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Table of Contents

(53 articles)



Review Articles | 3 October 2020

Nutritional Composition of Seaweed *Kappaphycus alvarezii* (<https://ejournal.stipwunaraha.ac.id/AGRIKAN/article/view/390>)

Seaweed is one of the important marine commodities and is a leading commodity. Seaweed *K. alvarezii* is a type of carrageenan-producing seaweed, as a food source for humans, pharmaceutical ingredients, as a thickener, stabilizer and emulsion. Carrageenan is used in...

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The Role of Inferent Hormones on Gonad Maturity Index and Growth of Ambon Betok Fish (*Chrysiptera cyanea*) **(https://ejournal.stipwunaraha.ac.id/AGRIKAN/article/view/391)**

One type of marine ornamental fish that can be developed through cultivation is betok Ambon fish. Cultivation of this fish is quite profitable, and easy to maintain. To maintain the sustainability and sustainability of Betok Ambon fish farming, one way to take is to...

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The Community Partnership Program Utilization of Cattle Manure as Organic Fertilizer **(https://ejournal.stipwunaraha.ac.id/AGRIKAN/article/view/399)**

The Community Partnership Program of livestock farmer groups in Doyado Village, East Tidore District, Tidore Islands City, is a community service activity aimed at handling cow manure in Doyado Village, which is currently quite abundant in number but not well...

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Realizing Minimum Service Standards for Food Based on Local Wisdom in Central Halmahera Regency

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Realizing minimum service standards in the food sector is the responsibility of the Government in general, and the Government of Central Halmahera Regency in particular. Various efforts have been made, among others, through the approach of implementing "local wisdom"...

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The business group which is become the target of this activity is a group of processing and selling enbal (cassava) in Ibra village, Southeast Maluku regency. This group has been producing for more than 10 years but there are still many shortage, especially in the...

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Seagrass Potential as Supporting Ecotourism in Sibul Island, Subdistrict North Oba, North Maluku Province

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Seagrass Ecotourism is a tourism activities based on the ecosystem of seagrass. Component of seagrass consist of vegetation and biota that associated with the seagrass. The purpose of this research is to understand the condition biophysics of seagrass (Types of...

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Suckermouth Catfish (*Pterygoplichthys pardalis*) In Wajo Regency, South Sulawesi Province: The Heavy Metal Content of Lead (Pb), Mercury (Hg) and Arsenic (As) (<https://ejournal.stipwunaraha.ac.id/AGRIKAN/article/view/398>)

Suckermouth catfish (*Pterygoplichthys pardalis*) is a type of foreign fish (South America) which is prohibited from entering Indonesia because it can endanger ecosystems and the aquatic environment by its invasive nature. The existence of janitor fish threatens the...

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Size Structure and Sex Ratio of Black Tip Reef Shark (*Carcharhinus melanopterus*) Landed in the TPI Paotere of Makassar City and TPI Beba of Takalar Regency, Province South Sulawesi **(<https://ejournal.stipwunaraha.ac.id/AGRIKAN/article/view/416>)**

Carcharhinus melanopterus in the southern waters of the Makassar Strait is caught with bottom longlines and bottom gill nets as bycatch, caught throughout the year without any management arrangements. The research objective was to obtain information about the size...

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Keamanan Pangan dan Mutu Produk Ikan Panggang Layang yang di Produksi Desa Dermasandi Tegal

(Food Safety and Quality Flying Grilled Fish of Produced in Dermasandi Village Tegal)

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Abstrak. Keamanan pangan dan mutu produk merupakan hal yang sangat penting diterapkan dalam pengolahan produk perikanan. Penelitian ini bertujuan untuk mengetahui keamanan pangan dan mutu produk ikan panggang layang yang diproduksi oleh desa Dermasandi. Ikan Panggang layang merupakan produk olahan tradisional yang sangat digemari oleh masyarakat karena memiliki tekstur dan aroma yang khas. Sampel ikan panggang layang dilakukan pengujian dilaboratorium Unit Pelaksana Teknis Daerah Pengujian dan Penerapan Mutu Produk Perikanan Cirebon. Hasil yang diperoleh yaitu parameter uji sensori dengan hasil 8 – 8,17, kadar air dengan hasil 67,51% - 68,11%, kadar lemak dengan hasil 0,45% - 1,41% , Angka Lempeng Total (ALT) atau Total Plate Count (TPC) dengan hasil 110.000 - 120.000 kol/g, dan Escherichia coli dengan hasil < 3 APM/g.

