

DAFTAR PUSTAKA

- Achmad; E. N. Herliyana; I. Z. Siregar dan O. Permana. (2011). The morphological and genetic characteristics of the oyster mushroom. (*Pleurotus* sp.). *Jurnal Hort.* 21 (3):225-231.
- Alemawor F, Dzogbefia VP, Oddoye EOK, Oldham JH (2009) The influence of *Pleurotus ostreatus* fermentation on cocoa pod husk composition: the effects of fermentation duration and Mn²⁺ supplementation on the fermentation process. *J Bioteknologi.* 8:1950-1958. <https://doi.org/10.4314/ajb.v8i9.60454>
- Alqurashi AS, Al Masoudi LM, Hamdi H, Abu Zaid A (2022) Chemical Composition and Antioxidant, ANTiviral, Antifungal, Antibacterial and Anticancer Potentials of *Opuntia ficus-indica* Seed Oil. 27:5453. <https://doi.org/10.3390/molecules27175453>
- Amrullah, A. 2020. An added value analysis of Pulu Mandoti rice agricultural commodities at farmers level. *IOP Conference Series: Earth and Environmental science.* 486 012040 doi:10.1088/1755-1315/486/1/01200.
- Apostolidis E, Kwon YI, Shetty K (2007) The potential inhibition of formulations, fruits, and cheese enriched with mushrooms on key enzymes related to type 2 diabetes and hypertension. *Food Science Innovations Emerging Technology.* 8:46-54. <https://doi.org/10.1016/j.ifset.2006.06.001>
- Arifin, A, S., Yuliana, N, D., and Rafi, M (2019) *Antioxidant Activity of Pigmented Rice and Its Impact on Health.* Institut Pertanian Bogor: Bogor.
- Arwansyah A, Arif AR, Ramli I, Hasrianti H, Kurniawan I, Ambarsari L, Sumaryada TI, Taiyeb M (2022) Investigation of active compounds of *Brucea javanica* in treating hypertension using a network pharmacology-based analysis combined with homology modeling, molecular docking and molecular dynamics simulation. *Chemistry Select.* 7:e202102801. doi:10.1002/slct.202102801.
- Arwansyah A, Aris RA, Ramli I, Kurniawan I, Sukarti S, Nur Alam M, Illing I, Farid Lewa A, Manguntungi B (2021) Molecular modelling on SARS-CoV-2 papain-like protease: an integrated study with homology modelling, molecular docking, and molecular dynamics simulations. *SAR QSAR Environ Res.* 32:699-718. doi:10.1080/1062936X.2021.196060.
- Azis, A., Izzati, M., Biologi, S. H.-J. A., & 2015, undefined. (2015). The antioxidant tritional value of several types of rice and millet as functional nts in Indonesia. *Ejournal3.Undip.ac.Id*, 4(1), 45–61. 3.undip.ac.id/index.php/biologi/article/view/19400.
-), Han J, Yang X, Li H, Wang S, Wen H, Li S, Liu H (2013) ioactive components in rice fermented with edible mushroom *gi.* 4:96-102. <https://doi.org/10.1080/21501203.2013.816386>



- BALITBANGTAN. 2015. *Kandungan Antioksidan Beras Merah, Baik untuk Tubuh*. Badan Penelitian dan Pengembangan Pertanian: Jakarta Selatan.
- Bello M, Oluwamukomi MO, Enujiugha VN (2017) Anti-diabetic activity of three species of oyster mushrooms. *Food Science Technology*. 18:247-254
- BPTP. 2015. *Teknologi Budidaya Jamur Tiram Putih (Pleurotus ostreatus)*. BPTP Balibangtan: Jambi.
- Bragg, L., & Tyson, G. W. (2014). Metagenomics using next-generation sequencing. In *Environmental microbiology* (pp. 183-201). Humana Press, Totowa, NJ.
- B Mukesh, K Rakesh. Molecular docking: a review. *IJRAP*. 2011; 2: 1746-1751
- Daniel, R. (2005). The metagenomics of soil. *Nature Reviews Microbiology*, 3(6), 470-478.
- Deepalakshmi, K., and Mirunalini, S. 2014. *Pleurotus ostreatus*: an oyster mushroom with nutritional and medicinal properties. *Journal Biochem Tech*. Vol. 5 (2): 718-726.
- Djarajah, N, M., and Abbas, S, D. 2001. *Jamur Tiram*. Penerbit Kanisius: Yogyakarta.
- Egamberdieva, D., Shrivastava, S., & Varma, A. (Eds.). (2015). Plant-growth-promoting rhizobacteria (PGPR) and medicinal plants (pp. 287-303). Cham: *Springer International Publishing*.
- Fernandes Â, Barros L, Martins A, Herbert P, Ferreira IC (2015) Nutritional characterisation of *Pleurotus ostreatus* (Jacq. ex Fr.) P. Kumm. produced using paper scraps as substrate. *Food Chem*. 15:396-400. <https://doi.org/10.1016/j.foodchem.2014.08.027>
- Fidien, K., A., et al. 2021. Diversity Analysis, Identification, and Bioprospecting of Lactic Acid Bacteria (LAB) Isolated From Sumbawa Horse Milk. *Biodiversity*. Vol. 22(6): 3333-3340. DOI: 10.13057/biodiv/d220639.
- Finirsa, M, A., Warsidah, Sofiana, M, S J., and Risiko. 2022. Physicochemical Characteristics of Analogue Rice from the Combination of Seaweeds *Eucheuma Cottonii*, Mocaf And Sago. *Jorunal Oseanologia*. Vol. 1 (2). e-ISSN: 2830-7771.
- Fitriani, V., Setiaboma, W., and Permana, L. 2021. The Characterization of Physical Properties of Broken Rice Cereal Flakes with the Addition of *Jurnal Teknologi Industri*. Vol. 15(2).
- Id Ziska, L, H. 2019. Rice: Importance for Global Nutrition. *Nutritional Science and Vitaminology*. ISSN-L: 0301-4800.



Ghorbani A (2017) Mechanisms of antidiabetic effects of flavonoid rutin. *Biomed Pharmacother.* 96:305–312. <https://doi.org/10.1016/j.biopha.2017.10.001>

Gogavekar SS, Rokade SA, Ranveer RC, Ghosh JS, Kalyani DC, Sahoo AK (2014) Important nutritional constituents, flavour components, antioxidant and antibacterial properties of *Pleurotus sajor-caju*. *J Food Sci. Technol.* 51:1483-1491. <https://doi.org/10.1007/s13197-012-0656-5>

Gupta A, Sharma S, Saha S, Walia S (2013) Yield and nutritional content of *Pleurotus sajor caju* on wheat straw supplemented with raw and detoxified mahua cake. *Food Chem.* 141:4231-9. <https://doi.org/10.1016/j.foodchem.2013.06.126>

Hakim, et al., 2018. Metabolit Profiling Bagian Akar, Batang, Daun, dan Biji *Helianthus annuus* L. menggunakan ULC-MS. *Media Pharmaceutica Indonesiana*. Vo. 2(2): 62-81.

Halil, W., Yuliarsih, E, T., Yusmasari, Y., and Idaryani, I. 2021. The Response of Farmers to The VUP Farming Application of Inpari 24 Rice Technology in Pangkep Regency. *Journal Agrisistem*. Vol. 17 (3).

Hanifah, Nur, et al., 2016. Strategi Pengembangan Usaha Beras Hitam Organik (Studi Kasus di Kelompok Tani Gemah Ripah Kecamatan Karangpandan Kabupaten Karanganyar) Program Studi Agribisnis Fakultas Pertanian, Universitas Sebelas Maret Surakarta Jl . Ir . Sutami No . 36 A Kentinga. *Agrista*, 4(3), 181–191.

Hasmah, 2020. Makanan Tradisional Pulu Mandoti di Enrekang. *Walasuji: Jurnal Sejarah dan Budaya*. Vol. 11 (1): 171-181.

Hoffmann, P., & Stroobant, V. 2013. *Mass Spectrometry: Principles and Applications* (Edisi ke-3). John Wiley & Sons

Hugenholtz, P., & Tyson, G. W. 2008. Metagenomics. *Nature*, 455(7212), 481-483.

Ibrahim, R. 2012. Nutritional contents and medicinal properties of oyster mushroom (*Pleurotus* spp): A review. *Australian Journal of Basic and Applied Sciences*, 6(6), 95–98.

Ifadah, R.A., Wiratara, P.R.W., Afgani, C.A. 2021. Ulasan Ilmiah: Antosianin dan Manfaatnya untuk Kesehatan. *Jurnal Pengolahan Teknologi Pertanian*. Vol. 2(2)



(2008) Recommendations for evaluation of computational *Comput Aided Mol Des* 22:133–139. doi:10.1007/s10822-008-

- Jochum, T., Hayes, M., & Schramm, K. W. (2017). *Advances in Environmental Forensics: Emerging Topics in Environmental Health and Pollution Science*. Springer.
- John, E. B. M., Douglas, and Bennett's. 2020. *Other Gram-Negative and Gram-Variable Bacilli*. Encyclopedia of Analytical Science (Second Edition).
- Juanssilifero, A. B., Kahar, P., Amza, R. L., Sudesh, Y. K., Ogino, C., Prasetya, B < Kondo A. 2018. Lipid production by *Lipomyces starkeyi* using sap squeezed from felled old oil palm trunks. *Journal of Biosciences and Bioengineering*. Vol. 127(6): 726-731. <https://doi.org/10.1016/j.jbiosc.2018.12.002>,
- Karnila, R. 2015. *Biokimia*. Riau: Universitas Negeri Riau.
- Karim, A. 2020. Endemic Rice Pulu' Mandoti Supports the Economy and Food Security at Salukanan Community During Covid-19 Global Pandemic Crisis. *International Journal of Innovative Science and Research Technology*. Vol. 5 (9): 793-796.
- Karim, A., Junaidin A., Syukur, A. 2020. Beras Lokal Pulu' Mandoti Penopang Ekonomi Dan Ketahanan Pangan Masyarakat Desa Salukanan di Tengah Crisis Pandemic Global 'Covid-19'.
- Khan, M, A. 2010. Nutritional and composition and Hypocholesterolemic effect of mushroom: *Pleurotus sajor-caju* and *Pleurotus florida*: LAP Lambert Academic publishing GmbH & co. KG: Saarbrücken, Germany 1-11.
- Koebanu, W., Hendrik, C, W., and Refli. 2022. Identification of Macroscopic Fungi in Hauno Benak Protected Forest, Kolbano District, South Central Timor Regency. *Journal Science of Biodiversity*. Vol, 3 (1). e-ISSN: 2829-7385.
- Kolb P, Irwin JJ (2009) Docking screens: right for the right reasons? *Curr Top Med Chem* 9:755–770.
- Liu, J., Wei, P., He, Q., Chen, S., Gao, J., Liu, B., ... & Zheng, X. (2017). Fatty acid profile of rice (*Oryza sativa* L.) bran and antioxidant activity of its extracts. *Journal of Food Science and Technology*, 54(2), 324–332.
- Maulana, R. 2012. Protein content of oyster mushrooms (*Pleurotus spp*). *Jurnal Pengolahan Hasil Perikanan Indonesia*, 15(2), 165–169.
- Maslakhah, F. N., Mutiah, R., Hakim, A., Aprinda, R., & Suryadinata, A. 2019. Filing Bagian Akar, Batang, Daun, dan Biji *Helianthus annuus* L. Instrumen UPLC-MS. *MPI (Media Pharmaceutica)* 2(2), 64–81. <https://doi.org/10.24123/mpi.v2i2.1361>.
- Jannes, E., Latunra, A, I., and Paeolangan, N. 2013. Sifat Fisikokimia Beras Merah pada Beberapa Sentra Produksi Sulawesi Selatan. Makassar: Departemen Biologi, Fakultas Ilmu Pengetahuan Alam, Universitas Hasanuddin.



