

**Part 1:** **TITLE, AUTHORS, APPROVALS, etc**

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| **Code assigned:** | **2020.115B** |  |
| **Short title:** Abolish one genus *Pbi1virus* and rename one species (*Mycobacterium* *virus Plot*) (*Caudovirales*: *Siphoviridae*) | | |
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**Author(s) and email address(es)**

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|  |  |
| Adriaenssens EM, Tolstoy I, Turner D, Kropinski AM | [evelien.adriaenssens@quadram.ac.uk](mailto:evelien.adriaenssens@quadram.ac.uk);  [tolstoy@ncbi.nlm.nih.gov](mailto:tolstoy@ncbi.nlm.nih.gov);  [dann2.turner@uwe.ac.uk](mailto:dann2.turner@uwe.ac.uk);  [Phage.Canada@gmail.com](mailto:Phage.Canada@gmail.com) |

**Author(s) institutional address(es) (optional)**

|  |
| --- |
| Quadram Institute Bioscience, UK [EMA]  NCBI, USA [IT]  University of the West of England, UK [DT]  University of Guelph, Canada [AMK] |

**Corresponding author**

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| Andrew M. Kropinski |

**List the ICTV Study Group(s) that have seen this proposal**

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| *Caudovirales* Study Group, Bacterial and Archaeal Viruses Subcommittee |

**ICTV study group comments and response of proposer**

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**Authority to use the name of a living person**

|  |  |  |
| --- | --- | --- |
| **Taxon name** | **Person from whom the name is derived** | **Permission attached (Y/N)** |
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**Submission dates**

|  |  |
| --- | --- |
| Date first submitted to SC Chair |  |
| Date of this revision (if different to above) |  |

**ICTV-EC comments and response of the proposer**

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**Part 3:** **TAXONOMIC PROPOSAL**

**Name of accompanying Excel module**

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| 2020.115B.R.Pbi1virus.xlsx |

**Abstract**

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| Mycobacterium phage PBI1 (genus Pbi1virus) has been shown by Igor Tolstoy from NCBI to be similar enough to Mycobacterium phage PLot (Plotvirus) to warrant its removed from the Master Species list. |

**Text of proposal**

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| --- | --- |
| |  | | --- | | Mycobacterium phage PBI1 (genus *Pbi1virus*) has been shown by Igor Tolstoy from NCBI to be similar enough to Mycobacterium phage PLot (*Plotvirus)* to warrant its removed from the Master Species list. Practically, this will merge the genera *Pbi1virus* and *Plotvirus* into one genus (*Plotvirus*) and one species, *Mycobacterium virus PLot*, which is renamed from *Mycobacterium virus Plot*, to reflect the spelling of the exemplar isolate*.* | |

**Supporting evidence**

BLASTN analysis and genome comparisons reveals that these two phages (Mycobacterium phage PBI1, [DQ398047.1](https://www.ncbi.nlm.nih.gov/nucleotide/DQ398047.1?report=genbank&log$=nucltop&blast_rank=15&RID=EEBBRPMU014), and Mycobacterium phage PLoT, [DQ398051.1](https://www.ncbi.nlm.nih.gov/nucleotide/DQ398051.1?report=genbank&log$=nucltop&blast_rank=1&RID=EEBBRPMU014)) share 97.5% DNA sequence identity (1,2; Figure 1). The following phages should be considered as strains within the genus *Plotvirus* in the species *Mycobacterium virus PLot* as they share more than 95% nucleotide identity over the genome length.

Chart

Description automatically generated

**Figure 1: VIRIDIC (4): Intergenomic distance between members of the genus *Plotvirus*.**

**Strain table**

|  |  |  |
| --- | --- | --- |
| **Phage** | **Accession** | **Belongs to species** |
| Mycobacterium phage Penelope2018 | MN119378.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Butterscotch | FJ168660.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Visconti | MH399788.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage BigMama | MH025888.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Giuseppe | MN234227.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Erk16 | MH316562.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage WaldoWhy | MK494102.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Chill | MK524498.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Helpful | MN284908.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Delton | MK559427.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Troll4 | FJ168662.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage PBI1 | DQ398047.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Adjutor | EU676000.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage SirHarley | JF937107.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Gumball | FJ168661.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage Nova | JN699014.1 | *Mycobacterium virus PLot* |
| Mycobacterium phage KandZ | MH834615.1 | *Mycobacterium virus PLot* |

**References**

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3. O'Leary NA, Wright MW, Brister JR, Ciufo S, Haddad D, McVeigh R, et al. Reference sequence (RefSeq) database at NCBI: current status, taxonomic expansion, and functional annotation. Nucleic Acids Res. 2016;44(D1):D733-45. doi: 10.1093/nar/gkv1189. PMID: 26553804.
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