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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING ILMIAH

Judul Karya Ilmiah/Artikel : The quality of edible film made from Nile tilapia (*Oreochromis niloticus*) skin gelatin with addition of different type seaweed hydrocolloid

Jumlah Penulis : 6 (enam)

Status Pengusul : ~~Penulis pertama~~/ penulis ke 6./ ~~penulis korespondensi~~ **

Penulis Karya Ilmiah : H Deanti, JM Hulu, A Setyaji, RN Eliyanti, K Aliya,
Eko Nurcahya Dewi

Identitas Karya Ilmiah : a. Nama Prosiding : IOP Conf. Series :
Earth and Environmental Science.
b. No. ISBN : -
c. Tahun Terbit, : 2018
Tempat Pelaksanaan : Indonesia
d. Penerbit : IOP
e. Alamat web prosiding :
<http://iopscience.iop.org/article/10.1088/1755-1315/116/1/012062>
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c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9		7.8
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		9
Total = (100%)	30		19.6
Nilai Pengusul =		$40\% : 6 =$	1.3

Catatan Penilaian Paper oleh Reviewer : sesuai kompetensi pengusul. Turun 40%. Perbaikan profil gelatin dari kulit ikan menggunakan berbagai hidrokolloid algae variabel, analisis data memadai. Banyak kesalahan typo-grafis. Teknik penulisan daftar pustaka tidak konsisten.

Σ pustaka : 18.

$$\text{Dishusi} = \frac{15}{18} = 83.3$$

$$= \frac{26}{30} \times 9 = 7.8$$

$$\text{Pustaka} = \frac{12}{18} = 66.7.$$

$$(> 2007)$$

$$= \frac{26}{30} \times 9 = 7.8$$

Semarang, 22/11/2018.

Reviewer 1

Prof. Norma Afianti, M.Sc., Ph.D

NIP. 195511101982032001

Unit kerja : FPIK UNDIP

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Nilai Pengusul =			2.77

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-- Karya ilmiah ini sesuai dg bidang keilmuan
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 -- Kemutakhiran informasi = $10/10 = 61.1\% = \frac{27}{30} \times 9 = 7.8$
 -- Similarity 4% with no student paper

Semarang, 24 November 2018
 Reviewer 2



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IOP Conference Series: Earth and Environmental Science

Volume 116, Issue 1, 8 March 2018, Article number 012062

3rd International Conference on Tropical and Coastal Region Eco Development 2017; Yogyakarta; Indonesia; 2 October 2017 through 4 October 2017; Code 135131

The Quality of Edible Film Made from Nile Tilapia (*Oreochromis niloticus*) Skin Gelatin with Addition of Different Type Seaweed Hydrocolloid (Conference Paper)

(Open Access)

Deanti, H.^a ✉, Hulu, J.M.^a, Setyaji, A.^a, Eliyanti, R.N.^a, Aliya, K.^a, Dewi, E.N.^b 🔍

^aStud. at Fish Product Technology Department, Faculty Fisheries and Marine Sciences UNDIP, Jl. Prof. Soedarto, SH, Tembalang, Semarang, Jawa Tengah, 50275, Indonesia

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Abstract

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The functional properties of fish skin's gelatin lower than mammals, hence the gelatin proteins needed a polysaccharides hydrocolloids to form a continuous and more cohesive network of edible film. Polysaccharides hydrocolloid (carrageenan, agar and alginate) containing phenol compounds was oxidized to be converted into quinone and it was expected to act as a cross linking agent. The purpose of this study was to determine the characteristics (thickness, tensile strength, elongation, solubility and water vapour transmittance rate) of edible film made from Nile tilapia skin gelatin by adding different type polysaccharide hydrocolloid. Edible film was made by mixture of gelatin 5 g and addition of carrageenan (C1), agar (C2), alginate (C3) concentration ; 0,5% (v/w), all the materials were poured into 100 ml distilled water that containing 10% glycerol (w/w). The solution was then heated on a hot plate stirrer at 40°C for 30 min and dehydrated in an oven at 50°C. All data were analysed using ANOVA. Based on the result it can be seen that the addition of oxidized polysaccharides hydrocolloid have a significant effect on tensile strength (TS), water vapor transmittance rate, solubility and elongation at break properties, but did not in thickness. Edible film gelatin with the addition of alginate has better characteristics viewed by tensile strength (23.05 Kg/cm²), water vapor transmittance rate (0.61 gram/m²/hour) and thickness (0.16 mm) than carrageenan and agar. © Published under licence by IOP Publishing Ltd.

SciVal Topic Prominence ⓘ

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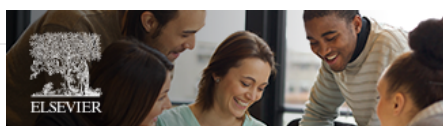
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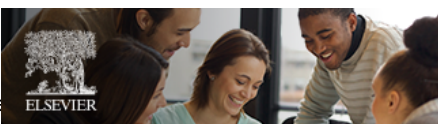
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