C21

LEMBAR
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
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http://iopscience.iop.org/article/10.1088/1755-1315/116/1/012062
Alamt web artikel :
http://iopscience.iop.org/article/10.1088/1755-1315/116/1/012062/pdf
g. Terindeks di (jika ada) : Scopus

Kategori Publikasi Jurnal Ilmiah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional ....
[ ] *Prosiding* Forum Ilmiah Nasional..........

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal *Prosiding*		Nilai Akhir Yang Diperoleh
	Internasional [30]	Nasional [10]	
a. Kelengkapan unsur isi paper (10%)	3		2.
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		7.8
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9		7.8.
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		2
Total = (100%)	**30**		19.6
Nilai Pengusul =	40% : 6 =		1.3.

Catatan Penilaian Paper oleh Reviewer : Sesuai kompetensi pengusul. Turnitin 4%. Perbaikan propil gelatin dari kulit ikan menggunakan berbagai hidrokoloid algae. variabel, analisis data memadai. Banyak kesalahan tipografis. Teknik penulisan daftar pustaka tidak konsisten.

Σ pustaka : 18.
Diskusi = 15/18 = 83.3
= 26/30 × 9 = 7.8
pustaka baru (>2007) = 12/18 = 66.7.
= 26/30 × 9 = 7.8.

Semarang, 22/11/2018
Reviewer 1

Prof. Norma Afiati, M.Sc., Ph.D
NIP. 195511101982032001
Unit kerja : FPIK UNDIP

Adlh disarankan u/ diajukan u/ GB!

Lampiran 10

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Komponen Yang Dinilai	Nilai Maksimal *Prosiding*		Nilai Akhir Yang Diperoleh
	Internasional [30]	Nasional [10]	
a. Kelengkapan unsur isi paper (10%)	3		3.0
b. Ruang lingkup dan kedalaman pembahasan (30%)	9		8.1
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9		7.8
d. Kelengkapan unsur dan kualitas terbitan/prosiding (30%)	9		8.8
Total = (100%)	**30**		27.7 x 100% : 4
Nilai Pengusul =			6.77

Catatan Penilaian Paper oleh Reviewer :
- Karya Ilmiah ini sesuai dg bidang keilmuan
- isi paper cukup lengkap dan kualitas publikasi cukup baik
- Kedalaman pembahasan : 14/18 = 77.8% = 27/30 x 9 = 8.1
- Kemutahiran informasi : 10/10 = 61.1% = 22/30 x 9 = 7.8
- Similarity 4% with (no) student paper

Semarang, 24 November 2018
Reviewer 2

Prof. Dr. Ir. Slamet Budi Prayitno, M.Sc
NIP. 195506281981031005
Unit kerja : FPIK Undip

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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]

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[b]Fish Product Technology Department, Faculty Fisheries and Marine Sciences UNDIP, Jl. Prof. Soedarto, SH, Tembalang, Semarang, Jawa Tengah, 50275, Indonesia

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 transmition rate) of edible film made from nile tilapia skin gelatin by adding different type polyssacharide 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 destilled water that containing 10% glycerol (w/w). The solution was then heated on a hot plate stirer at 40°C for 30 min and dehydrated in a oven at 50°C. All data were analysed using ANAVA. Based on the result it can be seen that the addition of oxidized polisacarides hydrocolloid have a significant effect on tensile strength (TS), water vapor transmision 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 Kgf/cm^2), water vapor transmission rate (0.61 gram/m^2/hour) and thickness (0.16 mm) than carrageenan and agar. © Published under licence by IOP Publishing Ltd.

SciVal Topic Prominence

Topic: Chitosan | Starch | permeability WVP

Prominence percentile: 99.862

Reaxys Database Information

View Compounds

Author keywords

Edible Film | Gelatin | Hydrocolloid | Nile Tilapia | Quality

Indexed keywords

Engineering controlled terms: Algae | Alginate | Coastal zones | Colloids | Crosslinking | Image quality | Polysaccharides | Solubility | Water vapor

Engineering uncontrolled terms

Engineering main heading: Tensile strength

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