Abstract. Food safety and product quality are very important things applied in the processing of fishery products. This study aims to determine the food safety and quality of flying fish products produced by the village of Dermasandi. Flying fish is a traditional processed product that is very popular with the community because it has a distinctive texture and aroma. The sample of flying grilled fish was tested in the laboratory of the Regional Technical Implementation Unit for Testing and Application of Quality of Fishery Products in Cirebon. The results obtained are sensory test parameters with results 8 - 8.17, moisture content with results 67.51% - 68.11%, fat content with results 0.45% - 1.41%, Total Plate Count (TPC) with a yield of 110,000 - 120,000 kol/g, and Escherichia coli with a yield of < 3 APM/g.

I. PENDAHULUAN

Desa Dermasandi merupakan salah satu desa sentra pengolahan ikan yang ada di kabupaten Tegal. Desa dermasandi berada di ketinggian 32 meter diatas permukaan laut. Dermasandi dikenal sebagai sentra pengolahan ikan panggang. Produksi rata-rata perhari mencapai 1 ton.

Ikan panggang merupakan salah satu komoditas produk olahan tradisional yang memiliki prospek untuk dikembangkan. Hal tersebut didasari bahwa sumber pangan dari ikan masih menjadi sumber pangan yang utama masyarakat.

Berbagai penelitian terdahulu yang relevan mengenai mutu dan keamanan produk ikan panggang diantaranya, adalah studi bakteriologis ikan bakar yang dikonsumsi di komune Yamoussoukro, ibukota politik Cote d'Ivoire (David et al., 2012), pengaruh lama pembakaran dan jenis bahan bakar terhadap kualitas sensoris dan kadar benzo(a)piren sate daging kambing (Adiyastiti,

et.al, 2014), kajian mutu ikan cakalang (katsuwonus pelamis) asap terhadap nilai kadar air dan pH selama penyimpanan (Tumond et.al, 2017), mutu dan keamanan pangan produk ikan asap di kabupaten Bulukumba provinsi Sulawesi Selatan (Amir, et.al, 2018), hasil penilaian organoleptic dan histologi lele asap pada proses pre-cooking (Yuliastri, et.al, 2015), analisa tingkat keamanan ikan manyung (Arius thalassinus) asap yang diolah dengan metode pengasapan berbeda (Ghazali, et.al, 2014), Karakteristik sensori beberapa produk ikan asap khas daerah di Indonesia dengan menggunakan metode quantitative descriptive analysis (Pratama, et.al, 2012)

II. METODE PENELITIAN

Penelitian ini dilakukan pada bulan Juli sampai Agustus 2020. Metode sampling yang digunakan adalah purposive sampling dalam pengambilan sampling ikan panggang layang. Parameter mutu dan keamanan ikan panggang

layang yang dianalisis adalah sensori, kadar air, kadar lemak, Angka Lempeng Total (ALT) atau Total Plate Count (TPC), dan Escherichia coli. Parameter tersebut dianalisis di Unit Pelaksana Teknis Daerah (UPTD) Pengujian dan Penerapan Mutu Produk Perikanan Cirebon.

