UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Abd-Elhalem, B. T., El-Shahat, M., dan El-Gendy, A. O. 2024. Standardization of the Agar Plate Method for Bacteriophage Production: Optimization of Plaque Size and Yield. *Antibiotics*. 14 (1): 2.

Abedon, S. T. 2018. Detection of Bacteriophages: Phage Plaques. Dalam D. Harper, S. Abedon, B. Burrowes, dan M. McConville (Ed.). *Bacteriophages*. Springer.

Abedon, S. T., dan Yin, J. 2021. Bacteriophage Plaques: Theory and Analysis. *Viruses*. 13(11): 2102.

Aditia, A., Nuswantoro, A., Djohan, H., Ihsan, B. M., Uq'ma, N., Shafitri, A. N., Affifatuzahara, A., Al-qorifah, F. A., dan Anjelica, B. 2023. Identifikasi dan Profil Resistensi Bakteri Pada Minuman Air Tahu dan Air Tebu Di Wilayah Kota Pontianak. *Jurnal Ilmiah Global Education*. 4 (4): 2412-2420.

Alkhalil, S. S. 2023. The Role of Bacteriophages in Shaping Bacterial Composition and Diversity in the Human Gut. *Frontiers in Microbiology*. 14: 1-15.

Almeida, G. M., dan Glaser, R. (2016). Transmission Electron Microscopy: A Visual Guide to Bacteriophage Biology. *Methods in Molecular Biology*. 145-158.

Andermann, T., Torres Jiménez, M. F., Matos-Maraví, P., Batista, R., Blanco-Pastor, J. L., Gustafsson, A. L. S., Källerjö, M., Linder, H. P., Oxelman, B., Bacon, C. D., dan Antonelli, A. 2020. A Guide to Carrying Out a Phylogenomic Target Sequence Capture Project. *Frontiers in Genetics.* 10, 1407.

Apriliansyah, M., Zuhrotun, A., dan Astrini, D. 2022. Bakteri utama penyebab kejadian luar biasa keracunan pangan. *Jurnal Farmasi Klinik Indonesia*. 11 (3): 239-255.

Artawinata, P. C., Lorraine, S., dan Waturangi, D. E. 2023. Isolation and characterization of bacteriophages from soil against food spoilage and foodborne pathogenic bacteria. *Scientific Reports*. 13. 9282.

Barua, P., dan Nath, P. D. 2018. Bacteriophages: A Potential Next Generation Biocontrol Tool for Plant Disease Management. *International Journal of Current Microbiology and Applied Sciences.* 7(9), 1103–1112.

Barylski, J., Enault, F., Dutilh, B. E., Schuller, M. B. P., Edwards, R. A., Gillis, A., Beszteri, B., Fellner, L., Fortier, L.-C., Klumpp, J., Knezevic, P., Krupovic, M., Kuhn, J. H., Lavigne, R., Roux, S., Sullivan, M. B., Suttle, C. A., Uchiyama, J., van Zyl, L. J., dan Wittmann, J. 2020. Analysis of Spounaviruses as a Case Study for the Overdue Reclassification of Tailed Phages. *Systematic Biology*. 69(1): 110-123.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Berg, V. D. D. F., van der Steen, B. A., Costa, A. R., dan Brouns, S. J. J. 2023. Phage tRNAs Evade tRNA-Targeting Host Defenses Through Anticodon Loop Mutations. *eLife.* 12.

Bertrand, R. L. 2019. Lag Phase Is a Dynamic, Organized, Adaptive, and Evolvable Period That Prepares Bacteria for Cell Division. *Journal of Bacteriology.* 201 (7).

Besarab, N. V., Akhremchuk, A. E., Zlatohurska, M. A., Romaniuk, L. V., Valentovich, L. N., Tovkach, F. I., Lagonenko, A. L., dan Evtushenkov, A. N. 2020. Isolation and Characterization of Hena1 – A Novel *Erwinia amylovora* Bacteriophage. *FEMS Microbiology Letters.* 367 (9).

Bilung, L. M., Jaraee, J., Nolasco-Hipólito, C., dan Vincent, M. 2018. Detection, Genetic Diversity and Antibiotic Resistance Profiles of *Bacillus cereus* Isolated from Sago Processing Plants in Malaysia. *Malaysian Journal of Microbiology*. 14(4): 320-324.

Bintsis, T. 2017. Foodborne pathogens. *AIMS Microbiology*. 3 (3): 529-563.

