

ANNUAL SUSTAINABILITY REPORT

SEAFAST Center LPPM IPB

2021



**SEAFAST
CENTER**



PUSAT
UNGULRN
IPTEKS
PERGURUAN
TINGGI

ISO 9001
BUREAU VERITAS
Certification



SDGs in Research and Innovation

1. Penelitian : Prevalensi dan profiling cemaran *Salmonella* pada karkas ayam serta identifikasi titik kendali kritis di rantai proses sebagai upaya pengendaliannya

Research: Prevalence and profiling of *Salmonella* contamination in chicken carcasses and identification of critical control points in the process chain as an effort of control

Indonesia tercatat sebagai salah satu negara dengan kejadian endemik salmonellosis tertinggi di Asia setelah Cina dan India. Kontaminasi *Salmonella spp.* pada karkas ayam dapat terjadi akibat adanya kontaminasi sebelum ayam dipotong maupun sesudah ayam dipotong.

Manfaat dari penelitian ini adalah mengembangkan metode deteksi *Salmonella* pada karkas ayam yang mendukung program peningkatan kualitas pangan yang aman dan bergizi

Waktu : Februari-September 2021

Lokasi : SEAFAST Center dan Dept. Ilmu dan Teknologi Pangan

Capaian SDGs : 3, 12

Link : [https://doi.org/10.26656/fr.2017.5\(2\).429](https://doi.org/10.26656/fr.2017.5(2).429)

Indonesia is listed as one of the countries with the highest incidence of endemic salmonellosis in Asia after China and India. *Salmonella spp.* contamination in chicken carcasses can occur due to contamination before or after the chicken being cut.

The benefit of this research is to develop a method for detecting *Salmonella* in chicken carcasses that supports a safe and nutritious food quality improvement program

Time : February-September 2021

Location : SEAFAST Center and Dept. Food Science and Technology

SDGs Outcome: 3, 12

Link : [https://doi.org/10.26656/fr.2017.5\(2\).429](https://doi.org/10.26656/fr.2017.5(2).429)

Sensitivity of enrichment-PCR method for *Salmonella enterica* serovar Typhimurium and *Salmonella enterica* serovar Enteritidis analysis in chicken carcasses

¹Wulan, H.A., ^{1,2*}Nurjanah, S. and ^{1,2}Rahayu, W.P.

¹Department of Food Science and Technology, IPB University, Bogor, Indonesia

²SEAFAST Center, IPB University, Bogor, Indonesia

Article history:

Received: 5 August 2020

Received in revised form: 10 September 2020

Accepted: 9 November 2020

Available Online: 21

February 2021

Keywords:

Chicken carcass,

Enrichment,

PCR,

Salmonella spp.,

Sensitivity

DOI:

[https://doi.org/10.266569/2017.5\(2\)1429](https://doi.org/10.266569/2017.5(2)1429)

Abstract

Salmonella spp. is Gram negative-pathogenic bacteria that usually found as a contaminant in chicken carcasses. This study was aimed to increase the sensitivity of PCR enrichment step and apply the enrichment-PCR combination to detect *Salmonella* in chicken carcasses. In this study we used *Salmonella enterica* serovar Hadar, *Salmonella enterica* serovar Typhimurium and *Salmonella enterica* serovar Enteritidis with the target genes were *invA*, *STM4497*, and respectively. A total of 25 g of the chicken carcasses were artificially contaminated by approximately 0.96 and 3.33 MPN/mL for each serovar separately. Samples were incubated in pre-enrichment and enrichment media for 8 hrs prior to the DNA extraction. The pre-enrichment and enrichment media was Buffered Peptone Water and Rappaport-Vassiliadis-soya. The result showed that the target genes of *S. enterica* ser. Hadar, *S. enterica* ser. Typhimurium and *S. enterica* ser. Enteritidis were detected in chicken carcasses, indicated by the presence of DNA band with the size was 429 bp, 311 bp and 135 bp respectively. These result in line with analysis using ISO method and BLAST-comparison analysis of DNA amplicon sequences with GenBank references. Application of this method for *Salmonella* detection in chicken carcasses sold in the traditional market showed a higher prevalence than the previous result without enrichment. All samples ($n = 100$) from unsanitary practice sellers were positively contaminated by *Salmonella* spp. and also high prevalence for *S. enterica* ser. Typhimurium and *S. enterica* ser. Enteritidis. It can be concluded that enrichment is an important step to increase the sensitivity detection of PCR method.

1. Introduction

Salmonella spp. is facultative anaerobic bacteria, Gram-negative, and rod-shaped bacilli. This bacterium belongs to family Enterobacteriaceae (Kim *et al.*, 2006). More than 2600 serovars *Salmonella* spp. have been identified (Popoff *et al.*, 2003). *Salmonella* has been known as a foodborne pathogen and caused outbreaks in several countries. *Salmonella* infections occurred in America (Scallan *et al.*, 2011), China (Xiao *et al.*, 2015), Australia (Ford *et al.*, 2018), Canada (Morton *et al.*, 2019). *Salmonella enterica* serovar Typhimurium and *Salmonella enterica* serovar Enteritidis are the dominant contaminant serovars in chicken carcasses. Both serovars are reported being the main cause of salmonellosis in humans (Lee *et al.*, 2009).

