



BACHELOR IN FOOD & AGRICULTURAL PRODUCT TECHNOLOGY

Jl. Flora No. 1, Bulaksumur, Yogyakarta, Indonesia, 55281

Telp : +62 274 549650

STAFF HANDBOOK

Email : tphp@ugm.ac.id

Website : <https://s1tphp.ugm.ac.id/>

Name	<i>Dian Anggraini Suroto, S.T.P., M.P., M.Eng., Ph.D.</i>		
Post	<i>Omics and Microorganism Bioprocessing in Food and Agricultural Product Applications</i>		
Academic career	<i>Doctoral Degree (Advanced Science and Biotechnology)</i>	<i>Graduate School of Engineering, Osaka University, Japan</i>	<i>2011-2018</i>
	<i>Master Degree (Advanced Science and Biotechnology)</i>	<i>Graduate School of Engineering, Osaka University, Japan</i>	<i>2009-2011</i>
	<i>Master Degree (Food Science and Technology)</i>	<i>Universitas Gadjah Mada, Indonesia</i>	<i>2003-2005</i>
	<i>Undergraduate Degree (Food and Agricultural Product Technology)</i>	<i>Universitas Gadjah Mada, Indonesia</i>	<i>1995-1999</i>
Employment	<i>Lecturer</i>	<i>Universitas Gadjah Mada</i>	<i>2005-present</i>
	<i>Head of Waste Management Laboratory</i>	<i>Universitas Gadjah Mada</i>	<i>2022-2025</i>
Research and development projects over the last 5 years	1) <i>Development of Instant Sourdough from Natural Starter of Local Indonesian Fruits (2023), 27 million rupiah</i> <i>Personils: Rini Yanti, Dian Anggraini S, Manikharda</i> 2) <i>Development of Drinked Yoghurt Products with Indigenous Lactobacillus plantarum Dad-13 lactic acid bacteria (2022), 251.1 million rupiah</i> <i>Personils: Endang SR, Dian Anggraini S</i> 3) <i>Development of nanohydrogel preparations standard extract of broadleaf plantain (Plantago major L.) for healing of diabetic wounds (2022), 150 million rupiah</i>		



	<i>Personils: Dian Anggraini S</i> 4) <i>Chemical, physical, and microbiological characteristics of malsai's raw materials and innovative products (2021), 218.4 million rupiah</i> <i>Personils: Dian Anggraini S</i> 5) <i>The effect of divalent or trivalent metal ions addition on the agricultural waste saccharification process using crush enzymes from high cellulase producing mutant strains Streptomyces bongoensis (2021), 15 million rupiah</i> <i>Personils: Dian Anggraini S</i> 6) <i>Characterization and production of cellulase enzymes form ribosome engineered mutants of Streptomyces lividans in agricultural waste (2020), 15 million rupiah</i> <i>Personils: Dian Anggraini S</i> 7) <i>Robosom engineering application to increase the production of enzymes and antimicrobial compounds (2019), 15 million rupiah</i> <i>Personils: Dian Anggraini S</i>
Industry collaborations over the last 5 years	-
Patents and proprietary rights	<i>Proses Kimia, Fisika, dan Biologi pada Pembuatan Roti</i> 2019
Important publications over the last 5 years	<i>Selected recent publications from a total of approx: 21</i> Danila, I. R., Yanti, R., & Suroto, D. A. (2023). Microbiota Properties and Texture of Rice Flour Bread with Pineapple Starter. <i>Journal of Applied Agricultural Science and Technology</i>, 7(3): 225-235. https://doi.org/10.55043/jaast.v7i3.130. Aziz, F. N., Utami, T., Suroto, D. A., Yanti, R., & Rahayu, E. S. (2023). Fermentation of pineapple juice with Lactiplantibacillus plantarum subsp. plantarum Dad-13: Sensory and microbiological characteristics. <i>Czech Journal of Food Sciences</i>, 41(3): 221-229. https://doi.org/10.17221/243/2022-CJFS. Krisnawati, R., Cahyanto, M. N., Sardjono, Suroto, D. A., & Widada, J. (2023). Transcriptional changes in the xylanolytic filamentous fungus Aspergillus



