

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

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| **Code assigned:** | **2020.033B** |  |
| **Short title:** Create nine new species in the genus *Chivirus* (*Caudovirales*: *Siphoviridae*) | | |
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**Author(s) and email address(es)**

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**Corresponding author**

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| Andrew 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**

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

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| Date first submitted to SC Chair | June 2020 |
| Date of this revision (if different to above) | December 2020 |

**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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| 2020.033B.R.Chivirus.xlsx |

**Abstract**

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| We have added nine new species to the genus *Chivirus*, and present evidence that it may be part of a future family. |

**Text of proposal**

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| |  | | --- | | **Species demarcation criteria:** We have chosen 95% DNA sequence identity as the criterion for demarcation of species in this new genus. Each of the proposed species differs from the others with more than 5% at the DNA level as confirmed with the BLASTN algorithm | |

**Supporting evidence**

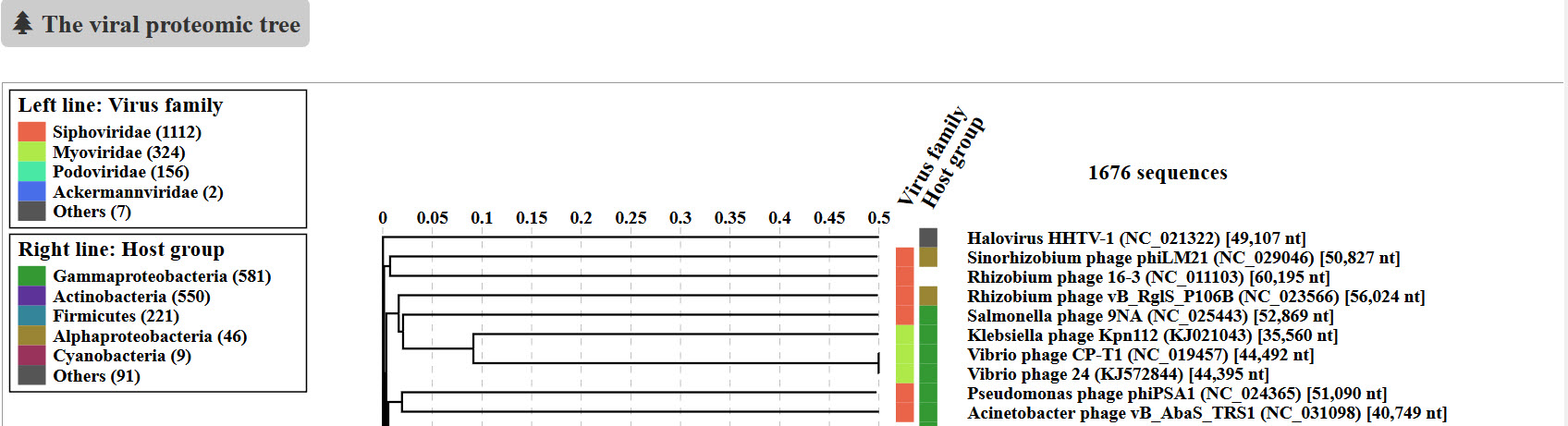
**History:** The geus *Chilikevirus* (renamed *Chivirus* in 2015) was created through Taxonomy Proposal 2013.039a-dB.

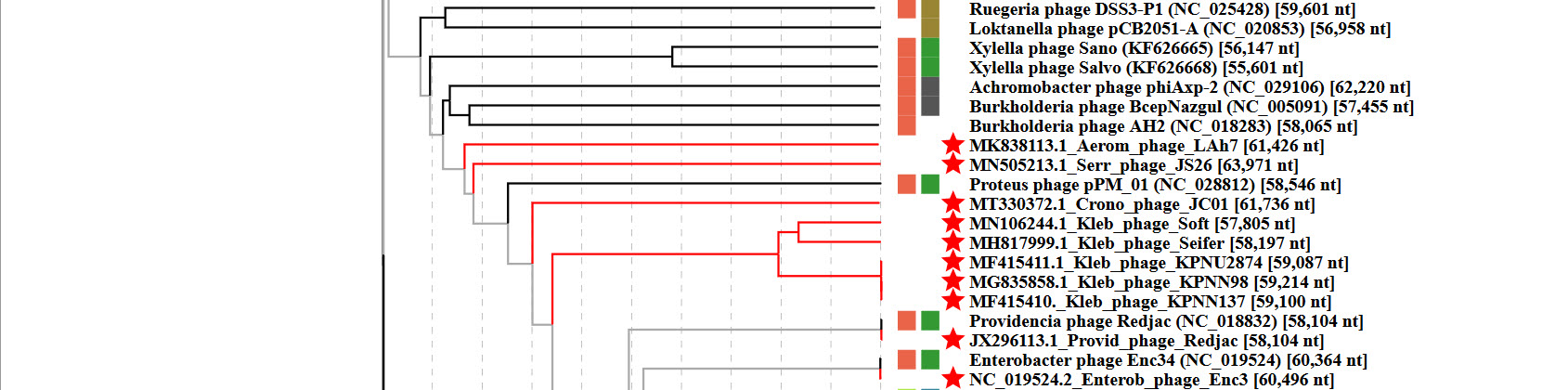
**VIRIDIC heat map:** VIRIDIC (Virus Intergenomic Distance Calculator; [1]) computes pairwise intergenomic distances/similarities amongst phage genomes. The black box delineates strains. The phage names highlighted in **yellow** are new species within the genus *Chivirus*, while those in **gold** are currently ICTV recognized species.

