DO NOT CONSIDER FOR TALK

2021 SEA Symposium Abstract

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Kari Clifton

MrGreen, in the lab, with a pipette

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Five bacteriophages were successfully isolated and characterized using the host bacterium *Microbacterium foliorum* NRRL B-24224. The bacteriophages were isolated using enrichment, purified, and amplified to high titer lysates. Two samples were sent to the University of Pittsburgh for sequencing. Interestingly, the first sample was found to be identical to not one but two others currently in the Actinobacteriophage Database. The second sample, dubbed MrGreen, was manually annotated by Cohort 8.6 at UWF. MrGreen was isolated from a sandy loam soil sample from Santa Rosa County in Northwest Florida. Transmission electron microphotography revealed an isomeric head and a long flexible tail characteristic of the family *Siphoviridae*, which was confirmed by sequencing. MrGreen is a typical cluster EE phage, with a genome length of 17421 base pairs, lytic, with 68.6% CG content, and 25 predicted protein-coding genes.