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2021 SEA Symposium Abstract

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Mycobacteriophage Duplicity: A temperate N cluster phage

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Mycobacteriophage Duplicity was annotated by Phage Hunters students at Virginia Tech during the Spring 2021 semester. Duplicity was originally isolated in 2014 by Phage Hunters students at Ouachita Baptist University (Arkadelphia, AR) from local soil using *Mycobacterium smegmatis* as a host. Duplicity is an N cluster phage with a mosaic genome. Duplicity shares similarities with N cluster phages Aggie, Charlie, and Tapioca in the left-hand side of the genome and Schnauzer and Smurph in the right-hand side of the genome. The presence of a tyrosine integrase gene suggests Duplicity is a temperate phage. Duplicity, Smurph, and Schnauzer all lack a large DNA methylase gene found in other N cluster phages.