- Mishra, V., Tomar, S., Yadav, P., and Vishwakarma, S. 2022. Elemental Analysis, Phytochemical Screening and Evaluation of Antioxidant, Antibacterial and Anticancer Activity of *Pleurotus ostreatus* through In Vitro and In Silico Approaches. *Metabolites*, 12(9). <https://doi.org/10.3390/metabo12090821>.
- Munarko, H., Slamet, B., Azis, S., Feri, K. 2021. The γ -aminobutyric acid (GABA) content and physicochemical characteristics of brown rice sprouted with different varieties and germination methods. *Jurnal IPB Scientific Repository*.
- Muthayya, S., Sugimoto, J. S., Montgomery, S., and Maberly, G. F. 2014. An Overview of Global Rice Production, Supply, Trade, and Consumption. *Annals of The New York Academy of Science*. DOI: 10.1111/nyas.12540.
- Morris, G.M., Lim-Wilby, M. 2008. Molecular Docking. In: Kukol, A. (eds) *Molecular Modeling of Proteins*. Methods Molecular Biology. vol 443. Humana Press. https://doi.org/10.1007/978-1-59745-177-2_19
- Nacha, J., Soodpakdee, K., and Chamyuang, S. 2023. Nutritional Improvement of Germinated Riceberry Rice (*Oryza sativa*) Cultivated with *Pleurotus ostreatus* Mycelium. *Trends in Sciences*. <https://doi.org/10.48048/tis.2023.5574>
- Poosri, S., Thilavech, T., Pasukamonset, P., Suparpprom, C., & Adisakwattana, S. (2019). Studies on Riceberry rice (*Oryza sativa* L.) extract on the key steps related to carbohydrate and lipid digestion and absorption: A new source of natural bioactive substances. *NFS Journal*, 17(August), 17–23. <https://doi.org/10.1016/j.nfs.2019.10.002>.
- Rathna PTS, Eliazer Nelson AR, Ravichandran K, Antony U (2019) Nutritional and functional properties of South Indian colored rice varieties: A review. *Journal of Ethn Foods*. 6:1-11. <https://doi.org/10.1186/s42779-019-0017-3>
- Ravichanthiran K, Ma ZF, Zhang H, Cao Y, Wang CW, Muhammad S, Aglago EK, Zhang Y, Jin Y, Pan B (2018) Phytochemical Profile of Red Rice and Its Nutrigenomic Implications. *Antioxidants (Basel)*. 7:71. <https://doi.org/10.3390/antiox7060071>
- Reis FS, Martins A, Vasconcelos MH, Morales P, Ferreira ICFR (2017) Functional Foods Based on Extracts or Compounds Derived from Mushrooms. *Food Science & Technology*. 66:48-62. <https://doi.org/10.1016/j.tifs.2017.05.010>
- Sánchez, C. 2010. Cultivation of *Pleurotus ostreatus* and other edible mushrooms. *Appl Microbiol Biotechnol* 85, 1321–1337. <https://doi.org/10.1007/s00253->



raj KK, Salauddin M, Pati S, Chakraborty R. (2022). Characterization, Antioxidant, Anti-inflammatory, Anti-diabetic Molecular Docking, Pharmacokinetic Profiling, and Network Analysis of the Major Phytoconstituents of Raw and Differently *Curcuma indica* (Himsagar cultivar): an In Vitro and In Silico

- Investigations. *Appl Biochem Biotechnol* 194, 950–987. Doi: 10.1007/s12010-021-03669-8.
- Shnyreva, A, A., Elena, Y, K., Artem, V, B., Alla, V, S. 2017. Solid-State Cultivation of Edible Oyster Mushrooms, *Pleurotus* sp. Under Laboratory Conditions. *Advance in Microbiology*. 7. 125.
- Sleator, R. D., Shortall, C., & Hill, C. (2008). Metagenomics. *Letters in applied microbiology*, 47(5), 361-366.
- Sumarsih. 2015. *Bisnis Jamur Tiram Edisi Revisi*. Jakarta: Penebar Swadaya.
- Sun L, Zhang Z, Xin G, Sun B, Bao X, Wei Y, Zhao X, Xu H (2020) Advancements in the umami taste and aroma of edible mushrooms. *Trends in Food Science & Technology*. 96:176-187. <https://doi.org/10.1016/j.tifs.2019.12.018>.
- Suriani. 2015. *Analisis Proksimat pada Beras Ketan Varietas Putih (Oryza sativa glutinosa)*. Makassar: Jurusan Kimia, Fakultas Sains dan Teknologi, UIN Alauddin Makassar.
- Suryanti, V., Riyatun., Suharyana., Sutarno., Saputra, O, A. 2020. Antioxidant activity and compound constituents of gamma-irradiated black rice (*Oryza sativa* L.) var. Cempo Ireng indigenous of Indonesia. *Biodiversitas*. Vol. 21(9): 4205-4212. Doi: 10.13057/biodiv/d210935.
- Sussi, A., Suharyono, A, S., and Nopena, F. 2016. The Influence of White Oyster Mushroom (*Pleurotus oestreatus*) Formulation and Tapioca to Physical, Organoleptic, and Chemical Characteristics of Cracker. *Jurnal Penelitian Pertanian Terapan*. Vol. 16(3): 163-173. ISSN 1410-5020.
- Soodpakdee, K., Nacha, J., Rattanachart, N., Owatworakit, A., & Chamyuang, S. (2022). Fermentation With *Pleurotus Ostreatus* Enhances the Prebiotic Properties of Germinated Riceberry Rice. *Frontiers in Nutrition*, 9(April), 1–8. <https://doi.org/10.3389/fnut.2022.839145>.
- Takagaki A, Yoshioka Y, Yamashita Y, Nagano T, Ikeda M, Hara-Terawaki A, Seto R, Ashida H (2019) The Influence of Microbial Metabolite (-)-Epigallocatechin Gallate on Glucose Uptake in L6 Skeletal Muscle Cells and Glucose Tolerance in ICR Rats. *Banteng Pharmaceutical Biology*. 42(2):212-221. <https://doi.org/10.1248/bpb.b18-00612>.
- Tjitrosoepomo, Gembong. 2014. *Taksonomi Tumbuhan (Schizophyta, Thallophyta, rizophyta)*. Yogyakarta: Gadjah Mada University Press.
- nd Suwastika, I, N. 2020. Media Formulation Of Oyster Production (*Pleurotus Ostreatus*) With Sago Pulp on. *Journal Biocелеbes*. Vol. 14(1). Doi: 10.15411.15087



- Wang D, Sakoda A, Suzuki M (2001) Biological efficiency and nutritional value of *Pleurotus ostreatus* cultivated on spent brewery grains. *Biological resource technology*. 78:293-300. [https://doi.org/10.1016/S0960-8524\(01\)00002-5](https://doi.org/10.1016/S0960-8524(01)00002-5)
- Winarsi, R. 2022. Production of Gamma-Aminobutyric Acid (GABA) by Lactic Acid Bacteria Isolate CIN-2 on MRSB Media with Various Concentrations of Ammonium Chloride. Journal of the Department of Biology, Faculty of Mathematics and Natural Sciences, Diponegoro University .
- Yan FJ, Dai GH, Zheng XD (2016) Mulberry Anthocyanin Extract Improves Insulin Resistance by Regulating the PI3K/AKT Pathway in HepG2 Cells and db/db Mice. *Journal of Nutrition and Biochemistry*. 36:68–80. <https://doi.org/10.1016/j.jnutbio.2016.07.004>
- Yang Y, Fu C, Zhou F, Luo X, Li J, Zhao J, He J, Li X, Li J (2018) Chemical composition, antioxidant activity, and antitumor activity of ethanol extract sub-fractions of wild and cultivated *Pleurotus ferulae*. *Rekan Journal*. 20:e6097. <https://doi.org/10.7717/peerj.6097>
- Yoshida, H., Tomiyama, Y., & Mizushima, Y. (2010). Lipid components, asam lemak and triacylglycerol molecular species of black and red rices. *Food Chemistry*, 123(2), 210–215. <https://doi.org/10.1016/j.foodchem.2010.04.010>
- Zervakis GI, Moncalvo JM, Vilgalys R (2004) Molecular phylogeny, biogeography, and speciation of *Pleurotus cystidiosus* and its allies. *Microbiology*. 150:715–726. <https://doi.org/10.1099/mic.0.26673-0>
- Zewdie S, Olsson M, Fetene M (2008) The influence of drought/irrigation on the proximate composition and carbohydrate content of two clones of enset [*Ensete ventricosum* (Welw.) Cheesman]. *SINET: Etiopia j sci*. 31:81-88. <https://doi.org/10.4314/sinet.v31i2.66527>
- Zhao Q, Liu X, Cui L, Ma C (2023) Extraction and bioactivity of chemical compositions from *Pleurotus ostreatus*: a review. *Journal of Future Foods*. 4:111-118. <https://doi.org/10.1016/j.jfutfo.2023.06.001>
- Zheng Y, Pang H, Wang J, Shi G, Huang J (2015) New apoptosis-inducing sesquiterpenoids from mycelial culture of edible Chinese mushroom *Pleurotus cystidiosus*. *Journal of Agricultural and Food Chemistry*. 63:545-551. <https://doi.org/10.1021/jf504931n>
- Zhu, J., Sun, X., Wang, S., Xu, Y., & Wang, D. (2017). Formation of nanocomplexes by proteins and fucoxanthin: Characterization, spectroscopic molecular docking. *Food Hydrocoll.*, 63, 391–403. [10.1016/j.foodhyd.2016.09.027](https://doi.org/10.1016/j.foodhyd.2016.09.027)



