

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

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| **Code assigned:** | ***2023.001A*** |  |
| **Short title:** Rename 111 archaeal virus species to adhere to the Latinized binomial format |
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**Author(s) and email address(es)**

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

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| ICTV Archaeal Viruses Subcommittee |

**ICTV Study Group comments and response of proposer**

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**ICTV Study Group votes on proposal**

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| **Study Group** | **Number of members** |
| **Votes support** | **Votes against** | **No vote** |
|  |  |  |  |

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

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| --- | --- |
| **Is any taxon name used here derived from that of a living person (Y/N)** | N |

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

**Submission dates**

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| --- | --- |
| Date first submitted to SC Chair | June 23, 2023 |
| Date of this revision (if different to above) |  |

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

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**Part 2:** **NON-TAXONOMIC PROPOSAL**

**Text of proposal**

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| NA |

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

**Name of accompanying Excel module**

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| 2023.001A.N.v1.Archaeal\_binomials.xlsx |

**Abstract**

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| We propose renaming 111 archaeal virus species to Latinized binomial format. |

**Text of proposal**

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| The names of 24 species for archaeal viruses do not conform with the ICTV rules for species nomenclature and thus must be renamed. These species (Table 1) were renamed applying a Latinized binomial format. In addition, we take this opportunity to rename 87 archaeal virus species using the same format for the sake of uniformity (Table 2). As a result, all 133 species of archaeal viruses will have Latinized binomial names. |

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**Supporting evidence**

Table 1. Species name changes from non-binomials to Latinized binomial format.

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| **Non-binomial species name** | **Proposed Latinized binomial name** | **Comment** |
| *Acidianus filamentous virus 3* | *Betalipothrixvirus acidiani* | After the host genus name, Acidianus |
| *Acidianus filamentous virus 6* | *Betalipothrixvirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Acidianus filamentous virus 7* | *Betalipothrixvirus pezzuloense* | Pezzulo (Pozzuoli in Neapolitan)  |
| *Acidianus filamentous virus 8* | *Betalipothrixvirus puteoliense* | Puteoli (Pozzuoli in Latin) |
| *Acidianus filamentous virus 9* | *Betalipothrixvirus uzonense* | After Uzon Caldera, Kamchatka - place of origin |
| *Sulfolobus islandicus filamentous virus* | *Betalipothrixvirus hveragerdiense* | Hveragerdi, Iceland - place of origin |
| *Acidianus filamentous virus 2* | *Deltalipothrixvirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Sulfolobus turreted icosahedral virus 1* | *Alphaturrivirus yellowstonense* | Yellowstone National Park - place of origin |
| *Sulfolobus turreted icosahedral virus 2* | *Alphaturrivirus hveragerdiense* | Hveragerdi, Iceland - place of origin |
| *Acidianus two-tailed virus* | *Bicaudavirus pozzuoliense* | Pozzuoli - place of origin |
| *Aeropyrum pernix bacilliform virus 1* | *Clavavirus yamagawaense* | Yamagawa hot spring, Japan - place of origin |
| *Sulfolobus spindle-shaped virus 1* | *Alphafusellovirus beppuense* | Beppu, Japan - place of origin |
| *Sulfolobus spindle-shaped virus 2* | *Alphafusellovirus reykjanesense* | Reykjanes, Iceland - place of origin |
| *Sulfolobus spindle-shaped virus 4* | *Alphafusellovirus arnavatnense* | Arnavatn, Iceland - place of origin |
| *Sulfolobus spindle-shaped virus 5* | *Alphafusellovirus hveragerdiense* | Hveragerdi, Iceland - place of origin |
| *Sulfolobus spindle-shaped virus 7* | *Alphafusellovirus hengillense* | Hengill, a volcanic mountain range, close to Hveragerði - place of origin |
| *Sulfolobus spindle-shaped virus 8* | *Alphafusellovirus yellowstonense* | Yellowstone National Park - place of origin |
| *Sulfolobus spindle-shaped virus 9* | *Alphafusellovirus kamchatkaense* | Kamchatka - place of origin |
| *Acidianus spindle-shaped virus 1* | *Betafusellovirus yellowstonense* | Yellowstone National Park - place of origin |
| *Sulfolobus spindle-shaped virus 6* | *Betafusellovirus hveragerdiense* | Hveragerdi, Iceland - place of origin |
| *Aeropyrum pernix ovoid virus 1* | *Betaguttavirus kodakarajimaense* | Kodakarajima, Japan - place of origin |
| *Sulfolobus alphaportoglobovirus 1* | *Alphaportoglobovirus beppuense* | Beppu, Japan - place of origin |
| *Aeropyrum coil-shaped virus* | *Alphaspiravirus yamagawaense* | Yamagawa hot spring, Japan - place of origin |
| *Sulfolobus ellipsoid virus 1* | *Alphaovalivirus fumarolicaense* | Laguna Fumarólica, Costa Rica - place of origin |