Molecular detection is proposed to be an effective and reliable method to detect *Salmonella* spp. in this

research. The basic principle of the PCR method is to amplify the DNA fragment of target bacteria (Joshi and Deshpande, 2011). The PCR method has widely used to detect *Salmonella* in food (Wang *et al.*, 2018). The *invA* gene is responsible for the virulence of *Salmonella* spp. and can be found in all serovar *Salmonella* spp. (Shanmugasamy *et al.*, 2011). The STM gene encodes fimbrial biosynthesis, which found in *S. enterica* ser. Typhimurium, particularly (Clavijo *et al.*, 2006). Fimbrial in *S. enterica* ser. Typhimurium has a function for adhesion, attachment of bacteria to the target cell, and start the infection (Malorny *et al.*, 2003). The ProtE gene is 60 kb virulence gene and only found in *S. enterica* ser. Enteritidis (Malorny *et al.*, 2007).

Previous developed molecular detection has low sensitivity, so it needs to be combined with the enrichment techniques (Yosua, 2018). This study aimed to increase the sensitivity of *Salmonella* spp. detection

FULL PAPER

Contoh luaran penelitian : Jurnal Food Research
Example of research output : Food Research Journal

2. Sintesis Minyak Nabati Sehat Diasilgliserol (DAG) dari RBDP Olein secara Gliserolisis Enzimatis dan Penambahan Stanol untuk Menurunkan Kolesterol dan Trigliserida Darah

Synthesis of Healthy Vegetable Oil Diacylglycerol (DAG) from RBDP Olein by Enzymatic Glycerolysis and Addition of Stanols to Lower Blood Cholesterol and Triglycerides

Minyak makan komersial yang merupakan produk turunan dari minyak kelapa sawit umumnya memiliki struktur lemak dalam bentuk triasilgliserol (TAG), senyawa ini memiliki dampak yang kurang baik bagi tubuh seperti obesitas. Sementara itu, minyak dalam bentuk DAG (diasilgliserol) dapat berperan sebagai healthy oil karena minyak DAG tidak memberikan efek kegemukan bagi tubuh dan memiliki pengaruh yang baik bagi kesehatan tubuh.

Manfaat penelitian ini adalah memperoleh metode sintesis dan metode pemurnian yang tepat untuk mendapatkan minyak dengan presentase fraksi DAG tertinggi serta informasi mengenai sifat fisik dan kimianya.

Waktu : 2020-2022

Lokasi : Laboratorium SEAFAST Center

Capaian SDGs : 3, 9, 12

Link : -

Commercial edible oil which is a derivative product of palm oil generally has a structure in the form of triacylglycerol (TAG), this compound has an adverse effect on the body such as obesity. Meanwhile, oil in the form of DAG (diacylglycerol) can act as a healthy oil because DAG oil does not promote obesity and instead poses positive effects on human body.

The benefit of this research is obtaining synthesis and purification method that will generate highest DAG fraction percentage as well as the physical and chemical properties of the product.

Time : 2020-2022

Location : Laboratory of SEAFAST Center

SDGs outcome : 3, 9, 12

Link : -

**PEMURNIAN MINYAK DIASILGLISEROLL (DAG) DARI REFINED BLEACHED
DEODORIZED PALM OLEIN**

**PURIFICATION OF DIACYLGLYCEROL OIL (DAG) FROM REFINED BLEACHED
DEODORIZED PALM OLEIN**

Sari Apriliana^{1*}, Nur Wulandari², Puspo Edi Giriwono³.

¹⁾ Program Studi Magister Ilmu Pangan, Sekolah Pascasarjana, IPB University, Bogor

²⁾ Departemen Ilmu dan Teknologi Pangan, Fakultas Teknologi Pertanian, IPB University, Bogor

* Penulis Korespondensi: E-mail: sari_apriliana@apps.ipb.ac.id

ABSTRAK

Dalam industri lemak dan minyak di dunia sekarang ini produk yang sangat menarik ialah diasilglicerol (DAG). Klaim DAG sebagai minyak sehat meningkatkan minat masyarakat untuk mensubstitusi minyak masak komersial dengan minyak DAG, hal ini juga menarik minat peneliti untuk mencoba mensintesis DAG secara pendekatan kimia atau enzimatis dengan berbagai metode. DAG disintesis melalui modifikasi struktur lemak dan minyak konvensional. DAG keluar dalam tiga stereoisomer, namun DAG dengan bentuk sn-1,3-DAG menunjukkan potensi menekan penumpukan lemak tubuh dan menurunkan kadar triasilglicerol, kolesterol dan glukosa. Proses sintesis minyak DAG dengan enzimatis tentunya tidak dapat menghasilkan persentase DAG dalam jumlah yang tinggi secara langsung. Oleh karena itu diperlukan beberapa perlakuan untuk mendapatkan komposisi DAG yang lebih tinggi, salah satunya pemurnian dengan pelarut. Tujuan penelitian ini ialah untuk memberikan informasi tentang metode sintesis dan metode pemurnian yang tepat untuk mendapatkan minyak dengan presentase fraksi DAG tertinggi serta mengkaji sifat fisik dan kimia produk. Penelitian sintesis minyak DAG dari RBDP Olein menunjukkan fraksi DAG terbaik ialah produk dengan proses pemurnian dengan NaOH 10% ini memiliki karakteristik visual tekstur berminyak, berbau minyak, dan berwarna putih. Sifat fisikokimia lainnya dari produk ini antara lain kadar air 1.00%, bilangan peroksida 3.93 meq/kg, bilangan iod 54.68 g/100g, kadar asam lemak bebas 8.80%, titik leleh 33.6 °C.