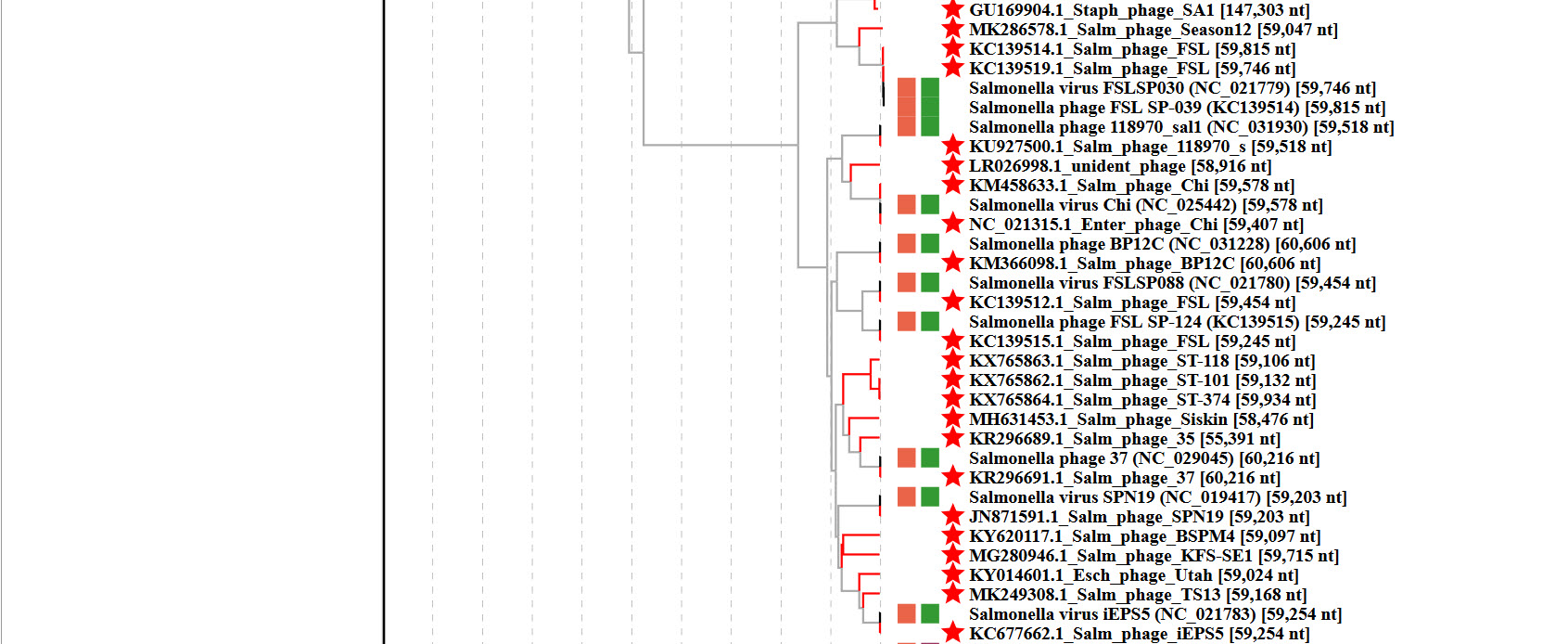
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**N.B. "unidentified phage genome assembly, chromosome: 1." (LR026998) has now been renamed “Salmonella phage YSD1” as is associated with the publication by Dunstan et al. (2019)**

**ViPTree analysis:** ViPTree analysis (<https://www.genome.jp/viptree/>; [2]) is based upon Rohwer and Edwards (2002) Phage Proteomic Tree [3]. The large **blue arrowhead** points to the *Chivirus* genus while the large **red arrowhead** points to a potential family which would include the *Yonseivirus*.

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**Specific Reference:**

Dunstan RA, Pickard D, Dougan S, et al. The flagellotropic bacteriophage YSD1 targets *Salmonella* Typhi with a Chi-like protein tail fibre. Mol Microbiol. 2019;112(6):1831‐1846. doi:10.1111/mmi.14396

**Electron micrograph:** None available

**References**

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