Full taxonomy for each species is provided in the accompanying excel spreadsheet.

Table 2. Species name changes from non-Latinized binomials to Latinized binomial format.

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| **Non-Latinized binomial species name** | **Proposed Latinized binomial species name** | **Comment** |
| *Alphalipothrixvirus SBFV2* | *Alphalipothrixvirus umijigokuense* | Umi Jigoku, Beppu, Japan - place of origin |
| *Alphalipothrixvirus SFV1* | *Alphalipothrixvirus beppuense* | Beppu, Japan - place of origin |
| *Deltalipothrixvirus SBFV3* | *Deltalipothrixvirus beppuense* | Beppu, Japan - place of origin |
| *Azorudivirus SRV* | *Azorudivirus furnasense* | Furnas Basin, Azores |
| *Hoswirudivirus ARV2* | *Hoswirudivirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Hoswirudivirus ARV3* | *Hoswirudivirus acidiani* | After the host genus name, Acidianus |
| *Hoswirudivirus MRV1* | *Hoswirudivirus metallosphaerae* | After the host genus name, Metallosphaera |
| *Hoswirudivirus SSRV1* | *Hoswirudivirus saccharolobi* | After the host genus name, Saccharolobus |
| *Icerudivirus SIRV1* | *Icerudivirus kverkfjoellense* | Kverkfjoell, Iceland |
| *Icerudivirus SIRV2* | *Icerudivirus hveragerdiense* | Hveragerdi, Iceland - place of origin |
| *Icerudivirus SIRV3* | *Icerudivirus gunnuhverense* | Gunnuhver, Iceland - place of origin |
| *Itarudivirus ARV1* | *Itarudivirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Japarudivirus SBRV1* | *Japarudivirus beppuense* | Beppu, Japan - place of origin |
| *Mexirudivirus SMRV1* | *Mexirudivirus azufresense* | Los Azufres National Park |
| *Usarudivirus SIRV4* | *Usarudivirus yellowstonense* | Yellowstone National Park - place of origin |
| *Usarudivirus SIRV5* | *Usarudivirus nymphense* | After Nymph Lake, Yellowstone National Park |
| *Usarudivirus SIRV8* | *Usarudivirus caloris* | After Latin calor (sing. gen.): of the heat |
| *Usarudivirus SIRV9* | *Usarudivirus aestus* | After Latin aestus (sing. gen.): of the heat |
| *Usarudivirus SIRV10* | *Usarudivirus acidum* | After Latin acidus for acidic |
| *Usarudivirus SIRV11* | *Usarudivirus dryadis* | After Latin Dryas, synonym for Nymph, referring to the source of virus isolation - Nymph Lake, Yellowstone National Park |
| *Alphatristromavirus PFV1* | *Alphatristromavirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Alphatristromavirus PFV2* | *Alphatristromavirus puteoliense* | Puteoli (Pozzuoli in Latin) |
| *Betatristromavirus TTV1* | *Betatristromavirus kraflaense* | Krafla, Iceland |
| *Captovirus AFV1* | *Captovirus yellowstonense* | Yellowstone National Park - place of origin |
| *Metforvirus Drs3* | *Metforvirus limi* | from Latin limus which can be translated as sludge, a material from which the virus and its host were isolated |
| *Hacavirus HCTV1* | *Hacavirus italiense* | after place of isolation Margherita di Savoia, Italy |
| *Tredecimvirus HVTV1* | *Tredecimvirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Beejeyvirus BJ1* | *Beejeyvirus bagaejinnorense* | after Bagaejinnor lake in Inner Mongolia, China, place of isolation |
| *Seejivirus CGphi46* | *Seejivirus salhabitans* | from Latin "sal" for salt, the habitat virus living in "habitans"  |