Kata kunci: diasilglicerol, enzimatis, kolesterol, pemurnian, triasilglicerol

ABSTRACT

The fats and oils industry in the world a product which has a great interest is diacylglycerol (DAG). Diacylglycerol has been reported by several researchers give good effects on health. DAG has been a research topic that is of great interest due to its various functionalities in the lipid system beside health benefits. The claim of DAG as a healthy oil has increased people's interest to substitute commercial cooking oil with DAG oil, and this has also attracted researchers interest to try synthesize DAG with chemical approach or enzymatic approach by various methods. DAG is synthesized by modifying the structure of conventional fats and oils. DAG comes out in three stereoisomers, but DAG sn-1,3-DAG demonstrated to have potential in suppressing body fat accumulation and lowering triacylglycerol, cholesterol, and glucose level. DAG has been applied in various food products as emulsifier, cooking oil, and functional ingredients in various fat-based products. Substitution of DAG in food products not only give a good effect on health but also improve the sensory quality of these products, such as the use of DAG in bakery products. Even though it is claimed to be a healthy oil there are several drawbacks and safety risks from using DAG that occur by DAG products that are exposed to high temperature exposure which causes the formation of GE (glycidyl esters) and 3-MCPDE (3-monochloropropane-1,2-diol fatty acid esters) . This article aims to provide an overview of synthesis methods, health benefits, deficiencies, application of diacylglycerol (DAG) in the food system.

Keywords: diacylglycerol, cholesterol, enzymatic, purification triacylglycerol

Contoh luaran penelitian : Draft Jurnal Internasional

Example of research output : Draft of Internasional Journal

3. Proses Produksi Bersih Jahe Merah/ Clean production of red ginger drink

Proses basah pengolahan jahe merah selama ini digunakan untuk proses pengolahan minyak atsiri melalui penyulingan ampas jahe merah hasil pemanutan dan pengepresan. Filtrat hasil pengepresan jahe merah parut masih belum dioptimalkan pemanfaatannya. Filtrat ini dapat diolah untuk menghasilkan pati, konsentrat dan bubuk instan jahe merah yang bernali komersial. SEAFAST Center bekerja sama dengan PT Bintang Toedjoe mengembangkan teknologi pengolahan yang komprehensif untuk produksi berbagai produk jahe.

Manfaat penelitian ini adalah memperoleh teknologi pengolahan produk bersih jahe merah mulai dari penanganan jahe merah segar sampai dihasilkan beberapa produk dari jahe merah tersebut dengan kualitas produk yang baik dan memenuhi standar industri.

Waktu : 4 Agustus – 31 Desember 2021

Lokasi : SEAFAST Center, Pilot Plant, dan beberapa wilayah di Indonesia (Bogor, Trenggalek dan Purworejo)

Capaian SDGs : 3, 9, 11, 12

Link : -

The wet processing of red ginger has been used for the production of essential oils through distillation of red ginger dregs resulted from grating and pressing. The utilization of the filtrate from pressing of grated red ginger yet to be fully optimized. This filtrate can actually be processed to produce commercially valuable starch, concentrate and instant red ginger powder. SEAFAST Center in collaboration with PT Bintang Toedjoe develops comprehensive processing technologies for the production of various ginger products.

The benefit of this research is obtaining technology to process red ginger products starting from handling of fresh red ginger to production of different red ginger products with better quality standard.

Time : August 4th – December 31th, 2021

Location : SEAFAST Center, Pilot Plant, and some regions in Indonesia (Bogor, Trenggalek and Purworejo)

