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## Physical Properties of Leaflike Tea Prepared with Sea Tangle, *Laminaria japonica*

Ji-Man Kwak, Hyun-Joo Kim, Yong-Won Kim,  
Dong-Soo Kang and Tae-Jin Bae

Division of Food Technology and Nutrition, Yosu National University,  
Yosu 550-749, Korea

Sea tangle, *Laminaria japonica* was contained abundantly alginic acid as well as calcium, phosphate, iron, magnesium, iodine etc which was emitted action of cholesterol and heavy metal as of cadmium and it was also contained laminine etc which was effect to hypertension. But physical properties of sea tangle affected preparation of leaflike tea. Therefore, this study was investigated changes of physical properties of sea tangle by chemical and physical treatments. Sea tangle was cutted(2×2cm) and it was made a hole by a pin and measured strength with rheometer(Sun scientific Co., Model CR-100D) as temperatures(70, 80, 90, 100℃), solvent concentration (0.05, 0.1, 0.2, 0.3%), treated times(0.5, 1, 2, 3, 4hr), solvents(water, acetic acid, sodium bicarbonate, dipotassium hydrogenphosphate), respectively. In case of treatments with acetic acid, sodium bicarbonate, dipotassium hydrogenphosphate, distilled water at 70℃, concentration of 0.05%, during 0.5hr strength were shown 5196, 5060, 5248 and 6264g/cm<sup>2</sup>, respectively, as increasing 80, 90, 100℃ strength were decreased to 2473, 1132, 556g/cm<sup>2</sup> and 3148, 2972, 2880g/cm<sup>2</sup> and 5184, 4392, 2556g/cm<sup>2</sup> and 4720, 3184, 2452g/cm<sup>2</sup>, respectively. When sea tangle heated at 80, 90, 100℃ during 3 and 4hr with 0.3% solution of dipotassium hydrogenphosphate was impossible measurement for excessive soft strength. As pointed out above, strength decreased generally as increasing temperature, concentrations, times and acetic acid of the solvents was effected noteworthy. In case of physical treatment were shown higher decrease of strength than non-physical treatment.