

under *Guttaviridae* are present in the cocktail against the three bacterial hosts. Whereas, phages belong to *Cystoviridae* are present in the cocktail against MDR *P. aeruginosa* and *V. cholerae*. Lastly, *Lipothrixviridae* phages are only present in the cocktail against MRSA.

V. RECOMMENDATION

The future researchers may improve and further characterize the phage cocktail against MDR *Pseudomonas aeruginosa*, Methicillin Resistant *Staphylococcus aureus* and *Vibrio cholerae* through molecular analysis.

REFERENCES

- [1] Ackermann, H.-W., & Prangishvili. (2012). Prokaryote viruses studied by electron microscopy. *Archives of Virology*, 157(10), 1843–1849. doi:10.1007/s00705-012-1383-y
- [2] Benson, H., J. (2015). *Benson's* microbiological applications: laboratory manual in general microbiology.
- [3] Jończyk, E., Kłak, M., Międzybrodzki, R., & Górski, A. (2011). The influence of external factors on bacteriophages—review. *Folia Microbiologica*, 56(3), 191–200. <http://doi.org/10.1007/s12223-011-0039-8>
- [4] Klinzing, D. C., Choi, S. Y., Hasan, N. A., Matias, R. R., Tayag, E., Geronimo, J., ... Colwell, R. R. (2015). Hybrid *Vibrio cholerae* El Tor Lacking SXT Identified as the Cause of a Cholera Outbreak in the Philippines. *mBio*, 6(2), e00047–15. <http://doi.org/10.1128/mBio.00047-15>
- [5] Kutter, E., & Sulakvelidze, A. (2005). *Bacteriophages: Biology and Applications: Molecular Biology and Applications*. United States: Taylor & Francis, Inc. Madhusudana Rao, B., & Lalitha, K. V. (2014). Bacteriophages for aquaculture: Are they beneficial or inimical. *Aquaculture*, 437, 146–154. doi:10.1016/j.aquaculture.2014.11.039
- [6] Kuznetsov, Y. G., Chang, S.-C., Credaroli, A., & McPherson, A. (2013). Unique Tail Appendages of Marine Bacteriophages. *Advances in Microbiology*, 03(06), 55–59. <http://doi.org/10.4236/aim.2013.36A007>
- [7] Larcom, L. L., & Thaker, N. H. (1977). The effects of temperature and ultraviolet irradiation on multiplication of bacteriophage phi29. *Biophysical Journal*, 19(3), 299–306. [http://doi.org/10.1016/S0006-3495\(77\)85589-6](http://doi.org/10.1016/S0006-3495(77)85589-6)
- [8] Lu, T. K., & Koeris, M. S. (2011). The next generation of bacteriophage therapy. *Current Opinion in Microbiology*, 14(5), 524–531. <http://doi.org/10.1016/j.mib.2011.07.028>
- [9] Nouraldin, A. A. M., Baddour, M. M., Harfoush, R. A. H., & Essa, S. A. M. (2015). Bacteriophage-antibiotic synergism to control planktonic and biofilm producing clinical isolates of *Pseudomonas aeruginosa*. *Alexandria Journal of Medicine*. <http://doi.org/10.1016/j.ajme.2015.05.002>
- [10] Sulakvelidze, A. (2011). Bacteriophage: A new journal for the most ubiquitous organisms on Earth. *Bacteriophage*, 1(1), 1–2. doi:10.4161/bact.1.1.15030
- [11] Sulcius, S., Staniulis, J., & Paškauskas, R. (2011). Morphology and distribution of phage-like particles in a eutrophic boreal lagoon**This study was funded by a grant (No. T-66/05) from the Lithuanian State Sciences and Studies Foundation. *Oceanologia*, 53(2), 587–603. doi:10.5697/oc.53-2.587
- [12] Taj, M.K., Ling, J.X., Bing, L.L., Qi, Z., Taj, I. Hassani, T.M., Samreen, Z. & Yunlin, W. (2014). Effects of Dilution, Temperature and pH on the Lysis Activity of T4 Phage Against *E. coli* BL21. *The Journal of Animal & Plant Sciences*, 24(4): 2014, Page: 1252-1255. ISSN: 1018-7081
- [13] Vital, P. G., Dimasuay, K. G. B., Widmer, K. W., & Rivera, W. L. (2014). Microbiological Quality of Fresh Produce from Open Air Markets and Supermarkets in the Philippines. *The Scientific World Journal*, 2014, 1–7. <http://doi.org/10.1155/2014/219534>



Ana Blezilda R. Arca

Ms. Ana Arca is a Medical Technologist. She earned her bachelor's degree from Our Lady of Fatima University Valenzuela campus. She is currently a graduate student in the Pontifical and Royal University of Santo Tomas in Manila under the MS Microbiology program.

She is currently the research coordinator of the College of Medical Laboratory Science of Our Lady of Fatima University Quezon City campus. She is also an

Instructor in the said institution. Formerly, she worked in Capitol Medical Center as a Medical Technologist and section head of Microbiology.



Fame C. Mercines

Ms. Mercines is a Medical Technologist. She earned her bachelor's degree from Our Lady of Fatima University Valenzuela campus.

She is currently practicing in the Research Institute for Tropical Medicine in Alabang Philippines.