CONSIDER FOR TALK

8th Annual SEA-PHAGES Symposium Abstract

University of Maine, Machias

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Comparison of Cluster S Phages

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Mycobacterium phages MosMoris, Gattaca, and Marvin are the only members of the S cluster. Marvin was the first S cluster phage
discover in 2009 and was remained a singleton until the discovery a similar phage MosMoris. The cluster makes up of only 0.2% of
currently known phages and currently has no subclusters. The average genome of an S cluster phage is 65,193 bp long, has a 64.3% GC content, 110 genes, and a 3’ sticky overhang of 11 base pairs containing a sequence of GCGCGCAGCGC. Marvin, MosMoris and Gattaca have two individual reverse strand genes, 22 and 30, among its forward genes, then a cluster of reverse strand genes near the end of the genome. A syntenic group of tail protein genes is found at an unusual location: spanning genes 86-92.