Bonilla, N. dan Barr, J. J. 2018. Phage on tap: a quick and efficient protocol for the preparation of bacteriophage laboratory stocks. *The human virome: Methods and protocols.* 37-46.

Boon, M., Adriaenssens, E. M., dan Lavigne, R. 2022. Electron Microscopy Methods for Virus Identification and Characterization. *Curr. Issues Mol. Biol.* 44 (3): 1230-1245.

Cantu, V. A., Salamon, P., Seguritan, V., Redfield, J., Salamon, D., Edwards, R. A., dan Segall, A. M. 2020. PhANNs, a Fast and Accurate Tool and Web Server to Classify Phage Structural Proteins. *PLoS Computational Biology.* 16(11).

Caro-Astorga, J., Frenzel, E., Perkins, J. R., Álvarez-Mena, A., de Vicente, A., Ranea, J. A. G., Kuipers, O. P., dan Romero, D. 2020. Biofilm Formation Displays Intrinsic Offensive and Defensive Features of *Bacillus cereus*. *npj Biofilms and Microbiomes*. 6: 3.

Catania, A. M., Di Ciccio, P., Ferrocino, I., Civera, T., Canzio, F. T., dan Dalmasso, A. 2023. Evaluation of the Biofilm-Forming Ability and Molecular Characterization of Dairy *Bacillus* spp. Isolates. *Frontiers in Cellular and Infection Microbiology.* 13, 1229460.

Celios. 2025. *Makan (Tidak) Bergizi (Tidak) Gratis*. (https://celios.co.id/makan-tidak-bergizi-tidak-gratis/). Diakses tanggal 4 Januari 2026.

Chen, F., Cheng, X., Li, J., Yuan, X., Huang, X., Lian, M., Li, W., Huang, T., Xie, Y., Liu, J., Gao, P., Wei, X., Wang, Z., dan Wu, M. 2021. Novel lytic phages

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas P
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

protect cells and mice against *Pseudomonas aeruginosa* infection. *Journal of Virology*. 95 (8).

Cho, E., Kim, J., Ha, N.-C., dan Ryu, S. 2025. Amino Acid Residues in the Tail Fiber Differentiate the Host Specificity of *Cronobacter sakazakii* Bacteriophage. *Journal of Virology*. 99(5).

Cui, J., Zhong, W., Liu, W., Zhang, C., Zou, L., dan Ren, H. 2023. Whole Genome Sequencing and Annotation of a Lysogenic Phage vB_EcoP_DE5 Isolated From Donkey-Derived *Escherichia coli*. *Virus Genes.* 59(2), 290-300.

Damayanti, R., Jannah, S. N., Wijanarka, W., dan Rahaju, S. H. 2020. Isolasi bakteriofag *Salmonella spp.* dari biofilm pada sistem air minum isi ulang. *Jurnal Akademika Biologi*. 5 (2): 59-67.

Dams, D., Brøndsted, L., Drulis-Kawa, Z., dan Briers, Y. 2019. Engineering of Receptor-Binding Proteins in Bacteriophages and Phage Tail-Like Bacteriocins. *Biochemical Society Transactions.* 47(1): 449-460.

Das, R., dan Rahlff, J. 2024. Phage Genome Architecture and GC Content: Structural Genes and Where to Find Them. *bioRxiv.*

Dietrich, R., Jessberger, N., Ehling-Schulz, M., Märtlbauer, E., dan Granum, P. E. 2021. The Food Poisoning Toxins of *Bacillus cereus*. *Toxins*. 13 (2). 98.

Dedeo, C. L., Teschke, C. M., dan Alexandrescu, A. T. 2020. Keeping It Together: Structures, Functions, and Applications of Viral Decoration Proteins. *Viruses*. 12 (10): 1163.

Duan, S., Yu, Y., Guo, Y., Lu, D., Li, N., Liu, Z., Liang, J., Jiang, Y., Wang, S., Fu, P., Liu, J., dan Liu, H. 2023. Epidemiological Evaluation of *Bacillus cereus*-Induced Foodborne Outbreaks – China, 2010–2020. *China CDC Weekly.* 5(33), 737-741.

Duarte, J., Pereira, C., Calado, R., dan Almeida, A. 2025. Phage Stability Research: A Systematic Review Bridging Methodological Gaps and Paving the Way for Industrial and Clinical Applications. *PHAGE*. 6(3).