SDGs outcome : 3, 9, 12

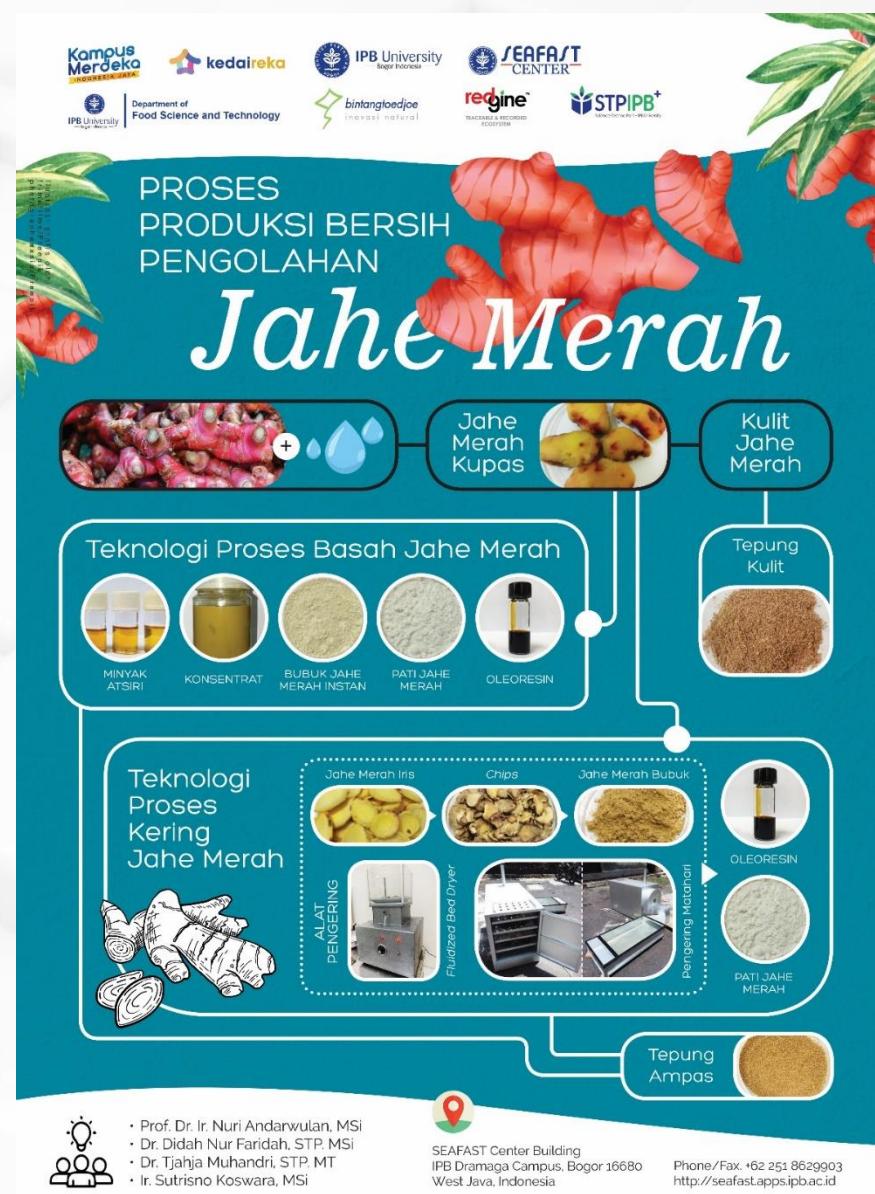
Link : -



Survei dan sampling di Trenggalek, Purworejo
survey & sampling in Trenggalek, Purworejo



Perbandingan jahe merah hasil usaha tani dan pengembangan SEAFAST Center
Comparison of red ginger from farmers and from SEAFAST Center



Poster “Proses Produksi Bersih Pengolahan Jahe Merah”
Poster “Clean production of red ginger drink”

1. Bimbingan Teknis Sanitasi Higiene Bagi Pengawas Keamanan Pangan Segar Asal Tumbuhan Hygiene Sanitation Technical Guidance for Food Safety Supervisors of Fresh Plant Origin

Pelaksanaan pengawasan dan pembinaan SPPB PSAT untuk UMK yang akan dilakukan oleh pengawas kabupaten/kota menghadapi tantangan minimnya penguasaan pengetahuan sanitasi hygiene. Minimnya pengetahuan sanitasi higiene pengawas disebabkan oleh latar belakang pendidikan yang tidak/kurang sesuai dan atau kurangnya pelatihan dan pengalaman terkait dengan penerapan sanitasi dan higiene.

Tujuan pelatihan ini adalah memberikan pemahaman dan praktek tentang sanitasi higiene yang diperlukan pengawas pangan segar Kabupaten/Kota dan meningkatkan kemampuan melakukan pengawasan dan pembinaan kepada UMK yang mendapatkan registrasi PSAT-PDUK.

Waktu : 18 Agustus 2021-17 September 2021

Lokasi : Online

Capaian SDGs : IPBSDG 2, IPBSDG 3, IPBSDG17, Learning Program, Partnership_Government

Link : <http://seafast.ipb.ac.id/bkp-kementan-ri-gandeng-seafast-center-lppm-ipb-university-cetak-pengawas-keamanan-pangan-segar-asal-tumbuhan/>

<http://seafast.ipb.ac.id/bimbingan-teknis-sanitasi-higiene-bagi-pengawas-keamanan-pangan-segar-asal-tumbuhan/>

The implementation of supervision and development of SPPB PSAT for MSEs which will be carried out by district/city supervisors faces the challenge of lack of mastery of sanitation and hygiene knowledge. The lack of knowledge on sanitation and hygiene of supervisors is caused by an inappropriate/less appropriate educational background and/or lack of training and experience related to the application of sanitation and hygiene.

The purpose of this training is to provide an understanding and practice of hygienic sanitation required by district/city fresh food supervisors and to improve the ability to supervise and provide guidance to MSEs that have obtained PSAT-PDUK registration.

Time : August 18th-September 17th, 2021

Location : Online

SDGs outcome : IPBSDG 2, IPBSDG 3, IPBSDG17, Learning Program,

Partnership_Government

Link : <http://seafast.ipb.ac.id/bkp-kementan-ri-gandeng-seafast-center-lppm-ipb-university-cetak-pengawas-keamanan-pangan-segar-asal-tumbuhan/>

<http://seafast.ipb.ac.id/bimbingan-teknis-sanitasi-higiene-bagi-pengawas-keamanan-pangan-segar-asal-tumbuhan/>

Recording...

Recording...