LAMPIRAN-LAMPIRAN



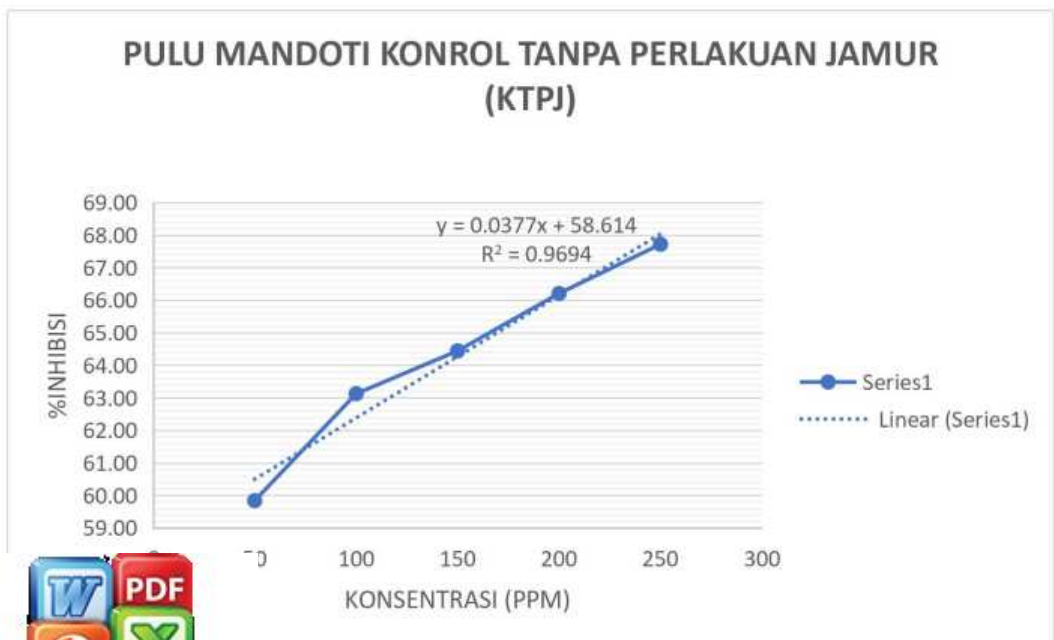
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Lampiran 1. Hasil Analisis Proksimat.

No. ID ELSA - Sampel	Kode Sampel	%BK	%KA	&ABU	%PK	%LK	%SK
885-92662-1	KTPJ	87.62	12.38	0.37	7.61	0.57	0,84
885-92662-2	JTP	90.03	9.97	0.30	8.46	1.27	0.82
885-92662-3	JTC	91.99	8.01	0.39	8.55	1.34	0.78
885-92662-4	JTM	90.51	9.49	0.24	8.24	1.28	0.78

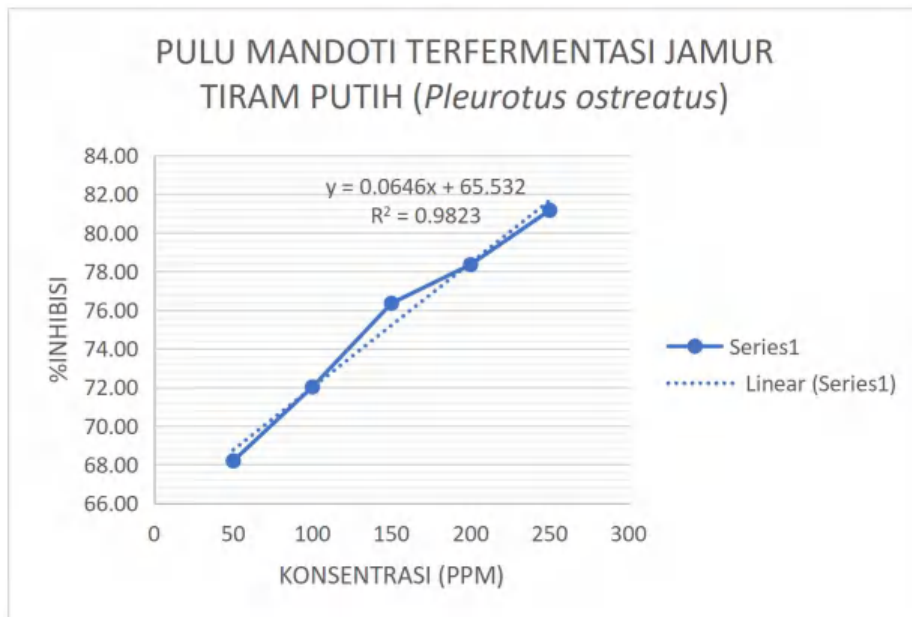
Lampiran 2. Uji Antioksidan Kontrol Tanpa Perlakuan Jamur (KTPJ).

KONSENTRASI (PPM)	%INHIBISI
50	59,84
100	63,12
150	64,44
200	66,21
250	67,72



Lampiran 3. Uji Antioksidan Pulu Mandoti terfermentasi Jamur Tiram Putih (*Pleurotus ostreatus*).

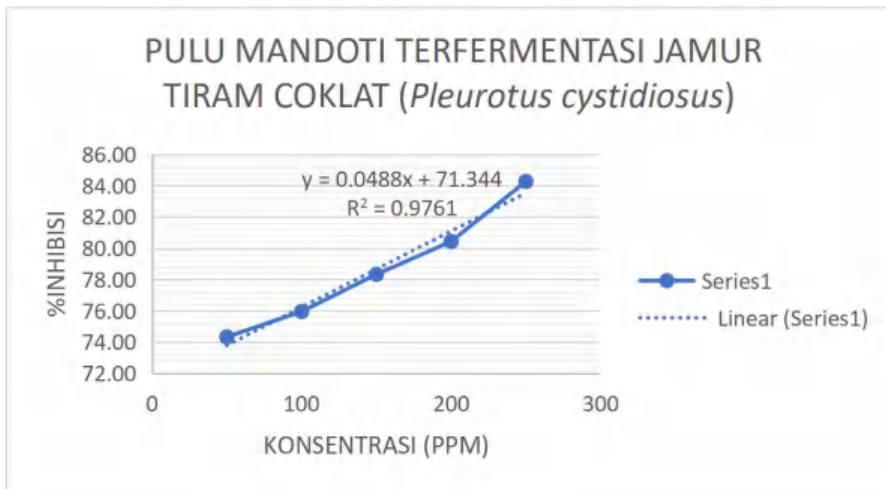
KONSENTRASI (PPM)	%INHIBISI
50	68,19
100	72,02
150	76,35
200	78,35
250	81,17



Lampiran 4. Uji Antioksidan Pulu Mandoti terfermentasi Jamur Tiram Coklat (*Pleurotus cystidiosus*).

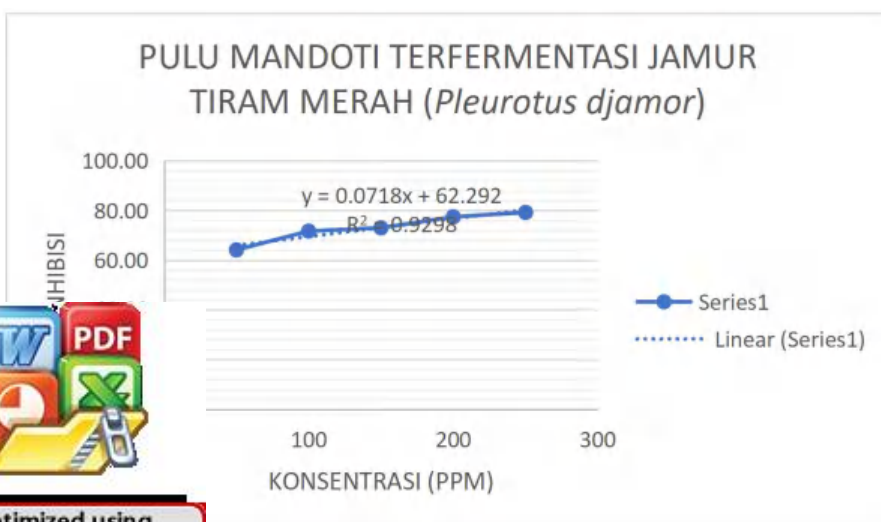
KONSENTRASI (PPM)	%INHIBISI
50	74,32
100	75,95
150	78,33
200	80,43
250	84,27





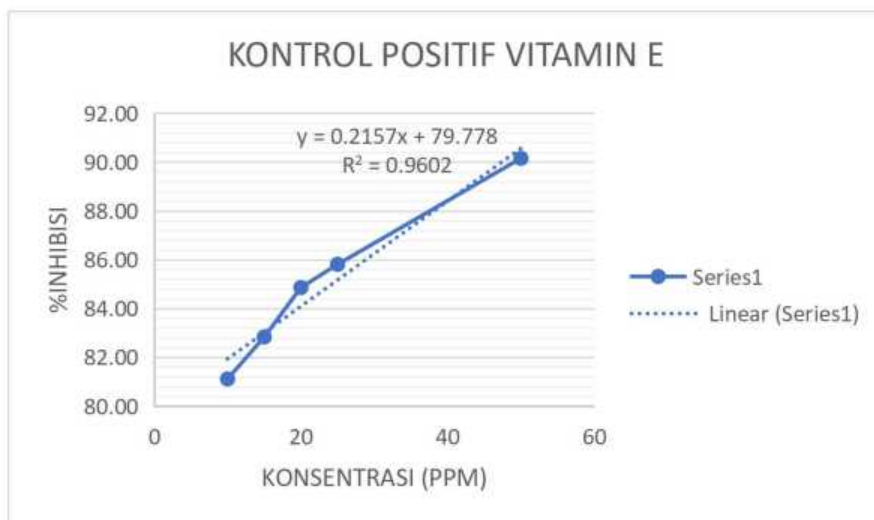
Lampiran 5. Uji Antioksidan Pulu Mandoti terfermentasi Jamur Tiram Merah (*Pleurotus djamor*).

KONSENTRASI (PPM)	%INHIBISI
50	64,10
100	71,68
150	72,97
200	77,40
250	79,19



Lampiran 6. Uji Antioksidan Kontrol Positif (Vitamin E).

