

Template for Taxonomic Proposal to the ICTV Executive Committee

Creating Species in an existing genus

Code[†] To designate the following viruses as species in the genus:

belonging to the family[°] :

Allpahuayo virus (CPXV)

CLHP-2098 AY012686, AY081210

CLHP-2472 AY012687

[†] Assigned by ICTV officers

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

Author(s) with email address(es) of the Taxonomic Proposal

Charrel RN (rnc-virophdm@gulliver.fr), Clegg JC (chris.clegg@camr.org.uk)
Maria Salvato (salvato@umbi.umd.edu), Michael Buchmeier (buchm@scripps.edu), Jean-Paul
Gonzalez (frjpg@mahidol.ac.th), Igor Lukashevich (lukashev@umbi.umd.edu) or
(igor50_2000@yahoo.com), Clarence J. Peters (cjpeters@utmb.edu), Rebeca Rico-Hesse
(rricoh@icarus.sfbr.org), Victor Romanowski (victor@nahuel.biol.unlp.edu.ar)

New Taxonomic Order

Order

Family

Arenaviridae

Genus

Arenavirus

Type Species

Lymphocytic choriomeningitis virus

List of Species in the genus

Ippya virus

Lassa virus

Lymphocytic choriomeningitis virus

Mobala virus

Mopeia virus

Amapari virus

Flexal virus

Guanarito virus

Junín virus

Latino virus

Machupo virus

Oliveros virus

Paraná

Pichinde virus

Sabiá virus

Tacaribe virus
Tamiami virus
Whitewater Arroyo virus

List of Tentative Species in the Genus

Pampa virus

List of Unassigned Species in the Family

None reported

Argumentation to justify the designation of new species in the genus

Species demarcation criteria in the genus

Members of an arenavirus species:

- share a specific host in the same species or genus,
- share a similar geographic distribution,
- are / are not an agent of disease in humans,
- share antigenic cross-reactivity,
- show a divergence of no more than 12% in the nucleoprotein amino acid sequence.

Argumentation to justify the designation of new species in the genus

Allpahuayo virus was isolated in 1997 in Peru from *Oecomys bicolor* and *Oecomys paricola* rodents (Moncayo et al., 2001). It is the first arenavirus to be isolated from rodents in the genus *Oecomys*; the fact that two isolates were recovered from two different species of *Oecomys* rodents suggests that *Oecomys* rodents are the main reservoir for this virus. It is the first arenavirus to be isolated in Peru. No cases of human infection or human disease have been reported so far. Complement fixation tests showed that *Allpahuayo virus* is a close relative of *Pichinde* and *Paraná* viruses. The complete sequence of the small genomic segment has been determined (Moncayo et al., 2001) and used to analyze the genetic distances between full-length gene sequences of *Allpahuayo virus* and other arenavirus species. This reveals that *Allpahuayo virus* is most closely related to *Pichinde virus*, with a genetic divergence in the amino acid sequence of the nucleoprotein of 23.4% (see Annex for phylogenetic trees). All these points indicate that *Allpahuayo virus* should be classified as a new species in the genus *Arenavirus*.

List of created Species in the genus

Allpahuayo virus (ALLV)

CLHP-2098	AY012686, AY081210
CLHP-2472	AY012687

References

Moncayo AC, Hice CL, Watts DM, Travassos da Rosa AP, Guzman H, Russel KL, Calampa C, Gozalo A, Popov VL, Weaver SC, Tesh RB. (2001). Allpahuayo virus: a newly recognized arenavirus (*Arenaviridae*) from arboreal rice rats (*Oecomys bicolor* and *Oecomys paricola*) in northeastern Peru. *Virology* 284:277-284.