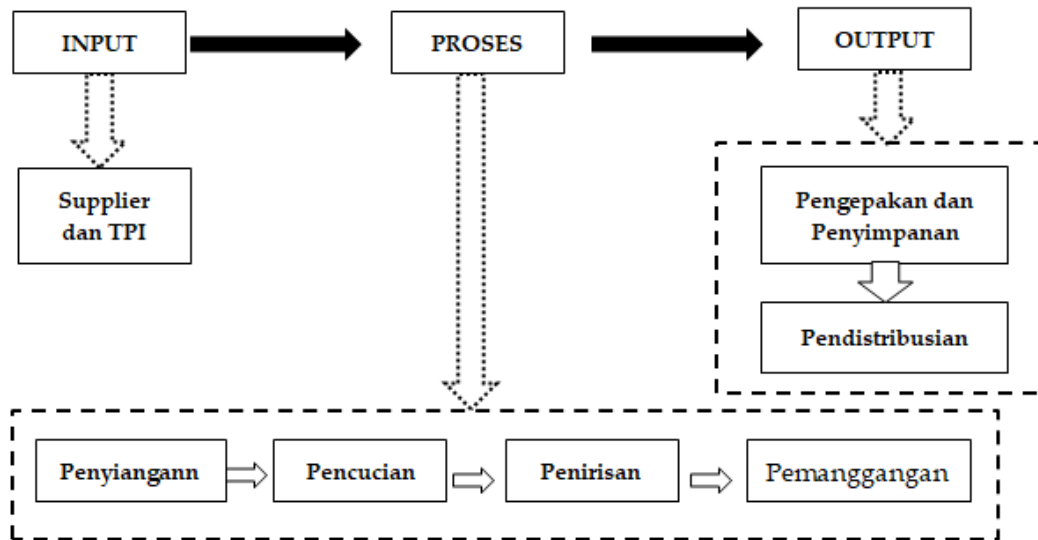
Pengujian sensori/organoleptic mengacu pada metode analisis SNI 2346:2015, kadar air dengan metode SNI 2354.2-2015, kadar lemak dengan metode SNI 2354.3-2017, ALT dengan

metode SNI 2332.3:2015, dan Escherichia coli dengan metode SNI 2332.1:2015.

III. HASIL DAN PEMBAHASAN

3.1. Alur Proses Ikan Panggang Layang

Ikan panggang yang diolah adalah jenis ikan layang yang diperoleh dari tempat pelelangan ikan di Tegal dalam bentuk beku. Adapun proses pengolahannya dapat dilihat pada Gambar 1.



Gambar 1. Alur Proses Pengolahan Ikan Panggang

Tahapan-tahapan dalam proses pengolahan ikan panggang adalah sebagai berikut :

1. Input, tahapan ini adalah tahapan penerimaan bahan baku yang diperoleh dari supplier dan melalui proses lelang di tempat pelelangan ikan (TPI).
2. Proses, tahapan ini terbagi menjadi 4 (empat) tahapan kegiatan dalam proses pengolahan ikan panggang yaitu :
 - a) Penyiangan, dalam tahapan ini dilakukan pembersihan ikan dan pembelahan atau pemiletan ikan yang bertujuan untuk menghilangkan kotoran dan isi perut.
 - b) Pencucian dilakukan untuk membuang kotoran yang masih menempel pada tubuh ikan dan sisa darah yang masih ada pada isi perut.
 - c) Selanjutnya dilanjutkan penirisan agar permukaan tubuh ikan kering.
 - d) Pemanggangan dilakukan sekitar 3-5 menit perekor diatas bara api yang menggunakan alat pemanggang dari kayu.

3. Output, merupakan tahapan terakhir dalam proses pengolahan ikan panggang.

- a) Setelah ikan matang ditata dalam keranjang bamboo, tidak dilakukan pengemasan satu persatu. Penyimpanan dilakukan dengan setelah seluruh ikan telah dilakukan pemanggangan. Penyimpanan selama 1 malam atau kurang lebih 14 jam dalam suhu beku.
- b) Pendistribusian dilakukan ke pasar-pasar tradisional yang ada di sekitar kabupaten Tegal, Kota Tegal dan Kabupaten Pemalang.

3.2. Uji Organoleptik/sensori Ikan Panggang Layang

Uji organoleptic dilakukan dengan parameter kenampakan, bau, rasa, tekstur, jamur dan lendir. Prosedur pengujian sensori sesuai dengan SNI 2346:2015 (Badan Standardisasi Nasional, 2015). Hasil pengujian sensori ikan panggang layang tertuang pada tabel 1 berikut.



Tabel 1. Hasil Uji Sensori Ikan Panggang Layang

Sampel	Kenampakan	Bau	Rasa	Tekstur	Jamur	Lendir
A	8	7	7	8	9	9
B	8	8	8	7	9	9
C	8	8	8	7	9	9

Dari tabel tersebut di atas menggambarkan bahwa ketiga sampel ikan panggang yang diuji memenuhi standar kelayakan untuk dikonsumsi. Setiap parameter uji sensori memenuhi standar analisis yaitu 7. Faktor yang mempengaruhi hasil dari uji sensori baik adalah bahan baku yang digunakan dan cara berproduksi yang baik dan benar.