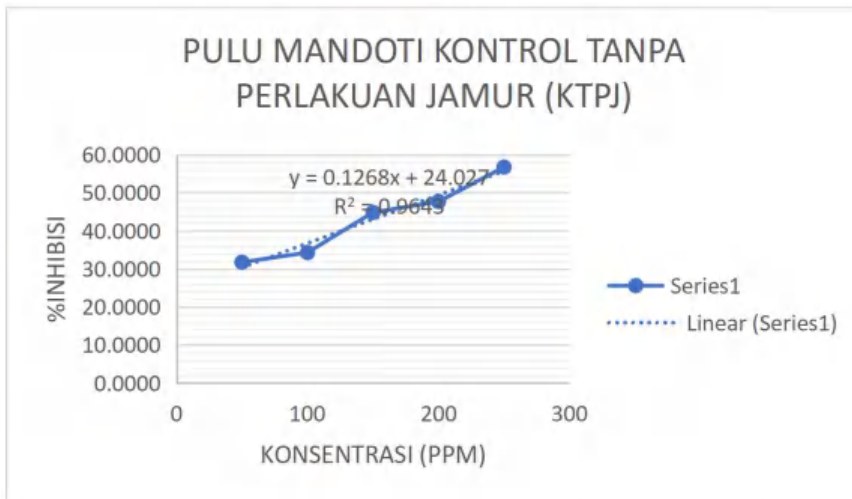
KONSENTRASI (PPM)	%INHIBISI
10	81,12
15	82,83
20	84,86
25	85,81
50	90,15



Lampiran 7. Uji Antidiabetes Kontrol Tanpa Perlakuan Jamur (KTPJ).

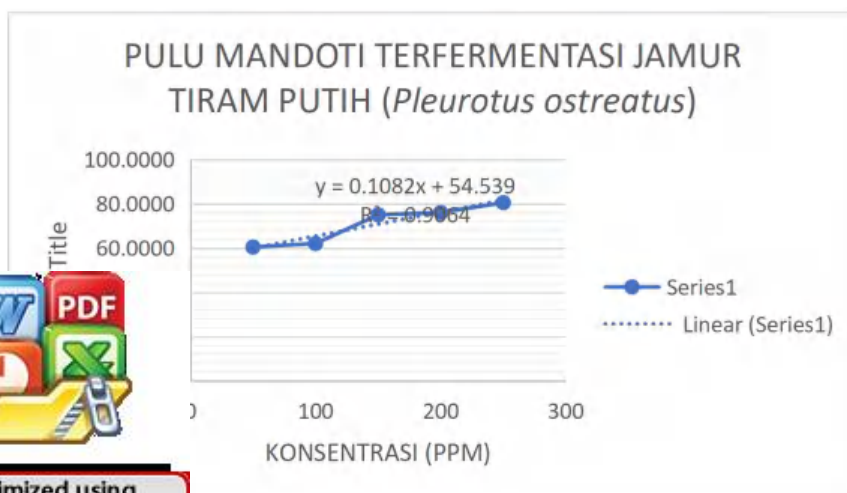
KONSENTRASI (PPM)	%INHIBISI
50	31,7258
100	34,2758
150	44,8181
200	47,6611
250	56,7224





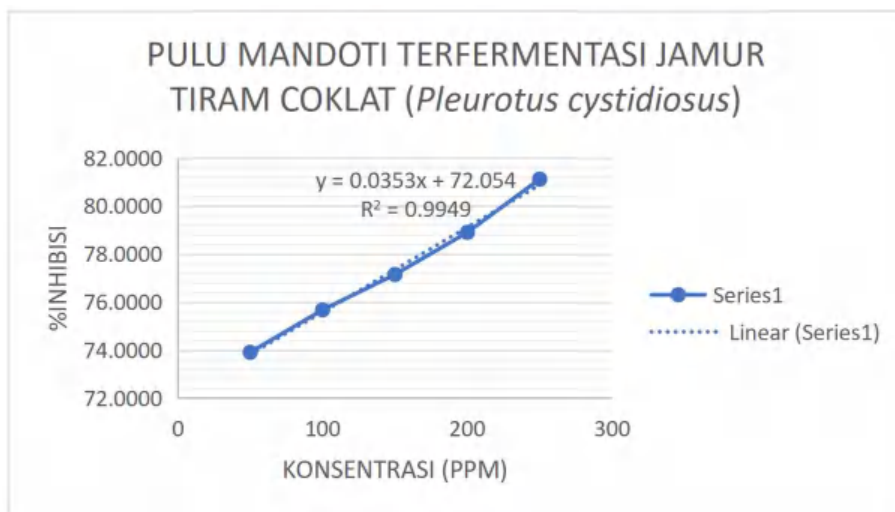
Lampiran 8. Uji Antidiabetes Pulu Mandoti terfermentasi Jamur Tiram Putih (*Pleurotus ostreatus*).

KONSENTRASI (PPM)	%INHIBISI
50	60,4108
100	62,0139
150	74,9577
200	76,0104
250	80,4684



Lampiran 9. Uji Antidiabetes Pulu Mandoti terfermentasi Jamur Tiram Coklat (*Pleurotus Cystidiosus*).

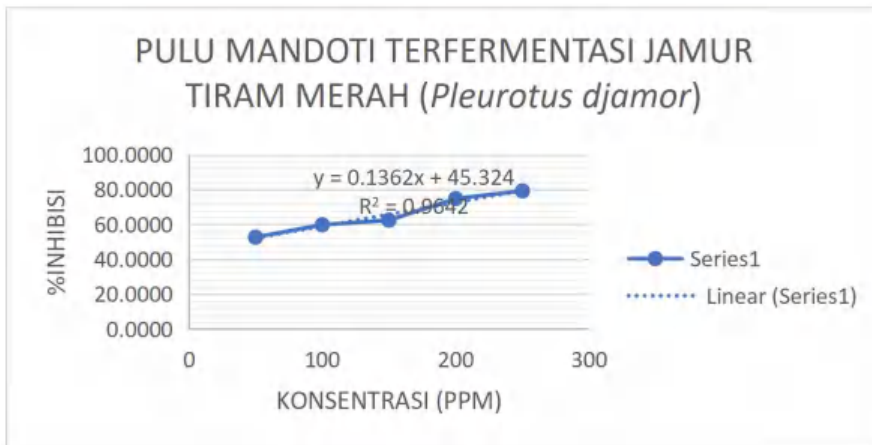
KONSENTRASI (PPM)	%INHIBISI
50	73,9057
100	75,6716
150	77,1432
200	78,8966
250	81,1134



Lampiran 10. Uji Antidiabetes Pulu Mandoti terfermentasi Jamur Tiram Merah (*Pleurotus djamor*).

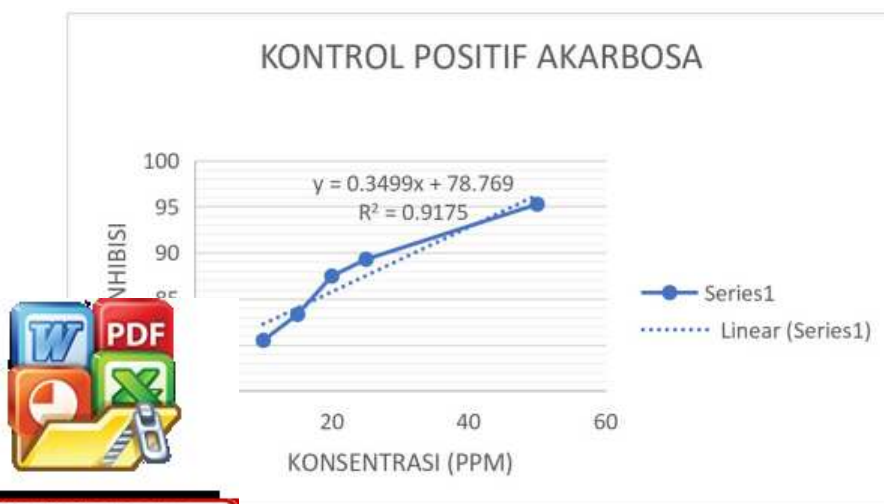
KONSENTRASI (PPM)	%INHIBISI
50	52,6501
100	59,7721
150	62,3896
200	74,7824
250	79,2035





Lampiran 11. Uji Antidiabetes Akarbosa (Kontrol Positif).

KONSENTRASI (PPM)	%INHIBISI
10	80,49909199
15	83,31204208
20	87,46940948
25	89,29175277
50	95,26207026



Lampiran 12. Profiling Metabolit Sekunder.




No.	Compound Name	R. Time	Area	Chemical Formula	Molecular Weight	Biological Activity	Treatment			
							KTPJ	JTP	JTC	JTM
1	Hex-3-ene-1,6-diol	5.209	15036305	C6H12O2	116.18 g/mol		√			
2	Carbamic acid, phenyl ester	5.578	2.47E+08	C8H7NO2	137.38 g/mol	Antioxidant	√			
3	Dimethyl fumarate	5.872	32014097	C6H8O4	144.14 g/mol.	Antioxidant and Antidiabetic	√			
4	5,5-Dimethyl-1,3-dioxane	6.007	17026593	C6H12O2	116.18 g/mol		√			
5	2(3H)-Furanone, dihydro-3-hydroxy-4,4-dimethyl-, (.+/-.)-	6.267	16676371	C7H10O3	142.17 g/mol		√			
6	1,4-Pentanediol	6.608	1.93E+08	C5H12O2	104.15 g/mol		√			
7	1H-Imidazole-4-carboxylic acid, methyl ester	6.771	1.49E+08	C7H8N2O2	152.15 g/mol	Antioxidant	√			
8	Butanedioic acid, monomethyl ester	6.938	66303702	C5H8O4	132.12 g/mol	Antidiabetic	√			
9	Butanedioic acid, hydroxy-, dimethyl ester	7.182	4.3E+08	C6H10O4	146.15 g/mol		√			
10	Hepta-2,4-dienoic acid, methyl ester	7.464	69284981	C9H12O2	152.19 g/mol	Antioxidant	√			
11	4-c	7.584	6400968	C19H24ClNO3	349.85 g/mol		√			
12	2	7.702	36880989	C6H5ClO2	144.56 g/mol		√			
13	B e	7.797	3459950	C7H14O3	146.18 g/mol		√			