Ehling-Schulz, M., Frenzel, E., dan Gohar, M. 2019. Food-Bacteria Interplay: Pathometabolism of Toxin Producing *Bacillus cereus* Group Bacteria. *Front. Microbiol.* 10: 1177.

Endersen, L., dan Coffey, A. 2020. The Use of Bacteriophages for Food Safety. *Current Opinion in Food Science.* 36: 1-8.

Farhani, I., Hariyadi, R. D., dan Lioe, H. N. 2024. Phenotypic and Genotypic Screening of *Bacillus cereus* Local Isolates for Their Antimicrobial Resistance. *Biodiversitas.* 25(11), 4507–4514.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Fox, D., Mathur, A., Xue, Y., Liu, Y., Tan, W. H., Feng, S., Pandey, A., Ngo, C., Hayward, J. A., Atmosukarto, I. I., Price, J. D., Johnson, M. D., Jessberger, N., Robertson, A. A. B., Burgio, G., Tscharke, D. C., Fox, E. M., Leyton, D. L., Kaakoush, N. O., Märtlbauer, E., Leppla, S. H., dan Man, S. M. (2020). *Bacillus cereus* Non-Haemolytic Enterotoxin Activates the NLRP3 Inflammasome. *Nature Communications.* 11 (1). 760.

Gaffar, A., dan Suryani, E. M. 2022. Bakteriofag dan Aplikasi dalam Mengendalikan Bakteri Patogen untuk Meningkatkan Keamanan Pangan. *BIOMA.* 18(2): 14-48.

Gao, T., Ding, Y., Wu, Q., Wang, J., Zhang, J., Yu, S., Mo, L., Kong, L., Feng, Y., Chen, M., Wu, H., dan Pang, R. 2018. Prevalence, Virulence Genes, Antimicrobial Susceptibility, and Genetic Diversity of *Bacillus cereus* Isolated From Pasteurized Milk in China. *Frontiers in Microbiology.* 9, 533.

Gdoura-Ben A. M., Culot, A., Techer, C., AlReshidi, M., Adnan, M., Jan, S., Baron, F., Grosset, N., Snoussi, M., Gdoura, R., dan Gautier, M. 2022. Isolation, Partial Characterization and Application of Bacteriophages in Eradicating Biofilm Formation by *Bacillus cereus* on Stainless Steel Surfaces in Food Processing Facilities. *Pathogens.* 11(8), 872.

Ge, H., Hu, M., Zhao, G., Du, Y., Xu, N., Chen, X., dan Jiao, X. 2020. The "Fighting Wisdom and Bravery" of Tailed Phage and Host in the Process of Adsorption. *Microbiological Research.* 230, 126344.

Goulet, A., Spinelli, S., Mahony, J., dan Cambillau, C. 2020. Conserved and Diverse Traits of Adhesion Devices From *Siphoviridae* Recognizing Proteinaceous or Saccharidic Receptors. *Viruses.* 12(5), 512.

Haque, M. A., Hu, H., Liu, J., Islam, M. A., Hossen, F., Rahman, M. A., Ahmed, F., dan He, C. 2024. Emergence of multidrug-resistant *Bacillus* spp. derived from animal feed, food, and human diarrhea in South-Eastern Bangladesh. *Journal of Microbial Pathogens.* 24 (61): 1-19.

Hamill, P. G., Stevenson, A., McMullan, P. E., Williams, J. P., Lewis, A. D. R., Sudharsan, S., Stevenson, K. E., Farnsworth, K. D., Khroustalyova, G., Takemoto, J. Y., Quinn, J. P., Rapoport, A., dan Hallsworth, J. E. 2020. Microbial Lag Phase Can Be Indicative of, or Independent from, Cellular Stress. *Scientific Reports*. 10: 5948.

Harvard Medical School. 2023. *Protocol 8: Flooding Plates and Preparing High-Titer Lysates*. https://phages.hms.harvard.edu/labprotocols/protocol_08-lysates.html. Diakses tanggal 10 Mei 2026.

Huang, L., dan Xiang, Y. 2020. Structures of the Tailed Bacteriophages That Infect Gram-Positive Bacteria. *Current Opinion in Virology.* 45: 65-74.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Inkson, B. J. (2016). Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM) for Materials Characterization. *Woodhead Publishing*. 17-43.

Iqbal, M. 2021. *Modul Bakteriofag: Konsep Dasar Bakteriofag*. Jember: Universitas Jember.