3.3. Kadar Air

Air merupakan komposisi kimia yang terbanyak dalam tubuh ikan. Untuk berkembang biak mikroorganisme membutuhkan wadah yang terdapat dalam tubuh ikan yaitu air, sehingga salah satu tujuan pemanggangan adalah mengurangi kandungan air yang terdapat pada ikan (Swastawati, et.al, 2013). Kadar air ikan panggang layang dermasandi dapat dilihat pada tabel 2 dibawah ini.

Tabel 2. Hasil Uji Kadar Air Ikan Panggang Layang

Sampel	Hasil (%)	Standar Analisis (%)
A	67,51	Maks. 60
B	67,70	Maks. 60
C	68,11	Maks. 60

Dari ketiga sampel yang diuji kadar air yang terdapat pada ikan panggang layang melebihi standar maksimal yaitu 60 %. Menurut (Swastawati et al., 2013) nilai kadar air masih tinggi disebabkan oleh waktu pemanggangan yang relatife singkat dan suhu yang fluktuatif yang mengakibatkan proses penguapan air tidak stabil sehingga produk yang dihasilkan kadar air melebihi standar analisis.

3.5. Angka Lempeng Total (ALT)

Hasil analisa ALT terhadap ikan panggang layang dapat dilihat pada tabel tersebut dibawah ini.

Tabel 4. Hasil Uji ALT Ikan Panggang Layang

Sampel	Hasil (kol/g)
A	110.000
B	110.000
C	120.000

Dari seluruh sampel yang dianalisa menunjukkan bahwa produk ikan panggang layang belum sesuai standar yang dipersyaratkan untuk produk panggang yaitu 50000 koloni/gram. Hal ini mengacu ke SNI 7967:2014 tentang syarat dan mutu keamanan sidat panggang beku.

Tingginya ALT ikan panggang layang disebabkan oleh cara berproduksi yang belum baik oleh pengolah. Sanitasi dan hygiene yang belum diterapkan dengan baik dalam proses pengolahan ikan panggang.

3.4. Kadar Lemak

Faktor pendukung untuk menghasilkan rasa dan aroma ikan panggang adalah lemak sehingga bahan yang digunakan untuk menghasilkan ikan panggang layang yang memiliki aroma yang khas.

Tabel 3. Hasil Uji Kadar Lemak Ikan Panggang Layang

Sampel	Hasil (%)
A	0,45
B	1,36
C	1,41

Berdasarkan hasil pengujian dari ketiga sampel tersebut menunjukkan bahwa kadar lemak yang terkandung pada ikan panggang layang sesuai dengan yang dipersyaratkan untuk produk yang melalui proses penggunaan suhu panas yaitu maksimal 20 %.

3.6. Escherichia coli

Escherichia coli merupakan indikator kualitas air yang digunakan dalam pengolahan ikan (Amir et al., 2018). Hasil analisa uji Escherichia coli ikan panggang layang dermasandi dapat dilihat pada tabel 5 di bawah ini.



Tabel 5. Hasil Uji Escherichia Coli Ikan Panggang Layang

Sampel	Hasil (APM/g)
A	< 3
B	< 3
C	< 3

Dari ketiga sampel ikan panggang layang tersebut memenuhi standar keamanan dan mutu sesuai dengan SNI produk perikanan dalam hal ini produk panggang sidat beku yaitu SNI 7967:2014.

IV. PENUTUP

Keamanan dan mutu ikan panggang layang yang diproduksi Desa Dermasandi dengan parameter uji sensori dengan hasil 8 – 8,17, kadar air dengan hasil 67,51 - 68,11, kadar lemak dengan hasil 0,45 - 1,41 , Angka Lempeng Total (ALT) atau Total Plate Count (TPC) dengan hasil 110.000 - 120.000, dan Escherichia coli dengan hasil <3 APM/g. Dalam penelitian selanjutnya dapat dilakukan penelitian untuk setiap tahap alur proses pengolahan.

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