| *Haloferacalesvirus HF1* | *Haloferacalesvirus moolapense* | after place of isolation Cheetham Saltworks, Moolap, Victoria, Australia |
| *Haloferacalesvirus HJTV2* | *Haloferacalesvirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Haloferacalesvirus HRTV5* | *Haloferacalesvirus pyrstotum* | from Finnish pyrstö referring to the tail of a bird or fish |
| *Haloferacalesvirus HRTV8* | *Haloferacalesvirus salis* | from Latin sal referring to salt |
| *Haloferacalesvirus HRTV10* | *Haloferacalesvirus eilatense* | after Eilat solar saltern, Israel, place of origin |
| *Haloferacalesvirus HSTV4* | *Haloferacalesvirus samutsakhonense* | after place of origin - Samut Sakhon, Thailand |
| *Haloferacalesvirus Serpecor1* | *Haloferacalesvirus serpentinense* | after Serpentine Lake, Australia - place of origin |
| *Laminvirus HRTV25* | *Laminvirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Mincapvirus HSTV2* | *Mincapvirus eilatense* | after Eilat solar saltern, Israel, place of origin |
| *Minorvirus HRTV27* | *Minorvirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Dpdavirus HRTV29* | *Dpdavirus caudatum* | from Latin caudatum referring to the tail of the virion |
| *Retbasiphovirus HFTV1* | *Retbasiphovirus hantatum* | from Finnish häntä referring to tail |
| *Saldibavirus HRTV4* | *Saldibavirus natrii* | from Latin natrium referring to sodium |
| *Hagravirus HGTV1* | *Hagravirus capitaneum* | from Latin capitaneum referring to large |
| *Psimunavirus psiM2* | *Psimunavirus limi* | from Latin limus which can be translated as sludge, a material from which the virus and its host were isolated |
| *Clampvirus HHTV1* | *Clampvirus italiense* | after place of isolation Margherita di Savoia, Italy |
| *Hatrivirus HATV3* | *Hatrivirus caudatum* | from Latin caudatum referring to the tail of the virion |
| *Halohivirus HHTV2* | *Halohivirus suolae* | from Finnish suola referring to salt |
| *Samsavirus HCTV2* | *Samsavirus crystalli* | from Latin crystallus for (salt) crystal |
| *Lonfivirus HSTV1* | *Lonfivirus codicilli* | from Latin codicillus for a small tree stump (after the virion's small tail) |
| *Eilatmyovirus HATV2* | *Eilatmyovirus salis* | from Latin sal referring to salt |
| *Pormufvirus HRTV28* | *Pormufvirus salinum* | from Latin salinum referring to salty |
| *Chaovirus ChaoS9* | *Chaovirus bigenum* | from Latin bigenum for hybrid, referring to virus sharing different parts of genome with other viruses |
| *Myohalovirus phiCh1* | *Myohalovirus alkaliphilum* | from English alkaliphile |
| *Myohalovirus phiH* | *Myohalovirus spontanei* | from Latin spontaneum for spontaneous, referring to the spontaneous induction of the phiH provirus |
| *Alphapleolipovirus HHPV1* | *Alphapleolipovirus italiense* | after place of isolation Margherita di Savoia, Italy |
| *Alphapleolipovirus HHPV2* | *Alphapleolipovirus huluense* | after place of origin - Hulu Island, Liaoning, China |
| *Alphapleolipovirus HRPV1* | *Alphapleolipovirus finnoniense* | after Finland, where the first pleolipovirus isolate was isolated and described |
| *Alphapleolipovirus HRPV2* | *Alphapleolipovirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Alphapleolipovirus HRPV6* | *Alphapleolipovirus samutsakhonense* | after place of origin - Samut Sakhon, Thailand |