Jamal, M., Chaudhry, W. N., Hussain, T., Das, C. R., dan Andleeb, S. 2015. Characterization of New *Myoviridae* Bacteriophage WZ1 Against Multi-Drug Resistant (MDR) *Shigella dysenteriae*. *Journal of Basic Microbiology.* 55(4): 420-431.

Jin, A., Tursun, D., Tan, L., Yang, Z., Duo, Z., Qin, Y., dan Zhang, R. 2025. Whole Genome Sequencing and Analysis of Benzo(a)pyrene-Degrading Bacteria *Bacillus cereus* M72-4. *Genome.* 68(1): 1-9.

Jessberger, N., Dietrich, R., Granum, P. E., dan Märtlbauer, E. 2020. The *Bacillus cereus* Food Infection as Multifactorial Process. *Toxins*. 12 (11): 701.

Jurado, A., Pérez-Balibrea, N., dan García, C. 2022. Isolation, Partial Characterization and Application of Bacteriophages in Eradicating Biofilm Formation by *Bacillus cereus* on Stainless Steel Surfaces in Food Processing Facilities. *Pathogens*. 11 (8): 872.

Kahn, L. H., Bergeron, G., Bourassa, M. W., de Vegt, B., Gill, J., Gomes, F., Malouin, F., Opengart, K., Ritter, G. D., Singer, R. S., Storrs, C., dan Topp, E. 2019. From Farm Management to Bacteriophage Therapy: Strategies to Reduce Antibiotic Use in Animal Agriculture. *Annals of the New York Academy of Sciences*, 1441 (1). 31-39.

Kharel, K., Bookman, K. S., Schneider, R. G., Silverberg, R., Kurdmongloltham, P., Bertoldi, B., dan Schneider, K. R. 2024. Preventing Foodborne Illness: *Bacillus cereus*. *Food Science and Human Nutrition.* 6.

Kazi, M. dan Annapure, U. S. 2016. Bacteriophage Biocontrol of Foodborne Pathogens. *Journal of Food Science and Technology*. 53 (3): 1355-1362.

Kementerian Kesehatan Republik Indonesia. 2024. *Data KLB Keracunan Pangan Tahun 2024*. Jakarta: Kementerian Kesehatan.

Kim, S.-H., Choe, J., dan Park, M.-K. 2024. Complete Genome Sequence of *Salmonella Typhimurium*-Specific Phage vB_SalA_KFSST3 Possessing Antibiofilm Activity. *Journal of Microbiology and Biotechnology*. 52(3): 339-341.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Kim, E.-J., dan Lim, J.-A. 2025. Complete Genome Sequence of *Bacillus cereus* Phage vB_BceH_LBC2, a Lytic Member of the Genus *Bequatrovirus*. *Microbiology Resource Announcements.* 14(11): e00762-25.

Kok, D. N., Turnbull, J., Takeuchi, N., Tsourkas, P. K., dan Hendrickson, H. L. 2023. *In Vitro* Evolution to Increase the Titers of Difficult Bacteriophages: RAMP-UP Protocol. *PHAGE: Therapy, Applications, and Research*. 4(2): 68-81.

Kongsomboonchoke, P., Mongkolkarvin, P., Khunti, P., Vijitphichiankul, J., Nonejuie, P., Thiennimitr, P., dan Chaikeeratisak, V. 2025. Rapid Formulation of a Genetically Diverse Phage Cocktail Targeting Uropathogenic *Escherichia coli* Infections Using the UTI89 Model. *Scientific Reports.* 15.

Kropinski, A. M., Mazzocco, A., dan Waddell, T. E. 2018. Enumeration of Bacteriophages by Double Agar Overlay Plaque Assay. *Bacteriophages: Methods and Protocols.* 1: 69-76.

Łepek, K., Węgrzyn, G., dan Łoś, J. M. 2022. The Role of Calcium and Magnesium Ions in the Infection Process of Bacteriophages. *Frontiers in Microbiology*. 13: 895305.

Li, C., Yuan, X., Li, N., Wang, J., Yu, S., Zeng, H., Zhang, J., Wu, Q., dan Ding, Y. 2020. Isolation and Characterization of *Bacillus cereus* Phage vB_BceP-DLc1 Reveals the Largest Member of the Φ29-Like Phages. *Microorganisms.* 8(11): 1-22.

