

Template for Taxonomic Proposal to the ICTV Executive Committee Removing Species in an existing genus

Code † **2003.215V.01** To remove the following viruses as species in the genus:

Parvovirus

belonging to the family[°] : *Parvoviridae*

Feline parvovirus (FPV)
Canine parvovirus (CPV)
Raccoon parvovirus (RPV)
Mink enteritis virus (MEV)

Code † **2003.216V.01** To designate the following viruses as strains in the species:

Feline Panleukopenia virus (FPV)

belonging to the genus[°] : *Parvovirus*

Feline panleukopenia virus (FPV)
Canine parvovirus (CPV)
Raccoon parvovirus (RPV)
Mink enteritis virus (MEV)

† Assigned by ICTV officers

° leave blank if inappropriate or in the case of an unassigned genus

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New Taxonomic Order

Order	
Family	<i>Parvoviridae</i>
Subfamily	<i>Parvovirinae</i>
Genus	<i>Parvovirus</i>
Type Species	<i>Minute virus of mice</i>
List of Species in the genus	<i>Feline Panleukopenia virus</i>
List of Strains in the Species	Feline panleukopenia virus (FPV) Canine parvovirus (CPV) Raccoon parvovirus (RPV) Mink enteritis virus (MEV)

Comments of the EC

Species demarcation criteria in the genus

Criteria used to distinguish among species include DNA sequence relatedness, biological host range and differences in structural protein antigenicity. In general, isolates within a species differ by less than 5% in nucleotide sequence for the major non-structural protein, whereas isolates from species within a genus differ by >10% to 50%. In general, members of an individual species are confined to a single natural host species, but this is not invariant, as strains may exist within a viral species that infect different species of host animal. Strains within a species efficiently cross-neutralize, whereas isolates from individual species are serologically distinct from those of other species.

Argument to justify the removal of species in the genus

There are no such separate entities as Feline parvovirus (FPV) and Feline Panleukopenia virus (FPLV), this is an error in the last version of the book. They are both the same, and the SG suggests the retention of the original descriptor, Feline panleukopenia virus. The canine, raccoon parvoviruses and the mink enteritis virus are very closely related to the feline panleukopenia virus at the nucleotide sequence level (>99.2% for NS1) and are antigenically cross-neutralizing. Over the past decade or more, considerable evidence has accumulated that the former viruses are "species-jumping" tropism mutants of the long-established FPV. Since they do not differ from one another by any of the species demarcation criteria, we propose that they should be reclassified as strains of the species *Feline panleukopenia virus* (FPV).

List of created Species in the genus

none

References

Truyen, U., Gruenberg, A., Chang, S. F., Obermaier, B., Veijalainen, P. & Parrish, C. R. 1995 Evolution of the feline-subgroup parvoviruses and the control of canine host range in vivo. *J. Virol.*, 69, 4702-10.