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Isolation and genome characterization of bacteriophage Morrigan

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*Microbacterium foliorum* is a Gram-positive bacteria found in plants, soil, water, and dairy products. Due to *M. foliorum* having been isolated from wound swabs, blood samples, and clinical specimens such as surrounding catheters of immunocompromised patients there is a need to discover bacteriophage that could be utilized as biomedical interventions. The bacteriophage Morrigan was found in San Antonio, Texas isolated from *M. foliorum* strain NRRL B-24224. Following SEA-PHAGE protocol, Morrigan was isolated using the enriched isolation method, purified, amplified, and DNA isolated. Plaques sizes are from 1mm to 3mm and have a clear center and a turbid halo. DNA was sequenced at Pittsburgh Bacteriophage Institute by Illumina Sequencing. Morrigan was determined to have a genome length of 40509 bp and a GC content of 62.8%. Morrigan was assigned to cluster EA, subcluster EA6, and determined to have a lytic life cycle. Electron micrograph revealed Morrigan to have morphological features of a siphoviridae with a long flexible tail. Genome annotation is currently ongoing. As the global bacteriophage population remains relatively understudied, in comparison to bacteriophage comprising the most abundant group of biological entities on the planet, our research will contribute to the characterization of bacteriophages infecting *Microbacterium foliorum.*