"Bimbingan Teknis Sanitasi Higienis bagi Pengawas Keamanan Pangan Segar Asal Tumbuhan"

TATA TERTIB BIMTEK ONLINE

- Peserta dapat mengakses sistem informasi secara dinamis melalui link yang telah dikirimkan melalui pesan singkat.
- Di dalam sistem informasi terdapat tampilan:

 - Mengakses halaman utama dengan tampilan beranda.
 - Mengakses halaman kelas dan tugas.
 - Mengakses halaman audio, foto dan video arahan.
 - Halaman arahan ini berisi petunjuk teknis tentang bagaimana cara mendownload dan menonton video arahan.
 - Halaman audio ini berisi petunjuk teknis tentang bagaimana cara mendownload dan memutar file audio arahan.
 - Halaman foto ini berisi petunjuk teknis tentang bagaimana cara mendownload dan menonton foto arahan.
 - Halaman video ini berisi petunjuk teknis tentang bagaimana cara mendownload dan menonton video arahan.

Recording...

Recording...

Participants: 93

Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions App

2. Pelatihan Teknologi Pengawetan Produk Pangan dengan Pemanasan dan Pembekuan Training on Food Product Preservation by Heating and Freezing

Permasalahan klasik yang dialami oleh IKM Pangan adalah umur simpan produk yang pendek. Pengawetan produk dapat dilakukan dengan tidak menggunakan pengawet, tetapi dengan teknologi yang tepat untuk mencegah, memperlambat, dan/atau menginaktivasi mikroba.

Manfaat kegiatan ini adalah melatih pegiat IKM Pangan dalam memperpanjang umur simpan produk pangan dengan cara pemanasan dan pembekuan.

Waktu : 2 Oktober 2021

Lokasi : Online

Capaian SDGs : 2, 3, 10, 12

Link :

<https://web.facebook.com/photo/?fbid=492659403068734&set=a.233157703364353>

The classic problem in small and medium food producers (SME) is short shelf life of the products. Food preservation can be done without any preservatives. Proper method of preservation can inhibit or prevent the growth of microbes, or even inactivate it to a certain safety level.

The benefit of this activity is to train SMEs in food sector to prolong the shelf life of their food products through heating and freezing.

Time : October 2nd, 2021

Location : Online

SDGs outcome : 2, 3, 10, 12

Link :

<https://web.facebook.com/photo/?fbid=492659403068734&set=a.233157703364353>

3. Pelatihan Pengembangan Produk Indonesia: Amplang, Opak, Kerupuk, dll Training on Indonesian Snack Production: *Amplang, Opak, Kerupuk, etc.*

"Kerupuk-kerupukan" merupakan produk tradisional Indonesia yang tidak lekang oleh waktu dan kondisi. Beberapa daerah memiliki produk krupuk yang khas, seperti amplang, kemplang/kerupuk ikan, klanting, opak dll. Konsumen selalu ada, selalu beli dan hal ini merupakan peluang bagi IKM Pangan untuk meningkatkan pendapatan.

Manfaat pelatihan ini adalah melatih IKM Pangan teknik pembuatan produk kerupuk dan titik-titik kritis yang mempengaruhi mutu kerupuk yang dihasilkan.

Waktu : 28 Agustus 2021

Lokasi : Online

Capaian SDGs : 2, 3, 10, 12

Link :

<https://web.facebook.com/photo/?fbid=482272875440720&set=a.233157703364353>

"Kerupuk" or crackers are traditional Indonesian product that is timeless and highly sought-after. Some regions have their own signature cracker products, such as amplang, kemplang/ fish crackers, klanting, opak etc. The high number of consumers serves as a great opportunity for Food SMEs to gain income from this products.

The benefit of this activity is to train Food SMEs about the manufacturing techniques and critical points that affect the quality of the crackers.

Time : August 28nd, 2021

Location : Online

SDGs outcome : 2, 3, 10, 12

Link :

<https://web.facebook.com/photo/?fbid=482272875440720&set=a.233157703364353>

4. Pelatihan Produk Fermentasi Susu di Rumah Sendiri Training on Making Dairy Fermentation Products

Produk berbasis susu yang difermentasi (misal yoghurt, keju dll) sangat digemari oleh masyarakat. Hampir semua produk ini diproduksi oleh industri besar. Industri rumah tangga dapat juga membuat produk fermentasi susu sendiri.

Manfaat kegiatan ini adalah melatih pegiat IKM Pangan dalam memproduksi produk fermentasi susu di skala rumah tangga.

Waktu : 11 September 2021

Lokasi : Online

Capaian SDGs : 2, 3, 10, 12

Link:

<https://web.facebook.com/photo/?fbid=486684929999514&7&set=a.233157703364353>

Dairy fermented products are highly consumed by the public. However, nearly of these products are produced by big industry. Home industry can also make their own dairy fermented products with the right techniques.

The benefit of this activity is to train Food SMEs to produce dairy fermented products.

Time : September 11th, 2021

Location : Online

SDGs outcome : 2, 3, 10, 12

Link :

<https://web.facebook.com/photo/?fbid=486684929999514&7&set=a.233157703364353>



1. Pelatihan **Better Process Control School (BPCS)**, SEAFAST Center - BPOM In House Training **Better Process Control School (BPCS)**

Better Process Control School (BPCS) ditujukan untuk pengendalian pangan yang mempunyai potensi bahaya tinggi (*high risk-non acidified*), maupun *acidified products*, yang semuanya diolah menggunakan proses termal. SEAFAST Center selaku partner school dari Grocery Manufacturer Association-Science and Education Foundation (GMA-SEF), memberikan pelatihan BPCS dan Pengukuran Kecukupan Proses Termal kepada 15 pengawas pangan (*food inspector*) dari Badan POM RI.

