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Characteristics of Quality on Dough and Bread added with Ginseng Powder

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Recently, consumption of bread is increasing than staple food of rice in Korea by increase in income, improvement in economic life and eating habit, westernize for busy present-day life. Furthermore, there are reports of adding functional material as baking stuff to make better quality but experiment of ginseng, which is famous medical action is insignificant in actual circumstances. In this study, the effect on property of matter of adding ginseng was re-searched to develop as a new composition of functional foods after making dough and bread. Result of chromaticity (L, a, b) and property (stress, elasticity, aggregation, chewiness, brittleness and stickiness) in dough and bread added ginseng powder (each as 0, 1, 3 and 5%, respectively) was like this. 'L' value was shown that decreased by increasing additional concentration, 'a' value was negative in every section, 'b' value was the most high, 19.59 as added 3% in chromaticity of dough with ginseng powder was compared with non additional product. and, chromaticity of bread's 'L' value was the most high chromaticity, 65.88 as added 1%, 'a' value was negative in every section and 'b' value was the most high chromaticity, 19.23 as added 3%. Moreover property added 3% ginseng powder was the most high as making bread. In these conclusion, effect of adding ginseng powder on characteristic of quality and these survey has some high possibility of development functional foods as anticancer, strong low blood pressure, anti-cholesterol agent.

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Biodegradation of Endosulfan in a Packed-bed reactor by Immobilized *Klebsiella oxytoca* KE-8 and *Pseudomonas* sp. KS-2PMin-Sub Jo, Jung-Bok Lee, Ho-Yong Sohn¹, Jong-Sik Kim²,
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Endosulfan is a cyclodiene organochlorine currently widely used as an insecticide throughout the world. However it is highly toxic to fish and aquatic invertebrates. In this study, sodium alginate and granular activated carbon(GAC) were chosen as the supporting materials to immobilized *Klebsiella oxytoca* KE-8 and *Pseudomonas* sp. KS-2P that could biodegradation of endosulfan at high concentrations. These immobilized particles were packed separately into two column reactors, which were used for continuous treatment of a mineral medium containing high endosulfan concentrations. Each reactor had a working volume of 140mℓ(diameter : 2.5cm, length:30cm). A downflow mode of wastewater was applied to each reactor containing fresh influent. The flow rate of the influent was maintained at approximately 60mℓ/h. As a result, even at the tenth reaction, the immobilized cell maintained 60% of endosulfan-degradation rate of that at the first reaction(The immobilized cells with the cell density of 200mg/100g-dry weight degraded 14.7mM(6mg/l) endosulfan within 50min at a room temperature). These results suggested the immobilized cell of *K. oxytoca* KE-8 and *Pseudomonas* sp. KS-2P might be applicable a wastewater-treatment system for removal of endosulfan.

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