14	Catechol	8	34028402	C6H6O2	110.11 g/mol		√		
15	Dimethyl 3-hydroxy-3-methylpentane-1,5-dioate	8.112	21455897	C8H14O4	174.19 g/mol		√		
16	Dimethyl 4-oxoheptane-1,7-dioate	8.164	14162724	C10H16O4	200.24 g/mol		√		
17	5-Hydroxymethylfurfural	8.299	1.65E+08	C6H6O3	126.11 g/mol	Antioxidant and Antidiabetic	√		
18	2-Methoxy-4-vinylphenol	9.05	6649240	C9H10O2	150.18 g/mol	Antioxidant	√		
19	Methional	9.14	13630217	C4H8O2S	120.16 g/mol	Antioxidant	√		
20	Bicyclo[3.2.0]hept-3-en-2-one	9.513	3795381	C7H8O	108.14 g/mol		√		
21	2-Pyridineacetic acid, hexahydro-	9.72	36126147	C7H13NO2	155.18 g/mol	Antioxidant	√		
22	Butanoic acid, 2-methyl-, heptyl ester	10.171	10945530	C11H22O2	186.29 g/mol		√		
23	Citric acid, trimethyl ester	10.372	1.64E+08	C9H14O7	234.21 g/mol		√	√	√
24	5-Oxotetrahydrofuran-2,3-dicarboxylic acid, dimethyl ester	10.712	11309207	C6H8O7	192.13 g/mol	Antioxidant	√		
25	D-Allose	10.786	41460438	C6H12O6	180.16 g/mol		√		√
26	F	10.924	30384531	C8H14O3	158.19 g/mol		√		
27	2	11.057	12566525	C7H8O4	156.14 g/mol		√		
28	B	11.232	15112709	C11H12O	160.21 g/mol	Antioxidant and Antidiabetic	√		

29	L-Glutamic acid, N-acetyl-, dimethyl ester	11.319	33185196	C9H16N2O5	232.24 g/mol		√				
30	2(3H)-Furanone, 5-ethylidihydro-5-methyl-	11.471	4693865	C7H10O2	126.15 g/mol	Antioxidant	√				
31	2(3H)-Furanone, 5-(acetyloxy)dihydro-5-methyl-	11.63	12514641	C8H10O4	170.16 g/mol		√				
32	2-Piperidinthione	12.124	23398400	C5H9NS	115.19 g/mol		√				
33	Methyl tetradecanoate	12.318	23293560	C16H32O2	256.43 g/mol	Antioxidant	√				
34	Ethyl 2-acetamido-3,3,3-trifluoro-2-(isobutylamino)propionate	12.377	5431485	C11H17F3NO4	295.26 g/mol		√				
35	Octadecanoic acid, 9,10-dihydroxy-, methyl ester	12.662	4865557	C19H38O4	330.51 g/mol		√	√			
36	2-Propenoic acid, 3-(4-hydroxy-3-methoxyphenyl)-, methyl ester	13.312	4864234	C11H12O5	224.21 g/mol		√				
37	Hexanoic acid, oct-3-en-2-yl ester	13.533	11810837	C14H26O2	226.36 g/mol		√				
38	Pentadecanoic acid, 14-methyl-, methyl ester	13.731	87883193	C17H34O2	270.45 g/mol	Antioxidant	√				
39	n-Hexadecanoic acid	13.955	7946714	C16H32O2	256.43 g/mol	Antioxidant and Antidiabetic	√	√	√	√	√
40	Hexanoic acid, 4-tetradecyl ester	14.298	4001903	C20H40O2	328.54 g/mol		√				
41	9-methyl ester	14.856	1.62E+08	C19H34O2	294.49 g/mol	Antioxidant and Antidiabetic	√	√			
42	S	14.951	2341934	C11H12O5	224.21 g/mol	Antioxidant	√				
43	N	15.011	5750854	C19H38O2	310.51 g/mol	Antioxidant and Antidiabetic	√				



44	9,12-Octadecadienoic acid (Z,Z)-	15.091	3503598	C18H32O2	280.45 g/mol	Antioxidant and Antidiabetic	√	√	√
45	Butanoic acid, 3-hydroxy-3-methyl-,methyl ester	4.319	1002560	C6H12O3	132.16 g/mol			√	
46	Methyl (R)-(-)-3-hydroxy-2-methyl-propionate	4.835	501269	C5H10O3	118.13 g/mol			√	
47	Butanoic acid, 2-methyl-, methyl ester	5.097	450368	C6H12O2	116.16 g/mol	Antioxidant		√	
48	(S)-Methyl 2,3-dihydroxypropanoate	5.805	760601	C4H8O4	136.10 g/mol			√	
49	Methyl pyruvate dimethyl acetal	5.957	781678	C6H12O4	148.16 g/mol			√	
50	Isovaline, 3-hydroxy-	6.285	1053219	C5H11NO3	133.15 g/mol			√	
51	Isovaline, 3-hydroxy-	6.510	377920	C5H11NO3	133.15 g/mol				
52	Pentanoic acid, 4-methyl-2-oxo-, methyl ester	6.576	658765	C7H12O3	144.17 g/mol			√	
53	Phenol	6.977	1119875	C6H6O	94.11 g/mol			√	√
54	Pentanoic acid, 4-oxo-, methyl ester	7.092	3546404	C7H12O3	144.17 g/mol			√	
55	3-(Methylthio)propanoic acid methyl ester	8.260	268697	C5H10O2S	134.19 g/mol			√	
56	B	8.497	4997684	C6H10O4	146.14 g/mol			√	
57	F	8.740	471526	C6H10O3	130.14 g/mol			√	
58	B	8.925	712630	C8H8O	120.15 g/mol	Antioxidant		√	

59	2,5-Dihydroxybenzaldehyde, 2TMS derivative	11.411	335546	C11H18O3Si2	250.38 g/mol		√	
60	Levogluconone	11.534	2064750	C6H10O3	130.14 g/mol		√	
61	Tartaric acid, methyl ester	15.724	1774358	C7H12O6	192.17 g/mol		√	
62	5-(Hydroxymethyl)dihydrofuran-2(3H)-one	16.682	1247832	C5H8O3	116.12 g/mol		√	
63	Benzenepropanoic acid, .alpha.-hydroxy-, methyl ester	22.166	1515858	C10H12O3	180.20 g/mol		√	
64	2(3H)-Furanone, 5-hexyldihydro-	22.245	388058	C9H16O2	156.22 g/mol		√	
65	L-Proline, 5-oxo-, methyl ester	22.561	2590017	C8H15NO3	173.21 g/mol		√	
66	1-Chlorosulfonyl-3-methyl-1-azaspiro[3.5]nonan-2-one	25.138	2454362	C9H14ClNO3S	265.73 g/mol		√	
67	Citric acid, trimethyl ester	26.230	3007749	C9H14O7	234.21 g/mol		√	√
68	Thiirane, octyl-	27.430	2407936	C8H16OS	160.28 g/mol		√	
69	Phenol, 2,6-bis(1,1-dimethylethyl)-	27.912	452243	C14H22O	206.33 g/mol	Antioxidant and Antidiabetic	√	
70	Nonanedioic acid, dimethyl ester	29.347	591403	C11H20O4	216.28 g/mol		√	
71	4  iazole-3-thiol	30.455	384246	C6H10N4S	174.24 g/mol	Antioxidant	√	
72	2  l, dimethyl ester	30.615	290215	C12H10N2O4	246.22 g/mol		√	
73	1  cyclohexaned	30.720	376774	C12H28OSi2	244.52 g/mol		√	

74	Diethyl Phthalate	31.127	16413691	C12H14O4	222.24 g/mol	Antioxidant	√	√	√
75	Oxamide, N-(2-benzothiazolyl)-	31.305	995891	C9H8N2OS	192.24 g/mol		√		
76	2(3H)-Furanone, 3-butyldihydro-	31.419	1112012	C8H12O2	140.18 g/mol	Antioxidant	√		
77	(4-Hydroxy-2-mercapto-6-methyl-pyrimidin-5-yl)-acetic acid	32.312	701367	C9H10N2O3S	222.25 g/mol	Antioxidant and Antidiabetic	√		
78	2,2,4,6,6,8-Hexamethyl-4,8-diphenylcyclotetrasiloxane	41.407	695203	C18H30O4Si4	402.78 g/mol		√	√	√
79	Hexadecanoic acid, methyl ester	42.610	3484409	C17H34O2	270.45 g/mol	Antioxidant and Antidiabetic	√		
80	n-Hexadecanoic acid	43.766	4417074	C16H32O2	256.43 g/mol	Antioxidant and Antidiabetic	√	√	√
81	1,2-Diphenyltetramethyldisilane	45.666	762964	C14H20Si2	252.47 g/mol	Antioxidant and Antidiabetic	√	√	√
82	4-Isoxazolecarboxylic acid, 5-amino-, ethyl ester	46.272	1790079	C8H10N2O3	182.18 g/mol		√		
83	9,12-Octadecadienoic acid, methyl ester	47.857	6572662	C19H34O2	294.48 g/mol	Antioxidant and Antidiabetic	√	√	
84	6-Octadecenoic acid, methyl ester, (Z)-	48.040	5079794	C19H36O2	296.49 g/mol		√		
85	9,12-Octadecadienoic acid (Z,Z)-	49.010	310172	C18H32O2	280.45 g/mol	Antioxidant and Antidiabetic	√	√	√
86	B decanedioate	55.423	1038490	C16H30O4Si	318.50 g/mol		√		
87	C	57.733	316014	C11H18	150.26 g/mol		√		
88	C e n 2-[[2-[(2-propyl)methyl]-	58.059	865381	C20H30O2	302.46 g/mol		√		



