Sesame crackers (*Kuih Bijan*), a Malay popular traditional snack in Malaysia, is produced by deep frying sesame coated dough balls that are made from glutinous rice flour, sugar and water as the main ingredients. In this paper, the effect of different frying temperature (150, 170 and 190°C) and frying time (0, 1, 3, 5, and 7 min) on colour change of the uncoated sesame cracker's dough balls using electrical deep-fryer was investigated. The results showed that the mean values of redness (a*), yellowness (b*), chroma (C*), browning index (BI) and total colour change (ΔE) were found to increase significantly (P<0.05) with elevating frying temperature and frying time as shown in 170 and 190°C. However, the change of all these parameters is less significant at 150°C.

**Keyword:** Colour; Dough balls; Deep-frying; Frying temperature; Time