Manfaat kegiatan ini adalah meningkatnya pengetahuan dan keterampilan *food inspector* setara dengan petugas USFDA dalam melaksanakan pengawasan.

Waktu : 27 Spetember-1 Oktober 2021

Lokasi : Hotel Savero Style, Bogor

Capaian SDGs : 2, 3, 12, 17

Link : <https://seafast.ipb.ac.id/pelatihan-better-process-control-school-bpcs-oleh-seafast-center-dan-partner/>

The Better Process Control School (BPCS) is aimed at controlling food that has a high risk of non-acidified, as well as acidified products, all of which are processed using a thermal process. SEAFAST Center as a partner school of the Grocery Manufacturer Association-Science and Education Foundation (GMA-SEF), provided BPCS training and Measurement of Sufficiency of Thermal Processes to 15 food inspectors from the Indonesian National Food and Drug Administration (BPOM RI).

The benefit of this activity is the increased knowledge and skills of food inspectors on a par with USFDA officers in carrying out supervision.

Time : September 27th – October 1st, 2021

Location : Hotel Savero Style, Bogor

SDGs outcome : 2, 3, 12, 17

Link : <https://seafast.ipb.ac.id/pelatihan-better-process-control-school-bpcs-oleh-seafast-center-dan-partner/>



A screenshot of a video conference interface, likely Zoom, showing a grid of participant thumbnails. The thumbnails are arranged in several rows. Each thumbnail includes a small profile picture, the participant's name, and their affiliation. The names visible include: Liis Purwadi, SEAFAST Center; Sabrina Soraya_Waspred BPOM; Dianing Pratiwi_BPOM di Serang; Dianing Pratiwi_BPOM Jakarta; Garnieta; Aam Amnah_BPOM di Jakarta; Dias Indrasti_SEAFAST Center; Dinar Yogy; Reni Erlina_DitWasProd PO; Lokita POM Banyumas; Rahmat Hidayat; Nur Cahyawati_BBPO M Yogyakarta; Dwi Aruningtyas; Miranti Nirmala_Ditwasprod PO; Endah NW; Vannina Agustyan_BBPO M Surabaya; WasprodPO_Tyas; Achmad Faton - BPOM Batam; Didiik Purisito; Suhriyah_BBPO...; Benny Setiawan_WaspredPO; Nur Cahyawati_BBPO M Yogyakarta; Yuli Sukmayati; Endah NW; and Suhriyah_BBPO M Semarang. The interface shows various control buttons at the bottom, including "Start Video", "Share Screen", "Participants", and "End".

2. Pelatihan Kompetensi Pengembangan Kompetensi SDM Bidang Keamanan Pangan Jasa Boga, SEAFAST Center – STP Pariwisata NHI Bandung **Training on Food Safety of Catering Services**

Produsen pangan perlu melakukan upaya pencegahan kontaminasi pangan di setiap rantai pangan dengan menerapkan Sistem Manajemen Keamanan Pangan (SMKP). SMKP digambarkan sebagai piramida dengan penerapan sanitasi higiene sebagai prasyarat dasar dan HACCP (*Hazard Analyses Critical Control Point*) sebagai puncaknya. Untuk dapat menyusun dokumen HACCP perlu disiapkan personalia yang berkompeten dalam menyusun dokumen yang diperlukan.

Manfaat kegiatan ini adalah peserta mendapatkan ilmu mengenai penjaminan keamanan pangan berbasis HACCP yang dibuktikan dengan sertifikat kompetensi yang diakui secara nasional.

Waktu : 31 Mei – 4 Juni dan 7 – 11 Juni 2021

Lokasi : SEAFAST Center

Capaian SDGs : 3, 6, 12, 17

Link : <https://seafast.ipb.ac.id/seafast-center-lppm-ipb-latih-kompetensi-haccp-jasa-boga/>

Food producers need to make efforts to prevent food contamination at each food chain level by implementing a Food Safety Management System (FSMS). FSMS is described as a pyramid with the application of hygienic sanitation as a basic prerequisite and HACCP (*Hazard Analysis Critical Control Point*) as the culmination. To be able to develop HACCP documents, it is necessary to improve the competence of the personnel in that area.

The benefit of this activity is that participants gain knowledge about HACCP-based food safety management system proven by a nationally recognized certificate of competence.

Time : May 31–June 4 and June 7–11, 2021

Location : SEAFAST Center

SDGs outcome : 3, 6, 12, 17

Link : <https://seafast.ipb.ac.id/seafast-center-lppm-ipb-latih-kompetensi-haccp-jasa-boga/>



3. Penelitian challenge test for custard cream product, SEAFAST Center – PT Sonton Food Indonesia

Research about challenge test for custard cream product

Pangan olahan berasam rendah yang dikemas secara hermetis dan disimpan di suhu ruang harus dapat dibuktikan memiliki kondisi yang dapat menghambat pertumbuhan *C. botulinum*. Penelitian ini bekerja sama dengan PT Sonton Food Indonesia untuk menunjukkan bahwa persyaratan keamanan pangan tersebut terpenuhi melalui kegiatan *challenge test* menggunakan bakteri tersebut atau penggantinya (*surrogate*).