89	Octadecanoic acid, 9,10-dihydroxy-, methyl ester, (R*,R*)-	58.821	363428	C19H38O4	330.51 g/mol		√	√
90	Furfural	3.879	1344770	C5H4O2	96.08 g/mol			√
91	Nonanoic acid	4.788	10191480	C9H18O2	158.24 g/mol	Antioxidant		√
92	Propanoic acid, chloro-2-hydroxy-	5.000	915663	C3H5ClO2	108.52 g/mol			√
93	2,6,6-Trimethyl-bicyclo[3.1.1]hept-3-ylamine	6.265	808219	C10H19N	153.27 g/mol			√
94	2-Furancarboxaldehyde, 5-methyl-	6.614	768457	C6H6O2	110.11 g/mol			√
95	1-[(Trimethylsilyl)oxy]propan-2-ol	7.074	3432002	C7H18OSi	146.30 g/mol			√
96	Benzeneacetaldehyde	9.015	769476	C8H8O	120.15 g/mol	Antioxidant		√
97	Levoglucosenone	11.581	3405509	C6H10O3	130.14 g/mol			√
98	1H-Azonine, octahydro-1-nitroso-	13.171	893722	C8H16N2O	160.24 g/mol			√
99	2-Furancarboxaldehyde, 5-(chloromethyl)-	14.138	1500344	C6H6Cl2O2	177.02 g/mol	Antioxidant		√
100	Methyl 1-(tert-butyloxymethyl)-pyrrolidine-2-c	16.895	872254	C11H21NO3	215.29 g/mol			√
101	1	17.009	1720851	C22H43NO	337.59 g/mol	Antioxidant		√
102	1 n	17.617	1271975	C8H17NO	143.22 g/mol			√
103	E	18.318	1037754	C7H12O2	128.17 g/mol			√



l-3-(1-




104	3-cis-Methoxy-5-trans-methyl-1R-cyclohexanol	20.760	793044	C8H16O2	144.21 g/mol		√		
105	1-Methyl-1-n-pentyloxy-1-silacyclobutane	23.891	4009652	C10H24OSi	200.38 g/mol		√		
106	2,4-Pentadienamide, N,N-diethyl-	25.135	2568684	C9H15N2	157.23 g/mol		√		√
107	Hexanoic acid	27.805	20972325	C6H12O2	116.16 g/mol	Antioxidant and Antidiabetic	√		
108	1,6-Anhydro-.beta.-d-talopyranose	27.961	22509069	C6H10O5	162.14 g/mol		√		
109	Hexadecanoic acid, 2-bromo-	30.915	808109	162.14 g/mol	162.14 g/mol		√		
110	Diethyl Phthalate	31.135	21211743	C12H14O4	222.24 g/mol	Antioxidant	√	√	√
111	2,5-Piperazinedione, 3-methyl-6-(1-methylethyl)-	32.944	912878	C8H14N2O2	170.21 g/mol		√		
112	3-Methyl-2,3,6,7,8,8a-hexahydropyrrolo[1,2-a]pyrazine-1,4-dione	35.461	1746461	C9H13N3O2	187.22 g/mol		√		
113	3,6-Diisopropylpiperazin-2,5-dione	36.921	1017630	C10H18N2O2	202.26 g/mol		√		
114	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-	37.291	776945	C7H10N2O2	154.17 g/mol		√		
115	Octadecanoic acid 2-oxo- methyl ester	37.883	1368013	C19H36O3	312.48 g/mol		√		
116	C	38.998	2565029	C11H20N2O3	232.29 g/mol		√		√
117	3	39.915	1282958	C10H18N2O2	202.26 g/mol		√		
118	7	40.096	902999	C19H36O2	296.49 g/mol		√		



119	2,2,4,6,6,8-Hexamethyl-4,8-diphenylcyclotetrasiloxane	41.415	1376920	C ₂₀ H ₃₀ O ₄ Si ₄	402.78 g/mol		√	√	√
120	Hexahydro-3-(1-methylpropyl)pyrrolo[1,2-a]pyrazine-1,4-dione	42.195	2139783	C ₁₁ H ₁₇ N ₃ O ₂	215.27 g/mol			√	√
121	Pent-4-enoyl amide, 2-methyl-N-pentyl-	42.582	906025	C ₁₂ H ₂₃ NO	197.31 g/mol			√	
122	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-	42.781	3765987	C ₁₂ H ₂₀ N ₂ O ₂	224.30 g/mol			√	√
123	2,5-Piperazinedione, 3,6-bis(2-methylpropyl)-	42.941	892008	C ₁₂ H ₂₄ N ₂ O ₂	224.33 g/mol	Antioxidant		√	
124	Octahydrodipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione-, (5aR,10aR) (isomer 2)	43.081	2815751	C ₁₂ H ₁₈ N ₂ O ₂	218.28 g/mol			√	
125	n-Hexadecanoic acid	43.776	3308126	C ₁₆ H ₃₂ O ₂	256.43 g/mol	Antioxidant and Antidiabetic	√	√	√
126	1,2-Diphenyltetramethyldisilane	45.674	1459520	C ₁₄ H ₂₀ Si ₂	270.52 g/mol	Antioxidant and Antidiabetic	√	√	√
127	1,3-Cyclohexanedione, 2-acetyl-5-(2-furanyl)-	48.106	1312514	C ₁₂ H ₁₂ O ₃	204.22 g/mol			√	
128	1,9-Cyclohexadecadiene, (E,E)-	49.031	1028227	C ₁₆ H ₃₀	222.42 g/mol			√	
129	Octadecanoic acid	49.890	899969	C ₁₈ H ₃₆ O ₂	284.48 g/mol	Antioxidant and Antidiabetic		√	
130	9H-Purin-6-amine N ⁹ -dimethyl-	50.936	923624	C ₇ H ₁₀ N ₆	182.20 g/mol			√	
131	F ₃ one, hexahydro-	55.996	853820	C ₁₂ H ₁₄ N ₂ O ₂	218.25 g/mol			√	
132	F	3.894	664289	C ₅ H ₄ O ₂	312.53 g/mol				√
133	E	4.699	14693886	C ₂₀ H ₄₀ O ₂	312.53 g/mol				√



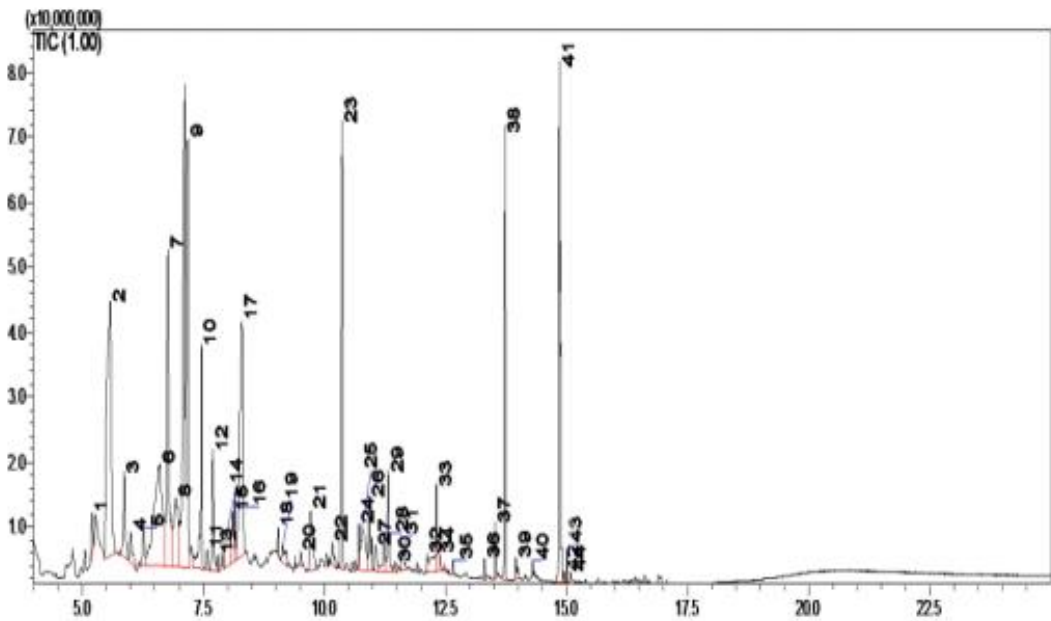
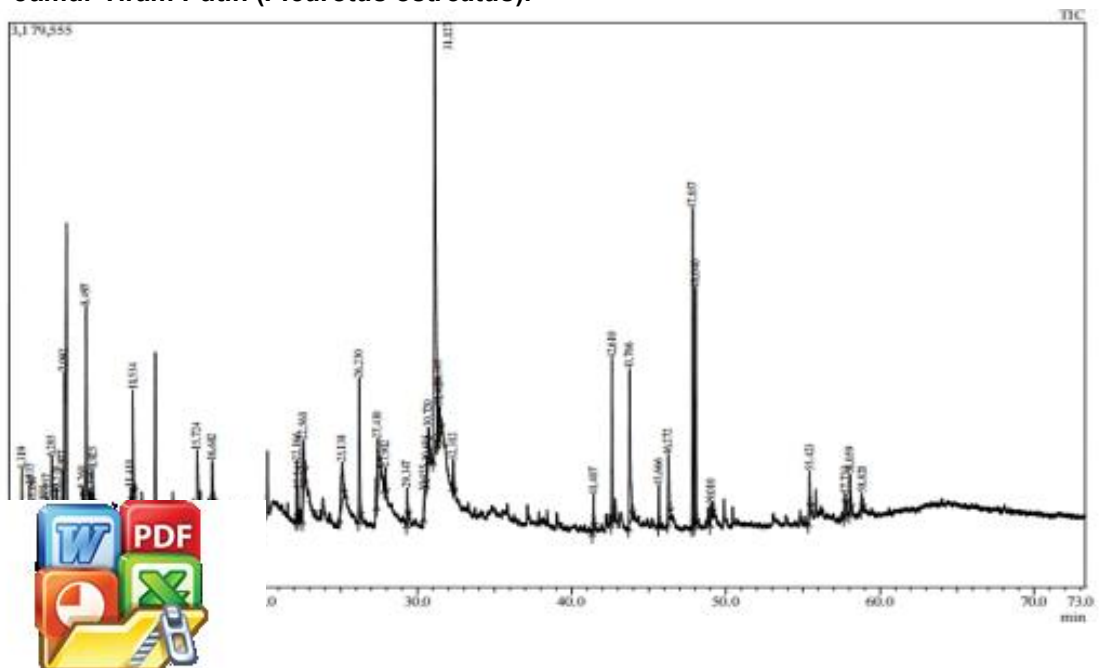
134	1,2-Butanediol, 1-(2-furyl)-3-methyl-	4.805	2029347	C8H12O4	172.18 g/mol		√
135	[1,1'-Bicyclohexyl]-4-carboxylic acid, 4'-propyl-, 4-pentylcyclohexyl ester	4.890	1557326	C30H48O2	440.71 g/mol		√
136	1-Chloro-2-[(trifluoromethyl)thio]cyclohexane	4.995	3044520	C7H10ClF3S	228.66 g/mol		√
137	9-Borabicyclo[3.3.1]nonane, 9-(2-iodo-1-hexenyl)-, (Z)-	5.075	715057	C11H17BIN	218.07 g/mol		√
138	3-(Hexadecyloxy)propan-1-ol	5.210	879598	C19H40O2	296.53 g/mol		√
139	1,3-Dioxepane, 2-heptyl-	6.101	698099	C11H22O3	202.29 g/mol		√
140	Oxime-, methoxy-phenyl-_	6.656	4426484	C7H9NO2	139.15 g/mol		√
141	Phenol	7.086	2511338	C6H6O	94.11 g/mol	√	√
142	Chloromethyl 4-chlorodecanoate	8.175	763864	C11H20Cl2O2	276.19 g/mol	Antioxidant	√
143	Pentanoic acid, 4-oxo-	9.661	698927	C5H8O3	116.12 g/mol		√
144	Levogluconone	11.562	5528467	C6H10O3	130.14 g/mol	Antioxidant	√
145	2-Furancarboxaldehyde 5-(chloromethyl)-	14.103	6168765	C6H5ClO2	142.56 g/mol		√
146	1	18.722	4398950	C11H22O	170.29 g/mol		√
147	L er	22.534	11111966	C7H11NO3	157.17 g/mol	Antioxidant	√
148	P iranyl)-	22.700	1459993	C9H15NO	153.22 g/mol	Antioxidant	√