Lin, Y., Cha, X., Brennan, C., Cao, J., dan Shang, Y. 2023. Contamination of plant foods with *Bacillus cereus* in a province and analysis of its traceability. *Microorganisms.* 11 (11): 2763.

Liu, A. W., Villar-Briones, A., Luscombe, N. M., & Plessy, C. 2022. Automated phenol-chloroform extraction of high molecular weight genomic DNA for use in long-read single-molecule sequencing. *F1000Research*. 11 (240): 1-13.

Lücking, R., Aime, M. C., Robbertse, B., Miller, A. N., Ariyawansa, H. A., Aoki, T., Cardinali, G., Crous, P. W., Druzhinina, I. S., Geiser, D. M., Hawksworth, D. L., Hyde, K. D., Irinyi, L., Jeewon, R., Johnston, P. R., Kirk, P. M., Malosso, E., May, T. W., Meyer, W., … Schoch, C. L. 2020. Unambiguous Identification of Fungi: Where Do We Stand and How Accurate and Precise Is Fungal DNA Barcoding? *IMA Fungus.* 11(1), 14.

Ly-Chatain, M. H. 2014. The Factors Affecting Effectiveness of Treatment in Phages Therapy. *Frontiers in Microbiology*. 5.

Maier, R. M., Pepper, I. L., dan Gerba, C. P. 2009. *Environmental Microbiology (2nd ed.)*. London: Academic Press.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Maerani, Ghaffar, M., Munggarani, F., Nuraeni, D. A., Ismaya, P. L., dan Faturochman, H. Y. 2026. Prevalence and Molecular Detection of Toxigenic Genes of *Bacillus cereus* in Rice-Based Street Foods in Tasikmalaya, Indonesia. *AgriHealth: Journal of Agri-food, Nutrition and Public Health.* 7(1), 68-77.

Mahsa, Y., Bouzari, M., Ghaemi, E. A., dan Shahin, K. 2020. Isolation, Characterization and Genomic Analysis of a Novel Bacteriophage VB_EcoS-Golestan Infecting Multidrug-Resistant *Escherichia coli* Isolated From Urinary Tract Infection. *Scientific Reports.* 10, 7690.

McClain, S., Islamovic, R. H., Ranjan, R., Slavovici-Hristache, A., dan Li, P. 2023. Allergy Risk Assessment for Newly Expressed Proteins (NEPs) in Genetically Modified (GM) Plants. *Regulatory Science.* 11(1): 60-75.

McDowell, R. H., Sands, E. M., dan Friedman, H. 2023. *Bacillus cereus*. Florida: StatPearls Publishing.

Microchemlab.com. *Bacillus cereus*. (https://microchemlab.com/microorganisms/bacillus-cereus/). Diakses tanggal 9 Januari 2026.

Microbesnotes.com. *Bacillus cereus- An Overview*. (https://microbenotes.com/bacillus-cereus/). Diakses tanggal 9 Januari 2026.

Microbenotes.com. *Bacteriophage- Definition, Structure, Life Cycles, Applications, Phage Therapy*. (https://microbenotes.com/bacteriophage/). Diakses tanggal 5 Juli 2026.

Mohammadi, B., Gorkina, N., dan Smith, S. A. 2022. *Foodborne Pathogens - Recent Advances in Control and Detection*. London: Intech Open.

Montso, P. K., Mlambo, V., dan Ateba, C. N. 2019. Characterization of Lytic Bacteriophages Infecting Multidrug-Resistant Shiga Toxigenic Atypical *Escherichia coli* O177 Strains Isolated from Cattle Feces. *Frontiers in Public Health*. 7: 355.

Mourosi, J. T., Awe, A., Guo, W., Batra, H., Ganesh, H., Wu, X., dan Zhu, J. 2022. Understanding Bacteriophage Tail Fiber Interaction With Host Surface Receptor: The Key "Blueprint" for Reprogramming Phage Host Range. *International Journal of Molecular Sciences.* 23(20), 12146.

Moye, Z. D., Woolston, J., dan Sulakvelidze, A. 2018. Bacteriophage Applications for Food Production and Processing. *Viruses*, 10(4). 205.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Moye, Z. D., Woolston, J., dan Sulakvelidze, A. 2020. How Broad Is Enough: The Host Range of Bacteriophages and Its Implications for Phage Therapy. *PHAGE: Therapy, Applications, and Research.* 1 (1): 39-44.