| *Betapleolipovirus HGPV1* | *Betapleolipovirus halogeometrici* | after host species Halogeometricum sp. |
| *Betapleolipovirus HHPV3* | *Betapleolipovirus thailandense* | after place of origin - Samut Sakhon, Thailand |
| *Betapleolipovirus HHPV4* | *Betapleolipovirus italiense* | after place of isolation Margherita di Savoia, Italy |
| *Betapleolipovirus HRPV3* | *Betapleolipovirus kalvoae* | from Finnish kalvo referring to membrane |
| *Betapleolipovirus HRPV9* | *Betapleolipovirus flexibile* | from Latin flexibilis referring to the flexible appearance of virions |
| *Betapleolipovirus HRPV10* | *Betapleolipovirus senegalense* | after Senegal - country of origin |
| *Betapleolipovirus HRPV11* | *Betapleolipovirus retbaense* | after Lake Retba, Senegal - place of origin |
| *Betapleolipovirus HRPV12* | *Betapleolipovirus rosense* | after Lac Rose, Senegal - place of origin |
| *Betapleolipovirus SNJ2* | *Betapleolipovirus integrationis* | from Latin integratio referring to integration |
| *Gammapleolipovirus Hardyhisp2* | *Gammapleolipovirus hardyense* | after Lake Hardy, Australia - place of origin |
| *Gammapleolipovirus His2* | *Gammapleolipovirus australiense* | after Australia - place of origin |
| *Yingchengvirus HJIV1* | *Yingchengvirus koreaense* | after place of origin, South Korea |
| *Yingchengvirus NVIV1* | *Yingchengvirus boliviaense* | after place of origin, Bolivia |
| *Yingchengvirus SNJ1* | *Yingchengvirus sinense* | after China - place of origin |
| *Alphasphaerolipovirus HCIV1* | *Alphasphaerolipovirus viikkii* | after Viikki campus, Helsinki, Finland, where the virus was isolated and described |
| *Alphasphaerolipovirus HHIV2* | *Alphasphaerolipovirus helsinkii* | after University of Helsinki, Finland, where the virus was isolated and described |
| *Alphasphaerolipovirus PH1* | *Alphasphaerolipovirus pinkense* | Pink lake, Australia - place of origin |
| *Alphasphaerolipovirus SH1* | *Alphasphaerolipovirus serpentinense* | Serpentine lake, Australia - place of origin |
| *Bottigliavirus ABV* | *Bottigliavirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Bottigliavirus ABV2* | *Bottigliavirus puteoliense* | Puteoli (Pozzuoli in Latin) |
| *Bottigliavirus ABV3* | *Bottigliavirus krisuvikense* | Krísuvík, Iceland - place of origin |
| *Alphaglobulovirus PSV* | *Alphaglobulovirus obsidianense* | Obsidian Pool, Yellowstone National Park - place of origin |
| *Alphaglobulovirus PSV2* | *Alphaglobulovirus pozzuoliense* | Pozzuoli, Italy - place of origin |
| *Alphaglobulovirus TSPV1* | *Alphaglobulovirus sileriense* | Sileri hot spring region, Indonesia - place of origin |
| *Alphaglobulovirus TTSV1* | *Alphaglobulovirus cinderense* | Cinder Pool, Yellowstone National Park - place of origin |
| *Salterprovirus His1* | *Salterprovirus australiense* | after Australia - place of origin |
| *Alphaportoglobovirus SPV2* | *Alphaportoglobovirus umijigokuense* | Umi Jigoku, Beppu, Japan - place of origin |
| *Nitmarvirus NSV1* | *Nitmarvirus maris* | After Latin mare (neuter) for sea |

Full taxonomy for each species is provided in the accompanying excel spreadsheet.