	tubingensis NBRC 31125 grown under repressive conditions. <i>Agriculture and Natural Resources</i>, 7(3): 523-532. https://li01.tci-thaijo.org/index.php/anres/article/view/260146. Alwi, A. N. S., Rahayu, E. S., Utami, T., Yanti, R., Suroto, D. A. (2023). Formulation of Fruit-Based Probiotic Drink From Snake Fruit (<i>Salacca Zalacca</i>) and <i>Lactiplantibacillus plantarum</i> subsp. <i>plantarum</i> Dad-13. <i>Current Research in Nutrition and Food Science Journal</i>, 11: 351–359. https://doi.org/10.12944/crnfsj.11.1.26. Tologana, R. D., Wikandari, R., Rahayu, E. S., Suroto, D. A., & Utami, T. (2023). Correlation between the chemical, microbiological and sensory characteristics of cream cheese using a mixed and single probiotic culture. <i>Journal of food science and technology</i>, 60(1), 181–189. https://doi.org/10.1007/s13197-022-05603-0 Wattimury, A., Suroto, D. A., Utami, T., Wikandari, R., & Rahayu, E. S. (2023). In silico analysis of antibiotic resistance genes in <i>Lactiplantibacillus plantarum</i> subsp. <i>plantarum</i> Kita-3. <i>Indonesian Journal of Biotechnology</i>, 28(2): 102-111. https://dx.doi.org/10.22146/ijbiotech.72550 Majid, A. A., Suroto, D. A., Utami, T., & Rahayu, E. S. (2023). Probiotic potential of kombucha drink from butterfly pea (<i>Clitoria ternatea</i> L.) flower with the addition of <i>Lactiplantibacillus plantarum</i> subsp. <i>plantarum</i> Dad-13. <i>Biocatalysis and Agricultural Biotechnology</i>, 51, 102776. https://doi.org/10.1016/j.bcab.2023.102776 Samodra, E. M. A., Suroto, D., Utami, T., Wikandari, R., & Rahayu, E. S. (2022). Cold Stress Response Genes of <i>Lantiplantibacillus plantarum</i> subsp. <i>plantarum</i> Mut-3 and <i>Lantiplantibacillus plantarum</i> subsp. <i>plantarum</i> Mut-7 Support the Ability to Survive in Low-Temperature Conditions. <i>HAYATI Journal of Biosciences</i>, 30(1), 65-70. https://doi.org/10.4308/hjb.30.1.65-70 Krisnawati, R., Cahyanto, M. N., Sardjono, S., Suroto, D. A., & Widada, J. (2022). RNA-seq data of <i>Aspergillus tubingensis</i> NBRC 31125 in carbon catabolite repressor related to xylanase production. <i>Data in brief</i>, 45, 108700. https://doi.org/10.1016/j.dib.2022.108700 Safitri, I. O., Suroto, D. A., Sardjono, S., Cahyanto, M. N., Sardjono, S., & Widada, J. (2022). Draft genome sequence of <i>Trichoderma asperellum</i> MLT1J1,
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- isolated from coconut husk in Maluku, Indonesia. *Korean Journal of Microbiology*, 58(3): 208-210. <https://doi.org/10.1016/j.dib.2022.108700>
- Gatya, M., Fibri, D. L. N., Utami, T., **Suroto, D. A.**, & Rahayu, E. S. (2022). Gut Microbiota Composition in Undernourished Children Associated with Diet and Sociodemographic Factors: A Case-Control Study in Indonesia. *Microorganisms*, 10(9), 1748. <https://doi.org/10.3390/microorganisms10091748>
- Hidayati, F. L. N., **Suroto, D. A.**, Sardjono, Cahyanto, M. N., & Widada, J. (2022). Whole-genome sequence data of cellulase-producing fungi *Trichoderma asperellum* PK1J2, isolated from palm empty fruit bunch in Riau, Indonesia. *Data in brief*, 45, 108607. <https://doi.org/10.1016/j.dib.2022.108607>
- Safitri, I. O., **Suroto, D. A.**, Widada, J., Sardjono, S., & Cahyanto, M. N. (2022). Effects of glucose as carbon catabolite repressor on alpha-amylase and glucoamylase production in Indonesian indigenous fungi. *Malaysian Journal of Microbiology*. <https://doi.org/10.21161/mjm.211279>.
- Krisnawati, R., Sardjono, Widada, J., **Suroto, D. A.**, & Cahyanto, M. N. (2022). Effect of Glucose on Endo-xylanase and β -xylosidase Production by Fungi Isolated in Indonesia. *Journal of Pure Applied Microbiology*, 16(1): 226-234. <https://doi.org/10.22207/JPAM.16.1.12>
- Jannah, S. R., Rahayu, E. S., Yanti, R., **Suroto, D. A.**, & Wikandari, R. (2022). Study of Viability, Storage Stability, and Shelf Life of Probiotic Instant Coffee *Lactiplantibacillus plantarum* Subsp. *plantarum* Dad-13 in Vacuum and Non Vacuum Packaging at Different Storage Temperatures. *International Journal of Food Science*, 2022, 1663772. <https://doi.org/10.1155/2022/1663772>
- Luwidharto, J. C. N., Rahayu, E. S., **Suroto, D. A.**, Wikandari, R., Ulfah, A., & Utami, T. (2022). Effects of *Spirulina platensis* Addition on Growth of *Lactobacillus plantarum* Dad 13 and *Streptococcus thermophilus* Dad 11 in Fermented Milk and Physicochemical Characteristics of the Product. *Applied Food Biotechnology*, 9(3), 205–216. <https://doi.org/10.22037/afb.v9i3.37013>
- Andriani, D., Hasan, P. N., Utami, T., **Suroto, D. A.**, Wikandari, R., & Rahayu, E. S. (2021). Genotypic and Phenotypic Analyses of Antibiotic Resistance in