Navaneethan, Y., Effarizah, M. E., dan Ismail, N. 2021. Toxins of Foodborne Pathogen *Bacillus cereus* and the Regulatory Factors Controlling the Biosynthesis of Its Toxins. *Sains Malaysiana.* 50(6): 1651-1662.

Necel, A., Bloch, S., Nejman-Faleńczyk, B., Grabski, M., Topka, G., Dydecka, A., Kosznik-Kwaśnicka, K., Grabowski, Ł., Jurczak-Kurek, A., Wołkowicz, T., Węgrzyn, G., dan Węgrzyn, A. 2020. Characterization of a Bacteriophage, vB_Eco4M-7, That Effectively Infects Many *Escherichia coli* O157 Strains. *Scientific Reports.* 10.

Necel, A., Dydecka, A., Topka-Bielecka, G., Wesołowski, W., Lewandowska, N., Bloch, S., dan Nejman-Faleńczyk, B. 2024. What, How, and Why? – Anti-EHEC Phages and Their Application Potential in Medicine and Food Industry. *Journal of Applied Genetics.* 66(1): 219-240.

Nurhasanah, V. A., Mahtuti, E. Y., dan Husnah, Y. A. 2024. Identifikasi Bakteri Patogen Gram Negatif pada Alat Praktikum Mikrobiologi di Laboratorium Central STIKes Maharani Malang. *Journal Borneo*. 4 (2): 67-80.

Ouyang, R., Ongenae, V., Muok, A., Claessen, D., dan Briegel, A. 2024. Phage Fibers and Spikes: A Nanoscale Swiss Army Knife for Host Infection. *Current Opinion in Microbiology.* 77.

Park, K.-M., Kim, H.-J., Choi, J.-Y., dan Koo, M. 2021. Antimicrobial Effect of Acetic Acid, Sodium Hypochlorite, and Thermal Treatments Against Psychrotolerant Bacillus cereus Group Isolated From Lettuce (*Lactuca sativa* L.). *Foods*. 10 (9): 2165.

Podgorski, J., Calabrese, J., Alexandrescu, L., Jacobs-Sera, D., Pope, W., Hatfull, G., dan White, S. 2020. Structures of Three actinobacteriophage Capsids: Roles of Symmetry and Accessory Proteins. *Viruses.* 12 (3): 294.

Pratiwi, R. H. (2021). Virus bakteri sebagai terapi untuk penyakit infeksi. *BIOEDUSAINS: Jurnal Pendidikan Biologi dan Sains*, *4*(2), 193-204.

Putri S., M., dan Susanna, D. 2021. Food safety knowledge, attitudes, and practices of food handlers at kitchen premises in the Port 'X' area, North Jakarta, Indonesia. *Italian Journal of Food Safety*. 10: 9215.

Rizkinata, K., Puspitasari, R. L., dan Rahayu, W. P. 2025. Isolation and Molecular Characterization of Bacteriophages Isolated From Lake Water and Their Application in Foods Against *Bacillus cereus*. *BMC Research Notes*. 18. 364.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Reyneke, B., Havenga, B., Waso-Reyneke, M., Khan, S., dan Khan, W. 2024. Benefits and Challenges of Applying Bacteriophage Biocontrol in the Consumer Water Cycle. *Microorganisms.* 12 (6): 1163.

Roeck, D. A., De Coster, W., Bossaerts, L., Cacace, R., De Pooter, T., Van Dongen, J., D'Hert, S., De Rijk, P., Strazisar, M., Van Broeckhoven, C., dan Sleegers, K. 2019. NanoSatellite: Accurate characterization of expanded tandem repeat length and sequence through whole genome long-read sequencing on PromethION. *Genome Biology*. 20 (1): 239.

Rohde, M. 2019. The Gram-Positive Bacterial Cell Wall. *Microbiology Spectrum.* 7(3).

Rösner, L. S., Walter, F., Ude, C., John, G. T., dan Beutel, S. 2022. Sensors and Techniques for On-Line Determination of Cell Viability in Bioprocess Monitoring. *Bioengineering*. 9(12): 762.

Sanatang, T. P. 2023. Uji Skrining Fitokimia Ekstrak Supernatan dari Bakteri Endofit Kulit Pisang. *Bioma: Jurnal Biologi Makassar*. 8 (1): 44-50.

