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Discovery and Annotation of Two Phages that Infect Microbacterium foliorum: Tedro and BAjuniper

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We isolated and purified Tedro and BAjuniper which infect the host Microbacterium foliorium. Tedro is a lytic, cluster EF phage isolated from soil collected in Hawarden, Iowa. Its genome is 56,197 bp long, circularly permuted, and includes 83 protein-coding genes and no tRNA genes. We are examining two of Tedro’s genes, genes 56 and 57, both of which are predicted to encode a DnaE-like DNA polymerase III (alpha) in more detail. Tedro\_57 is twice as large as Tedro\_56 so we are using additional bioinformatic tools to understand these genes. BAjuniper was isolated from soil collected in a garden in Orange City, Iowa. Its genome is 41,985 bp long. It was assigned to cluster EB. BAjuniper’s genome includes one tRNA gene and we will finalize BAjuniper’s annotation shortly.