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Isolation and Characterization of Six Novel *Rhodobacter Capsulatus* Bacteriophages

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Poster Presentation P9

ISOLATION AND CHARACTERIZATION OF SIX NOVEL *RHODOBACTER CAPSULATUS* BACTERIOPHAGES

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Rhodobacter capsulatus is a photosynthetic bacterium that is used frequently as a model system in studying the genetics of photosynthesis, but historically has not been used in bacteriophage studies. In order to broaden our knowledge of phages that infect R. capsulatus six new bacteriophages were isolated, expanding the total number of RC-bacteriophages to twelve. Although these new phages were found in various but similar freshwater environments, each displayed unique characteristics. These included plaque morphology, host range infectivity, and immunity. After isolation and purification of the bacteriophages, DNA was obtained from three, and sent to North Carolina State University for sequencing.