Manfaat kegiatan ini adalah mendapatkan protokol uji penghambatan pertumbuhan patogen *C. botulinum* pada produk custard cream melalui challenge test dengan menggunakan bakteri penggantinya.

Waktu : Januari-Desember 2021

Lokasi : Laboratorium SEAFAST Center

Capaian SDGs : 3, 9, 12, 17

Link : -

Processed low-acid foods that are hermetically packaged and stored at room temperature must be proven to have conditions that can inhibit the growth of *C. botulinum*. This study collaborates with PT Sonton Food Indonesia to demonstrate that these food safety requirements are met through a challenge test activity using these bacteria or their substitutes (*surrogate*).

The benefit of this activity is to obtain a test protocol for the inhibition of the growth of pathogenic *C. botulinum* on custard cream products through a challenge test using substitute bacteria.

Time : Jan-Dec 2021

Location : Lab of SEAFAST Center

SDGs outcome : 3, 9, 12, 17

Link : -

4. Pelatihan bagi Industri Kecil Menengah Pangan: “Produksi Pangan Olahan yang Sehat, Bermutu, dan Menguntungkan dengan Minyak Sawit” “Production of Healthy, Quality, and Profitable Processed Food with Palm Oil”

Minyak sawit dan produk turunannya tidak dapat dilepaskan dari konsumsi pangan sehari-hari masyarakat Indonesia, dengan aplikasi yang sangat luas. Berbagai informasi terkait issue kesehatan minyak sawit telah beredar di masyarakat. Munculnya trend kampanye negatif sawit melalui issue “no palm oil labelling”.

Tujuan kegiatan ini adalah memberikan informasi kepada masyarakat mengenai peranan minyak sawit dalam produk pangan dan dampaknya terhadap kesehatan, serta kaitannya dengan berkembangnya trend yang salah mengenai “no palm oil labelling”; melalui kegiatan interaktif dengan format yang disesuaikan dengan audience atau sasaran.

Waktu : 13 November 2021

Lokasi : Online

Capaian SDGs : IPBSDG 17 , IPBSDG 2 , IPBSDG3 , Learning Programs ,

Partnership_Private

Link : <http://seafast.ipb.ac.id/advokasi-sawit-indonesia-oleh-seafast-center-ipbm-ipb-dan-gapki-melalui-program-pelatihan-bagi-industri-kecil-menengah-pangan/>

<https://ipb.ac.id/news/index/2021/11/seafast-center-ipb-university-berbagi-pengetahuan-keunggulan-dan-produk-olahan-minyak-sawit-kepada-umkm/cef0ebf2ddcd1ee4c34110f17f9f2183>

<https://kumparan.com/news-release-ipb/seafast-center-ipb-berbagi-pengetahuan-produk-olahan-minyak-sawit-kepada-umkm-1ww20uCXMNn>

Palm oil and its derivative products cannot be separated from the daily food consumption of the Indonesian people, with very wide applications. Various information related to palm oil health issues have circulated in the community. The emergence of a negative palm oil campaign trend through the issue of "no palm oil labeling".

The purpose of this activity is to provide information to the public about the role of palm oil in food products and its impact on health, as well as its relation to the development of a false trend regarding “no palm oil labeling”; through interactive activities with a format that is tailored to the audience or target.

Time : November 13th 2021

Location : Online

SDGs outcome : IPBSDG 17 , IPBSDG 2 , IPBSDG3 , Learning Programs ,

Partnership_Private

Link : <http://seafast.ipb.ac.id/advokasi-sawit-indonesia-oleh-seafast-center-ipbm-ipb-dan-gapki-melalui-program-pelatihan-bagi-industri-kecil-menengah-pangan/>

<https://ipb.ac.id/news/index/2021/11/seafast-center-ipb-university-berbagi-pengetahuan-keunggulan-dan-produk-olahan-minyak-sawit-kepada-umkm/cef0ebf2ddcd1ee4c34110f17f9f2183>

<https://kumparan.com/news-release-ipb/seafast-center-ipb-berbagi-pengetahuan-produk-olahan-minyak-sawit-kepada-umkm-1ww20uCXMNn>

Pelatihan bagi Industri Kecil Menengah Pangan

“Minyak Sawit: Peluang Bisnis untuk Produk Pangan Olahan”

Sabtu, 13 November 2021 || 09.00-12.00 WIB



Sambutan dan Pembukaan
Dr. Puspo Edi Giriwono, STP.,MAGR
(Kepala SEAFAST Center LPPM; Departemen ITP,
Fateta IPB; IPB University)



Dr. Tjahja Muhandri, S.TP, MT
(Ketua Forum Coaching Clinic IKM Pangan;
Departemen ITP, Fateta IPB; SEAFAST Center LPPM,
IPB University)

Pengembangan Produk Pangan Olahan
yang Menggunakan Ingridien Minyak Sawit



Prof. Dr. Ir. Nuri Andarwulan, M.Si
(Departemen ITP, Fateta IPB;
SEAFAST Center LPPM, IPB University)
Karakteristik Minyak Sawit dan Pengaruhnya
terhadap Mutu dan Keamanan Produk Pangan Olahan



Meraih Untung dari Bisnis yang Menggunakan Minyak Sawit



Dhita Sari, STP., MTPn
(IKM “INI DONAT”)