	Indonesian Indigenous Lactobacillus Probiotics. <i>Applied Food Biotechnology</i>, 8(4): 267-274. http://dx.doi.org/10.22037/afb.v8i4.34448 Darmastuti, A., Hasan, P. N., Wikandari, R., Utami, T., Rahayu, E. S., & Suroto, D. A. (2021). Adhesion Properties of <i>Lactobacillus plantarum</i> Dad-13 and <i>Lactobacillus plantarum</i> Mut-7 on Sprague Dawley Rat Intestine. <i>Microorganisms</i>, 9(11), 2336. https://doi.org/10.3390/microorganisms9112336 Andriani, D., Nur Hasan, P., Utami, T., Suroto, D. A., Wikandari, R., & Rahayu, E. S. (2021). Genotypic and Phenotypic Analyses of Antibiotic Resistance in Indonesian Indigenous Lactobacillus Probiotics. <i>Applied Food Biotechnology</i>, 8(4): 267-274. http://dx.doi.org/10.22037/afb.v8i4.34448 Suroto, D. A., Nur Hasan, P., & Rahayu, E. S. (2021). Genomic insight of two indigenous probiotics <i>Lactobacillus plantarum</i> Dad-13 and <i>Lactobacillus plantarum</i> Mut-7 from different origins of Indonesian fermented foods. <i>Biodiversitas</i>, 22(12): 5491-5500. https://doi.org/10.13057/biodiv/d221233 Wikandari, R., Putro, A. W., Suroto, D. A., Purwandari, F. A., & Setyaningsih, W. (2021). Combining a Flipped Learning Approach and an Animated Video to Improve First-Year Undergraduate Students' Understanding of Electron Transport Chains in a Biochemistry Course. <i>Journal of Chemical Education</i>, 98(7): 2236-2242. https://doi.org/10.1021/acs.jchemed.0c01477						
Activities in specialist bodies over the last 5 years	<table><tr><th>Organisation</th><th>Role</th><th>Period</th></tr><tr><td></td><td></td><td></td></tr></table>	Organisation	Role	Period			
Organisation	Role	Period					