium foil + PET packaging showed the smallest difference with controls, compared to the PE and PP packaging. The longer the storage time, the lower the level of preference towards taste, aroma, texture and overall snack noodles and instant noodles. In general, aluminium foil + PET and PP packaging were able to better maintain a level of preference of snack noodles and instant noodles, compared to PE packaging. PLS regression test results indicated that the factors that most influenced on overall preference level snack noodles were taste, while that of instant noodle were taste and texture.

Keywords: sweet potato, snack noodle, instant noodle, sensory

ABSTRAK

Ubi jalar oranye merupakan jenis ubi jalar yang melimpah dan hanya dimanfaatkan secara sederhana. Salah satu inovasi pengolahan ubi jalar oranye yaitu pembuatan snack mi dan mi instan bebas gluten. Penelitian ini bertujuan untuk mengetahui perubahan sensoris dan faktor yang paling dominan dalam mempengaruhi tingkat kesukaan keseluruhan snack mi dan mi instan ubi jalar oranye selama penyimpanan, pada jenis kemasan yang berbeda. Metode penelitian ini menggunakan Rancangan Acak Lengkap Faktorial (RALF) dengan dua faktor yaitu lama penyimpanan (0, 6, 7, 8, 9 dan 10 minggu) dan jenis kemasan (Polyethylene/PE, polypropylene/PP dan Alumunium foil+polietilen-treptalat/PET). Pengujian sensoris dilakukan menggunakan uji pembeda dan uji hedonik. Analisis data dilakukan dengan analisis variansi dan regresi '*Partial Least Square/PLS*'. Hasil menunjukkan bahwa semakin lama penyimpanan maka tingkat perbedaan sampel yang telah disimpan dengan kontrol semakin besar. Kemasan Alumunium foil+PET memiliki tingkat perbedaan dengan kontrol yang lebih sedikit dibandingkan dengan kemasan PE dan PP. Semakin lama penyimpanan maka semakin rendah tingkat kesukaan rasa, aroma, tekstur dan keseluruhan snack mi dan mi instan. Secara umum kemasan Alumunium foil+PET dan PP mampu mempertahankan tingkat kesukaan snack mi dan mi instan dibandingkan dengan kemasan PE. Hasil uji regresi PLS menunjukkan bahwa faktor yang paling berpengaruh terhadap tingkat kesukaan keseluruhan snack mi adalah rasa sedangkan pada mi instan adalah rasa dan tekstur.

Kata kunci: Ubi jalar, snack mi, mi instan, sensoris