149	4-Nitrobenzoic acid, heptyl ester	22.755	1995171	C14H17NO4	271.29 g/mol					√
150	1-Methyl-1-n-pentyloxy-1-silacyclobutane	23.887	719317	C10H22OSi	194.37 g/mol					√
151	1,1-Cyclopentanediacetamide	25.019	4293935	C8H12N2O2	172.19 g/mol	Antioxidant				√
152	2,4-Pentadienamide, N,N-diethyl-	25.118	14454875	C10H17N2	167.26 g/mol	Antioxidant			√	√
153	cis-4-(Hydroxymethyl)cyclohexanecarboxylic acid	26.164	2696360	C8H14O3	158.19 g/mol					√
154	Citric acid, trimethyl ester	26.245	1048445	C9H14O7	234.21 g/mol		√	√		√
155	N-(2-Furylmethyl)-1-butanamine	27.437	5651740	C10H13NO2	179.21 g/mol					√
156	D-Allose	27.788	45670233	C6H12O6	180.16 g/mol	Antioxidant	√			√
157	Dasycarpidan-1-methanol, acetate (ester)	28.340	1337338	C11H16O3	196.24 g/mol					√
158	Bicyclo[2.2.1]heptan-2-one, 1-ethenyl-7,7-dimethyl-	29.999	626038	C10H16O	152.24 g/mol	Antioxidant				√
159	Diethyl Phthalate	30.309	5811361	C12H14O4	222.24 g/mol	Antioxidant		√	√	√
160	Heptanoic acid, butyl ester	30.750	671143	C11H22O2	186.29 g/mol	Antioxidant				√
161	F  ester	30.810	835394	C7H12O3	156.17 g/mol					√
162	6  razole[4,3-	30.855	1639277	C11H6F3N3O	257.18 g/mol					√
163	D 	31.110	18836948	C12H14O4	222.24 g/mol	Antioxidant		√	√	√

164	Tetradecanoic acid	37.114	1454407	C14H28O2	228.37 g/mol	Antioxidant				√
165	Cyclo(L-prolyl-L-valine)	39.025	803141	C10H16N2O2	196.25 g/mol				√	√
166	2,2,4,6,6,8-Hexamethyl-4,8-diphenylcyclotetrasiloxane	41.399	985038	C20H24O4Si6	440.73 g/mol		√	√	√	√
167	Hexahydro-3-(1-methylpropyl)pyrrolo[1,2-a]pyrazine-1,4-dione	42.212	729059	C10H16N2O2	196.25 g/mol				√	√
168	Pyrrolo[1,2-a]pyrazine-1,4-dione, hexahydro-3-(2-methylpropyl)-	42.800	1238651	C11H18N2O	210.27 g/mol				√	√
169	cis-10-Heptadecenoic acid	43.152	790970	C17H32O2	268.44 g/mol	Antioxidant				√
170	n-Hexadecanoic acid	43.770	12893738	C16H32O2	256.42 g/mol	Antioxidant and Antidiabetic	√	√	√	√
171	1,2-Diphenyltetramethyldisilane	45.655	1212393	C14H18Si2	238.45 g/mol	Antioxidant and Antidiabetic		√	√	√
172	Furan-3-carboxaldehyde, 2-methoxy-2,3-dihydro-	46.273	2916884	C18H19NO3	297.35 g/mol					√
173	9,12-Octadecadienoic acid (Z,Z)-	49.023	1124085	C18H32O2	280.45 g/mol	Antioxidant and Antidiabetic	√	√		√



Lampiran 13. Hasil Profiling GC-MS Kontrol Tanpa Perlakuan Jamur (KTPJ).

Lampiran 14. Hasil Profiling GC-MS Perlakuan Pulu Mandoti terfermentasi Jamur Tiram Putih (*Pleurotus ostreatus*).

Lampiran 17. Hasil Analisis GC-MS Asam Lemak Kontrol Tanpa Perlakuan Jamur (KTPJ).

No	Metabolites Compound	RT	% of Area	M.F	M.W. (g/mol)	Ontologi	Library	Antioxidant	Antidiabetik
1	Octanoic acid, methyl ester	3.817	2.65	C9H18O2	158.24 g/mol	Ester	NCBI	Yes	-
2	Decanoic acid, methyl ester	5.056	3.42	C11H22O2	186.29 g/mol	Ester	NCBI	yes	-
3	Undecanoic acid, methyl ester	5.579	1.40	C12H24O2	200.32 g/mol	Ester	NCBI	-	-
4	Dodecanoic acid, methyl ester	6.060	3.87	C13H26O2	214.34 g/mol	Ester	NCBI	yes	-
5	Butylated Hydroxytoluene	6.397	2.18	C15H24O	220.35 g/mol	Fenolik	NCBI	yes	yes
6	Tridecanoic acid, methyl ester	6.508	2.12	C14H28O2	228.37 g/mol	Ester	NCBI	yes	-
7	Methyl tetradecanoate	6.929	4.58	C15H30O2	242.40 g/mol	Ester	NCBI	yes	-
8	Methyl myristoleate	7.083	0.82	C15H28O2	240.38 g/mol	Ester	NCBI	-	-
9	Pentadecanoic acid, methyl ester	7.329	1.62	C16H32O2	256.42 g/mol	Ester	NCBI	yes	-
10	14-Octadecenoic acid, methyl ester	7.481	2.60	C19H36O2	296.5 g/mol	Ester	NCBI	-	-
11	Hexadecanoic acid, methyl ester	7.708	13.37	C17H34O2	270.5 g/mol	Ester	NCBI	yes	yes
12	9-Hexadecenoic acid, methyl ester, (Z)-	7.811	2.05	C17H32O2	268.4 g/mol	Ester	NCBI	yes	-
13	Heptadecanoic acid, methyl ester	8.069	2.31	C18H36O2	284.5 g/mol	Ester	NCBI	-	-
14	cis-10-Heptadecenoic acid, methyl ester	8.173	2.12	C18H34O2	282.5 g/mol	Ester	NCBI	-	-
		8.415	6.09	C19H38O2	298.5 g/mol	Ester	NCBI	yes	-
		8.460	2.68	C17H32O2	268.4 g/mol	Ester	NCBI	-	-
		8.491	13.88	C19H36O2	296.5 g/mol	Ester	NCBI	yes	yes



18	8,11-Octadecadienoic acid, methyl ester	8.577	2.56	C19H34O2	294.5 g/mol	Ester	NCBI	-	-
19	9,12-Octadecadienoic acid, methyl ester	8.655	10.62	C19H34O2	294.5 g/mol	Ester	NCBI	yes	yes
20	Gamma-Linolenic acid, methyl ester	8.755	2.60	C19H32O	292.5 g/mol	Ester	NCBI	yes	-
21	9,12,15-Octadecatrienoic acid, methyl ester, (Z,Z,Z)-	8.755	1.43	C19H32O2	292.5 g/mol	Ester	NCBI	yes	-
22	Methyl 18-methylnonadecanoate	9.101	4.81	C21H42O2	292.5 g/mol	Ester	NCBI	-	-
23	cis-11-Eicosenoic acid, methyl ester	9.195	2.12	C21H40O2	326.5 g/mol	Ester	NCBI	yes	-
24	11,14-Octadecadienoic acid, methyl ester	9.399	1.17	C19H34O2	294.5 g/mol	Ester	NCBI	-	-
25	Docosanoic acid, methyl ester	9.958	4.15	C23H46O2	354.6 g/mol	Ester	NCBI	-	-
26	Tetracosanoic acid, methyl ester	11.088	2.79	C25H50O2	382.6 g/mol	Ester	NCBI	-	-



Lampiran 18. Hasil Analisis GC-MS Asam Lemak Pulu Mandoti terfermentasi Jamur Tiram Putih (*Pleurotus ostreatus*).

No	Metabolites Compound	RT	% of Area	M.F	M.W. (g/mol)	Ontologi	Library	Antioxidant	Antidiabetik
1	Octanoic acid, methyl ester	3.815	2.38	C9H18O2	130.26 g/mol	Ester	NCBI	yes	-
2	Decanoic acid, methyl ester	5.053	3.10	C11H22O2	158.32 g/mol	Ester	NCBI	yes	-
3	Undecanoic acid, methyl ester	5.576	1.28	C12H24O2	186.31 g/mol	Ester	NCBI	-	-
4	Dodecanoic acid, methyl ester	6.059	3.39	C13H26O2	200.32 g/mol	Ester	NCBI	yes	-
5	Butylated Hydroxytoluene	6.396	1.03	C15H24O	220.35g/mol	Fenolik	NCBI	yes	yes
6	Tridecanoic acid, methyl ester	6.506	1.60	C14H28O2	216.41 g/mol	Ester	NCBI	yes	-
7	Methyl tetradecanoate	6.928	3.83	C15H30O2	244.47 g/mol	Ester	NCBI	yes	-
8	trans-13-Octadecenoic acid, methyl ester	7.082	1.36	C19H36O2	284.54 g/mol	Ester	NCBI	yes	-
9	Pentadecanoic acid, methyl ester	7.327	1.99	C16H32O2	258.50 g/mol	Ester	NCBI	yes	-
10	10-Octadecenoic acid, methyl ester	7.479	2.26	C19H36O2	282.57 g/mol	Ester	NCBI	yes	-
11	Hexadecanoic acid, methyl ester	7.706	11.79	C17H34O2	270.51 g/mol	Ester	NCBI	yes	yes
12	10-Nonadecenoic acid, methyl ester	7.809	2.39	C20H38O2	314.62 g/mol	Ester	NCBI	-	-
13	Heptadecanoic acid, methyl ester	8.068	2.04	C18H36O2	286.56 g/mol	Ester	NCBI	-	-
14	cis-10-Heptadecenoic acid, methyl ester	8.170	1.93	C18H34O2	284.54 g/mol	Ester	NCBI	-	-
15	Methyl stearate	8.413	5.15	C19H38O2	298.57 g/mol	Ester	NCBI	yes	-
16	9-Octadecenoic acid, methyl ester	8.489	13.74	C19H36O2	298.57 g/mol	Ester	NCBI	yes	yes
17	9,12-Octadecadienoic acid, methyl ester	8.575	2.80	C19H34O2	280.50 g/mol	Ester	NCBI	yes	yes
	10,12-Octadecadienoic acid, methyl ester	8.653	10.29	C19H34O2	280.50 g/mol	Ester	NCBI	yes	yes
	11,12-Octadecadienoic acid, methyl ester	8.750	2.62	C20H32O2	280.50 g/mol	Ester	NCBI	yes	-
	11,14-Octadecadienoic acid, methyl ester,	8.864	2.01	C19H32O2	280.50 g/mol	Ester	NCBI	-	-
	11,15-Octadecadienoic acid, methyl ester	9.099	4.48	C20H40O2	316.64 g/mol	Ester	NCBI	yes	-



