PHYSICOCHEMICAL CHARACTERISTICS OF GUMMY ADDED WITH SUTCHI CATFISH (Pangasius hypophthalmus) GELATIN

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ABSTRACT

PHYSICOCHEMICAL CHARACTERISTICS OF GUMMY ADDED WITH SUTCHI CATFISH (Pangasius hypophthalmus) GELATIN

Gelatin from sutchi catfish skin was extracted and applied in the preparation of gummy. The sutchi catfish skin was pretreated with alkali and acid before extraction in 50°C distilled water. This study was carried out to determine the physicochemical characteristics of sutchi catfish (Pangasius hypophthalmus) skin gelatin in comparison with commercial gelatin that is from bovine source. Furthermore, the physicochemical properties of gummy added with sutchi catfish skin gelatins were also compared with gummy added with commercial gelatin. The gelatin and gummy were analysed for yield, gel strength, setting point and setting time, amino acid composition, texture profile analysis and sensory. The yield of gelatin obtained is 14.47% and the gel strength of sutchi catfish skin gelatin showed higher value 360.86 g compared to the commercial gelatin 217.37 g. The sutchi catfish skin gelatin contain higher amount of proline. The sensory acceptability of gummy added with sutchi catfish skin gelatin and commercial gelatin were also compared. The gummy produced from sutchi catfish skin gelatin and commercial gelatin shows similar physicochemical properties. Sensory analysis of both gummies showed that the gummies were similarly acceptable. Therefore, sutchi catfish skin gelatin can be used as a potential gelling agent in food in the future.