Sasani, S. M., Eftekhar, F., & Hosseini, S. M. 2019. Isolation and characterization of a *Klebsiella pneumoniae* specific lytic bacteriophage from a hospital waste-water treatment plant. *Journal of Medical Microbiology and Infectious Diseases*. 7: 6-11.

Shin, H., Bandara, N., Shin, E., Ryu, S., dan Kim, K.-P. 2011. Prevalence of *Bacillus cereus* Bacteriophages in Fermented Foods and Characterization of Phage JBP901. *Research in Microbiology.* 162(8), 791–797.

Shkoporov, A. N., Khokhlova, E. V., Fitzgerald, C. B., Stockdale, S. R., Draper, L. A., Ross, R. P., dan Hill, C. 2018. ΦCrAss001 Represents the Most Abundant Bacteriophage Family in the Human Gut and Infects *Bacteroides intestinalis*. *Nature Communications.* 9(1): 1-8.

Skaradzińska, A., Łusiak-Szelachowska, M., Jończyk-Matysiak, E., Weber-Dąbrowska, B., Żaczek, M., Borysowski, J., dan Górski, A. 2020. Bacteriophage Amplification – A Comparison of Selected Methods. *Journal of Virological Methods.* 282, 113856.

Sommer, M. J., dan Salzberg, S. L. 2021. Balrog: A Universal Protein Model for Prokaryotic Gene Prediction. *PLoS Computational Biology.* 17(2), e1008727.

Stachurska, X., Roszak, M., Jabłońska, J., Mizielińska, M., dan Nawrotek, P. 2021. Double-Layer Agar (DLA) Modifications for the First Step of the Phage-Antibiotic Synergy (PAS) Identification. *Antibiotics*. 10 (11): 1306.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Stevenson, K., McVey, A. F., Clark, I. B. N., Swain, P. S., dan Pilizota, T. 2016. General Calibration of Microbial Growth in Microplate Readers. *Scientific Reports*. 6: 38828.

Sujonoputri, F. R., Waturangi, D. E., dan Yogiara. 2021. Isolation, Characterization, and Application of Bacteriophages Against Several Food Spoilage Bacteria: *Bacillus subtilis*, *Bacillus cereus*, and *Shewanella putrefaciens*. *Bacterial Empire*. 4(2): 1-4.

Sulaimah, R., Renshaleksamana, E., Zaetun, S., Jiwintarum, Y., dan Rohmi. 2022. Viabilitas Bakteri pada Spesimen Klinis Penderita Infeksi Saluran Kemih Menggunakan Bio-porter sebagai Wadah Transport. *Journal of Indonesias Laboratory Technology of Student*. 1(1): 22-31.

Suzuki, T., Tsukamoto, T., Sakai, E., Mizuguchi, H., dan Mizuguchi, H. 2020. Sequence Search for Cloning and Genome Editing. *Drug Delivery System.* 35(3), 255–259.

Takahashi, M., Sawada, Y., dan Aoyagi, H. 2024. A Forced Aeration System for Microbial Culture of Multiple Shaken Vessels Suppresses Volatilization. *Archives of Microbiology*. 206: 246.

Tempo. 2025. *Pakar ungkap hasil lab kasus keracunan MBG: Ada Salmonella dan Bacillus cereus.* (https://www.tempo.co/politik/pakar-ungkap-hasil-lab-kasus-keracunan-mbg-ada-salmonella-dan-bacillus-cereus-2073977). Diakses tanggal 11 Desember 2025.

Titze, B., dan Genoud, C. 2016. Volume Scanning Electron Microscopy for Imaging Biological Ultrastructure. *Biol. Cell*. 108(11): 307-323.

Tong, C., Xiao, D., Li, Q., Gou, J., Wang, S., Zeng, Z., dan Xiong, W. 2024. First Insights into the Prevalence, Genetic Characteristics, and Pathogenicity of *Bacillus cereus* From Generations Worldwide. *mSphere.* 9(11).

Tran, N. K., Lanh, P. T., Thu, T. T., Phuoc, M. H., Duy, N. D., Hien, V. T., dan Quyen, D. V. 2025. Genomic and biological insights of bacteriophage ϕBc24 targeting *Bacillus cereus*. *Current Issues in Molecular Biology*. 47 (11): 906.