Budhi Sriwahyuni
(Khumayra Food-
IKM Keripik Pisang dan
Kacang Mete)



Moderator
Dr. Dias Indrasti, STP., MSc
(Departemen ITP, Fateta IPB;
SEAFAST Center LPPM, IPB University)



SEAFAST
CENTER



Bekerjasama dengan:



<https://ipb.link/pim-sea-ms21> (GRATIS)



seafast@apps.ipb.ac.id



+62 812-8120-216 (Meidi) +62 813-8222-4045 (Yuli)



5. Talk Show “Memilih Minyak dan Lemak yang Melezatkan Makanan serta Baik untuk Kesehatan” Talkshow “Choosing Fats and Oils that Taste Food and Good for Health”

Kegiatan bincang-bincang atau talk show dengan mengangkat topik “Memilih Minyak dan Lemak yang Melezatkan Makanan serta Baik untuk Kesehatan” ini ditujukan bagi kalangan masyarakat umum pengguna produk minyak dan lemak, terutama dari kalangan pedagang pangan olahan hasil penggorengan, pengusaha jasa boga skala rumah tangga, serta para ibu rumah tangga.

Acara talk show tersebut bertujuan untuk terus memupuk kecintaan dan kebanggaan produsen dan konsumen pengguna minyak sawit terhadap komoditas sawit hasil dalam negeri. Hal ini membantu membentuk mindset para produsen, konsumen dan pengguna minyak sawit di masyarakat umum, bahwa minyak sawit merupakan minyak nabati yang sama-sama menyehatkan seperti minyak nabati lainnya, dan bahkan memiliki aplikasi yang lebih tepat untuk penggunaan produk pangan olahan tertentu.

Waktu : 11 Desember 2021

Lokasi : Hybrid

Capaian SDGs : IPBSDG 17, IPBSDG 2, IPBSDG 3, Learning Program, Partnership_Government

Link : <https://ipb.ac.id/news/index/2021/12/seafast-ipb-university-gelar-talkshow-bahas-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat/f5c97d9d860939deaff789ebd73be0b0>

<https://sawitindonesia.com/seafast-ipb-university-gelar-talkshow-bahas-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat/>

<https://kumparan.com/news-release-ipb/seafast-ipb-gelar-talkshow-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat-1x74yrUcG8p>

<https://wartaekonomi.co.id/read380595/peran-minyak-sawit-dalam-menambah-cita-rasa-makanan>

<https://www.youtube.com/watch?v=w-sr7s24z0U>

This talk show with the topic "Choosing Oils and Fats that are Delicious in Food and Good for Health" is aimed at the general public who use oil and fat products, especially from traders of fried processed food, entrepreneurs of household scale catering services., as well as housewives.

The talk show aims to continue to foster the love and pride of producers and consumers of palm oil users towards domestically produced palm commodities. This helps shape the mindset of producers, consumers and users of palm oil in general, that palm oil is a vegetable oil that is equally healthy as other vegetable oils, and even has more appropriate applications for the use of certain processed food products.

Time : December 11th, 2021

Location : Online

SDGs outcome : IPBSDG 17, IPBSDG 2, IPBSDG 3, Learning Program, Partnership_Government

Link : <https://ipb.ac.id/news/index/2021/12/seafast-ipb-university-gelar-talkshow-bahas-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat/f5c97d9d860939deaff789ebd73be0b0>

<https://sawitindonesia.com/seafast-ipb-university-gelar-talkshow-bahas-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat/>

<https://kumparan.com/news-release-ipb/seafast-ipb-gelar-talkshow-konsumsi-minyak-kelapa-sawit-yang-lezat-dan-sehat-1x74yrUcG8p>

<https://wartaekonomi.co.id/read380595/peran-minyak-sawit-dalam-menambah-cita-rasa-makanan>

<https://www.youtube.com/watch?v=w-sr7s24z0U>

Talk Show

"Memilih Minyak dan Lemak yang Melezatkan Makanan serta Baik untuk Kesehatan"

Sabtu, 11 Desember 2021 || 09.00-12.00 WIB

Sambutan & Pembukaan

Retna Widayawati, SP
(Ketua Agrianita IPB University)

Prof. Dr. Slamet Budijanto, M.Agr
(Dekan Fateta, Departemen ITP, Fateta; IPB University)

Ir. Siti Nurianty, M.M
(Ketua Agrianita Fateta; IPB University)

Narasumber

Dr.-Ing. Dase Hunaefi, STP., M.Food.ST
(Departemen ITP, Fateta IPB; SEAFAST Center, LPPM, IPB University)

Minyak Sawit sebagai Ingredien Pangan Olahan yang Melezatkan

Moderator
Indri Indrawan, STP., MSI
(Universitas Trilogi)

SEAFAST-HIMITEPA COOKING VIDEO COMPETITION
LOMBA VIDEO MEMASAK SAJIAN DENGAN SAWIT
"Healthy and Tasty Oil Palm-Based Food"
SPONSORED BY: GAPIK

Pendaftaran: <https://ipb.link/sawit-cooking>
Instagram: @himitepoipb
Hadiah uang tunai jutaan rupiah bagi pemenang video terbaik & likes terbanyak

Zoom | WhatsApp: +62 812-8120-216 (Meidi)