22	cis-11-Eicosenoic acid, methyl ester	9.194	2.08	C21H40O2	340.66 g/mol	Ester	NCBI	yes	-
23	11,13-Eicosadienoic acid, methyl ester	9.397	1.29	C22H38O2	308.56 g/mol	Ester	NCBI	-	-
24	Heneicosanoic acid, methyl ester	9.499	3.48	C23H46O2	328.65 g/mol	Ester	NCBI	yes	-
25	5,8,11,14-Eicosatetraenoic acid, methyl ester, (all-Z)-	9.597	0.98	C22H32O2	304.52 g/mol	Ester	NCBI	-	-
26	9,12,15-Octadecatrienoic acid, methyl ester, (Z,Z,Z)-	9.672	1.25	C21H32O2	280.50 g/mol	Ester	NCBI	yes	-
27	Methyl eicosa-5,8,11,14,17-pentaenoate	9.896	1.28	C23H34O2	322.59 g/mol	Ester	NCBI	yes	-
28	Docosanoic acid, methyl ester	9.956	4.07	C23H46O2	342.68 g/mol	Ester	NCBI	-	-
29	13-Docosenoic acid, methyl ester, (Z)-	10.089	1.18	C23H46O2	340.66 g/mol	Ester	NCBI	yes	yes
30	Tricosanoic acid, methyl ester	10.485	0.89	C24H48O2	356.71 g/mol	Ester	NCBI	-	-
31	Tetracosanoic acid, methyl ester	11.087	2.05	C25H50O2	370.74 g/mol	Ester	NCBI	-	-



Lampiran 19. Hasil Analisis GC-MS Asam Lemak Pulu Mandoti terfermentasi Jamur Tiram Coklat (*Pleurotus cystidiosus*).

No	Metabolites Compound	RT	% of Area	M.F	M.W. (g/mol)	Ontologi	Library	Antioxidant	Antidiabetic
1	Octanoic acid, methyl ester	3.817	2.34	C9H18O2	130.26	Ester	NCBI	yes	-
2	Decanoic acid, methyl ester	5.056	2.85	C11H22O2	158.32	Ester	NCBI	yes	-
3	Dodecanoic acid, methyl ester	5.578	1.01	C13H26O2	186.38	Ester	NCBI	yes	-
4	Dodecanoic acid, methyl este	6.060	3.37	C13H26O2	186.38	Ester	NCBI	yes	-
5	Butylated Hydroxytoluene	6.396	0.94	C15H24O	220.35	Fenolik	NCBI	yes	yes
6	Tridecanoic acid, methyl ester	6.508	1.24	C14H28O2	216.41	Ester	NCBI	yes	-
7	Methyl tetradecanoate	6.928	3.65	C15H30O2	244.47	Ester	NCBI	yes	-
8	Methyl Z-11-tetradecenoate	7.082	1.08	C15H28O2	240.43	Ester	NCBI	-	-
9	Pentadecanoic acid, methyl ester	7.327	1.81	C16H32O2	258.50	Ester	NCBI	yes	-
10	trans-13-Octadecenoic acid, methyl ester	7.480	2.25	C19H36O2	296.55	Ester	NCBI	yes	-
11	Pentadecanoic acid, 14-methyl-, methyl ester	7.707	12.53	C16H32O2	258.50	Ester	NCBI	yes	-
12	7-Hexadecenoic acid, methyl ester, (Z)-	7.810	2.03	C17H34O2	270.51	Ester	NCBI	-	-
13	Heptadecanoic acid, methyl ester	8.068	2.10	C18H36O2	286.56	Ester	NCBI	-	-
14	cis-10-Heptadecenoic acid, methyl ester	8.172	1.93	C18H34O2	284.54	Ester	NCBI	-	-
15	Methyl stearate	8.414	5.41	C19H38O2	298.57	Metil Ester	NCBI	yes	-
16	9-Octadecenoic acid, methyl ester	8.460	2.47	C19H36O2	298.57	Ester	NCBI	yes	yes
17	9-Octadecenoic acid, methyl ester	8.491	16.00	C19H36O3	298.57	Ester	NCBI	yes	yes
18	9,12-Octadecadienoic acid, methyl ester	8.577	1.98	C19H34O2	280.50	Ester	NCBI	yes	yes
19	9,12-Octadecadienoic acid, methyl ester	8.655	12.01	C19H34O2	280.50	Ester	NCBI	yes	yes
	olenic acid, methyl ester	8.755	2.00	C20H34O2	280.50	Ester	NCBI	yes	-
	adecatrienoic acid, methyl ester,	8.865	1.57	C19H32O2	280.50	Ester	NCBI	-	-
	ic acid, 15-methyl-, methyl ester	9.101	3.90	C17H34O2	270.51	Ester	NCBI	yes	-
	senoic acid, methyl ester	9.194	2.34	C20H38O2	340.66	Ester	NCBI	yes	-



24	11,13-Eicosadienoic acid, methyl ester	9.400	0.95	C21H40O2	308.56	Ester	NCBI	-	-
25	Heneicosanoic acid, methyl ester	9.503	3.13	C23H46O2	328.56	Ester	NCBI	yes	-
26	5,8,11,14-Eicosatetraenoic acid, methyl ester, (all-Z)-	9.600	1.08	C22H32O2	304.52	Ester	NCBI	-	-
27	11,14,17-Eicosatrienoic acid, methyl ester	9.673	0.94	C21H36O2	306.54	Ester	NCBI	-	-
28	Docosanoic acid, methyl ester	9.957	3.75	C23H46O2	342.68	Ester	NCBI	-	-
29	11-Eicosenoic acid, methyl ester	10.092	1.35	C22H42O2	340.66	Ester	NCBI	-	-
30	Tetracosanoic acid, methyl ester	11.086	1.98	C25H50O2	370.74	Ester	NCBI	-	-



Lampiran 20. Hasil Analisis GC-MS Asam Lemak Pulu Mandoti terfermentasi Jamur Tiram Merah (*Pleurotus djamor*).

No	Metabolites Compound	RT	% of Area	M.F	M.W. (g/mol)	Ontologi	Library	Antioxidant	Antidiabetik
1	Octanoic acid, methyl ester	3.816	2.04	C9H18O2	158.24	Ester	NCBI	yes	-
2	Decanoic acid, methyl ester	5.055	2.54	C11H22O2	172.26	Ester	NCBI	yes	-
3	Undecanoic acid, methyl ester	5.578	1.15	C12H24O2	188.35	Ester	NCBI	-	-
4	Dodecanoic acid, methyl ester	6.060	3.15	C13H26O2	202.38	Ester	NCBI	yes	-
5	Butylated Hydroxytoluene	6.398	1.53	C15H24O	220.35	Fenolik	NCBI	yes	yes
6	Tridecanoic acid, methyl ester	6.508	1.87	C14H28O2	216.41	Ester	NCBI	yes	-
7	Methyl tetradecanoate	6.930	3.57	C15H30O2	230.44	Ester	NCBI	yes	-
8	Methyl myristoleate	7.084	1.02	C15H28O2	228.42	Ester	NCBI	-	-
9	Pentadecanoic acid, methyl ester	7.329	1.70	C16H32O2	244.47	Ester	NCBI	yes	-
10	trans-13-Octadecenoic acid, methyl ester	7.482	2.31	C19H36O2	298.57	Ester	NCBI	yes	-
11	Pentadecanoic acid, 14-methyl-, methyl ester	7.708	13.81	C17H34O2	258.50	Ester	NCBI	yes	-
12	9-Hexadecenoic acid, methyl ester, (Z)-	7.811	2.22	C17H32O2	270.51	Ester	NCBI	yes	-
13	Heptadecanoic acid, methyl ester	8.069	1.83	C18H36O2	286.56	Ester	NCBI	-	-
14	cis-10-Heptadecenoic acid, methyl ester	8.173	2.11	C18H34O2	284.54	Ester	NCBI	-	-
		8.415	5.21	C19H38O2	298.57	Ester	NCBI	yes	-
		8.460	1.79	C19H36O2	298.57	Ester	NCBI	-	-
		8.491	18.86	C19H36O2	284.54	Ester	NCBI	yes	yes
		8.577	1.85	C19H34O2	280.50	Ester	NCBI	yes	yes



19	9,12-Octadecadienoic acid, methyl ester	8.655	15.12	C19H34O2	280.50	Ester	NCBI	yes	yes
20	5,8,11-Heptadecatrienoic acid, methyl ester	8.751	2.24	C18H30O2	268.49	Ester	NCBI	yes	-
21	9,12,15-Octadecatrienoic acid, methyl ester, (Z,Z,Z)-	8.866	1.62	C19H32O2	280.50	Ester	NCBI	-	-
22	Methyl 18-methylnonadecanoate	9.101	3.71	C21H42O2	314.62	Ester	NCBI	-	-
23	cis-11-Eicosenoic acid, methyl ester	9.194	0.49	C21H40O2	326.63	Ester	NCBI	yes	-
24	9,12-Octadecadien-1-ol, (Z,Z)-	9.400	0.78	C18H34O	264.50	Alkenol	NCBI	-	-
25	Docosanoic acid, methyl ester	9.957	3.12	C23H46O2	342.68	Ester	NCBI	-	-
26	13-Docosenoic acid, methyl ester, (Z)-	10.091	0.90	C23H44O2	340.66	Ester	NCBI	Yes	yes
27	Tricosanoic acid, methyl ester	10.486	1.36	C24H48O2	356.71	Ester	NCBI	-	-
28	Tetracosanoic acid, methyl ester	11.089	2.06	C24H48O2	370.74	Ester	NCBI	-	-