Turner, D., Adriaenssens, E. M., Amann, R. I., Bardy, P., Bartlau, N., Barylski, J., Błażejak, S., Bouzari, M., Briegel, A., Briers, Y., Carrillo, D., Chen, X., Claessen, D., Cook, R., Crisci, M. A., Dechesne, A., Deptula, P., Dutilh, B. E., Ely, B., dan Wójcicki, M. 2025. Summary of taxonomy changes ratified by the International Committee on Taxonomy of Viruses (ICTV) from the Bacterial Viruses Subcommittee, 2025. *Journal of General Virology*. 106. Article 002111.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Turner, D., Shkoporov, A. N., Lood, C., Millard, A. D., Dutilh, B. E., Alfenas-Zerbini, P., van Zyl, L. J., Aziz, R. K., Oksanen, H. M., Poranen, M. M., Kropinski, A. M., Barylski, J., Brister, J. R., Chanisvili, N., Edwards, R. A., Enault, F., Gillis, A., Knezevic, P., Krupovic, M., dan Adriaenssens, E. M. 2023. Abolishment of morphology-based taxa and change to binomial species names: 2022 taxonomy update of the ICTV bacterial viruses subcommittee. *Archives of Virology*, 168 (74).

Urbani, D., Penzo, M., Evangelisti, M., Parenti, M. D., dan Del Rio, A. 2024. Refinement of the Risk Assessment Methodology for Open Reading Frames in GMO Applications. *EFSA Supporting Publications.* 21(1), EN-8561.

Vernon-Parry, K., dan Galvin-King, P. 2020. Principles and Practice of Scanning Electron Microscopy. *Encyclopedia of Analytical Science 3rd Edition*. 20-29.

Wacogne, B., Podevin, M. B., Vaccari, N., Koubevi, C., Codjiová, C., Gutierrez, E., Davoine, L., Robert-Nicoud, M., Rouleau, A., dan Frelet-Barrand, A. 2024. Concentration vs. Optical Density of ESKAPEE Bacteria: A Method to Determine the Optimum Measurement Wavelength. *Sensors*. 24 (24): 1–14.

Wang, Y., Zhao, Y., Bollas, A., Wang, Y., dan Au, K. F. 2021. Nanopore Sequencing Technology, Bioinformatics and Applications. *Nat. Biotechnol.* 39 (11): 1348-1365.

Wang, K., Yuan, X., Wang, J., Huang, Z., Yu, S., Jin, H., Wu, S., Xue, L., Wu, Q., dan Ding, Y. 2024. Isolation and Characterization of a Novel *Bacillus cereus* Bacteriophage vBce-DP7. *Microbial Pathogenesis.* 194: 1-7.

Widjaja, J. M. K., Waturangi, D. E., dan Yulandi, A. 2026. Genomic Characterization and Application on Food Samples of Bacteriophage ETEC-S3 to Control Enterotoxigenic *Escherichia coli*. *BMC Research Notes.* https://doi.org/10.1186/s13104-026-07881-9

Xiao, H., Tan, L., Tan, Z., Zhang, Y., Chen, W., Li, X., Liu, Y., Wang, J., Zhao, M., dan Rao, Z. 2023. Structure of the Siphophage Neck–Tail Complex Suggests That Conserved Tail Tip Proteins Facilitate Receptor Binding and Tail Assembly. *PLoS Biology*. 21 (12): e3002441.

Yang, S., Wang, Y., Liu, Y., Jia, K., Zhang, Z., dan Dong, Q. 2023 . Cereulide and emetic *Bacillus cereus*: Characterizations, impacts and public precautions. *Foods*, *12*(4), 1-23.

Yu, Z.-Z., Wang, H.-X., Yu, D.-S., Yin, N.-X., dan Zhang, J. 2024. The Effect of Aeration and Irrigation on the Improvement of Soil Environment and Yield in Dryland Maize. *Frontiers in Plant Science*. 15: 1-19.

UNIVERSITAS
GADJAH MADA
Isolasi dan Karakterisasi Bakteriofaga Asal Selokan Mataram sebagai Kandidat Potensial Biokontrol Bacillus cereus
Denny Kurniawan, Dr. rer. nat. Abdul Rahman Siregar, S.Si., M.Biotech.; Dr. Ajeng Kusumaningtyas Pramono, S.Si.,
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Zhou, Y., Wang, Y., Chen, K., dan Zhang, L. 2018. Effects of Agitation, Aeration and Temperature on Production of a Novel Glycoprotein GP-1 by *Streptomyces kanasenisi* ZX01. *Molecules.* 23 (5): 1226.