Annexes:

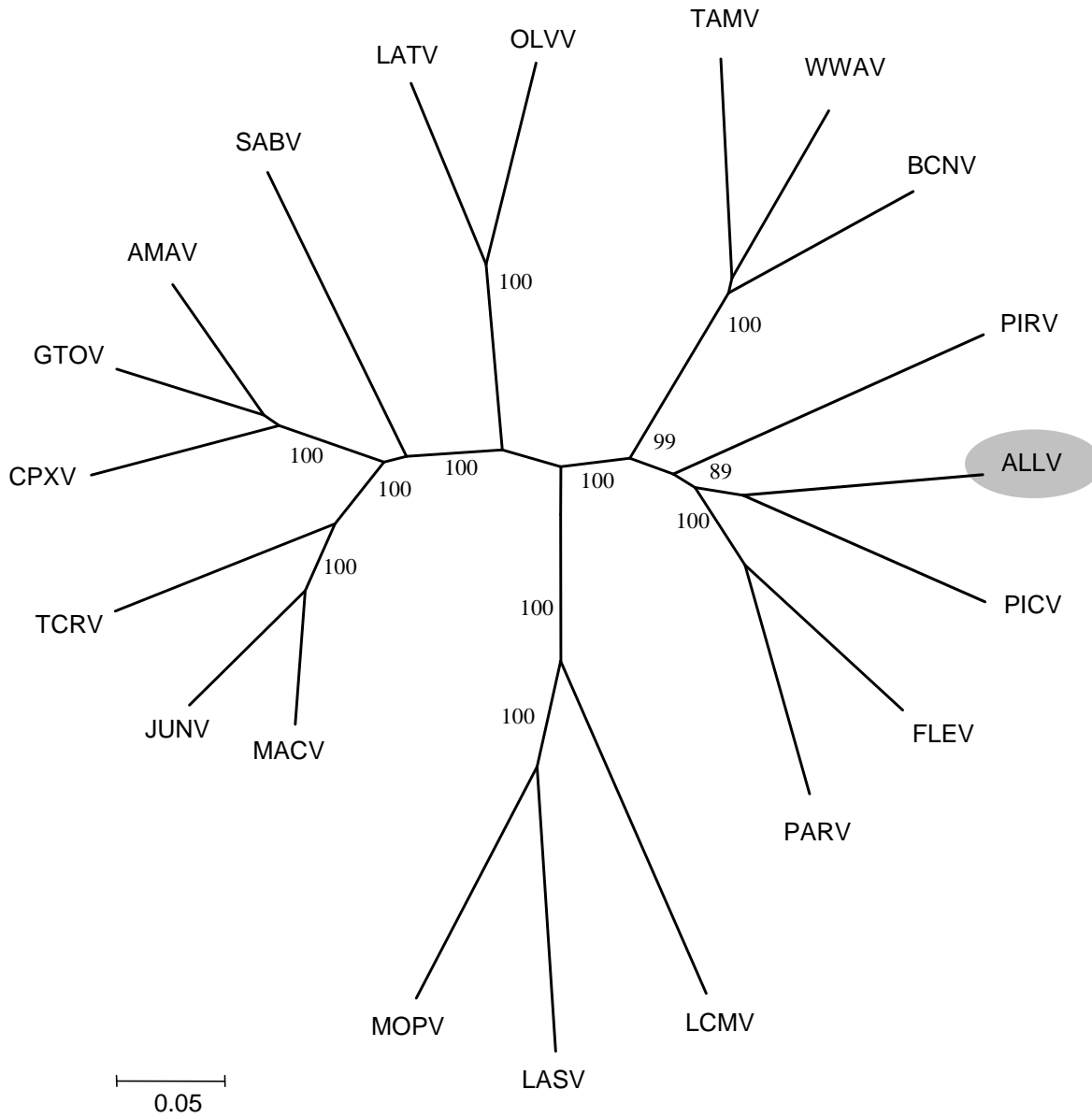


Fig.1. Phylogenetic tree showing the relationship between arenavirus species and the proposed species *Allpahuayo virus* (ALLV), using complete nucleoprotein amino acid sequences.

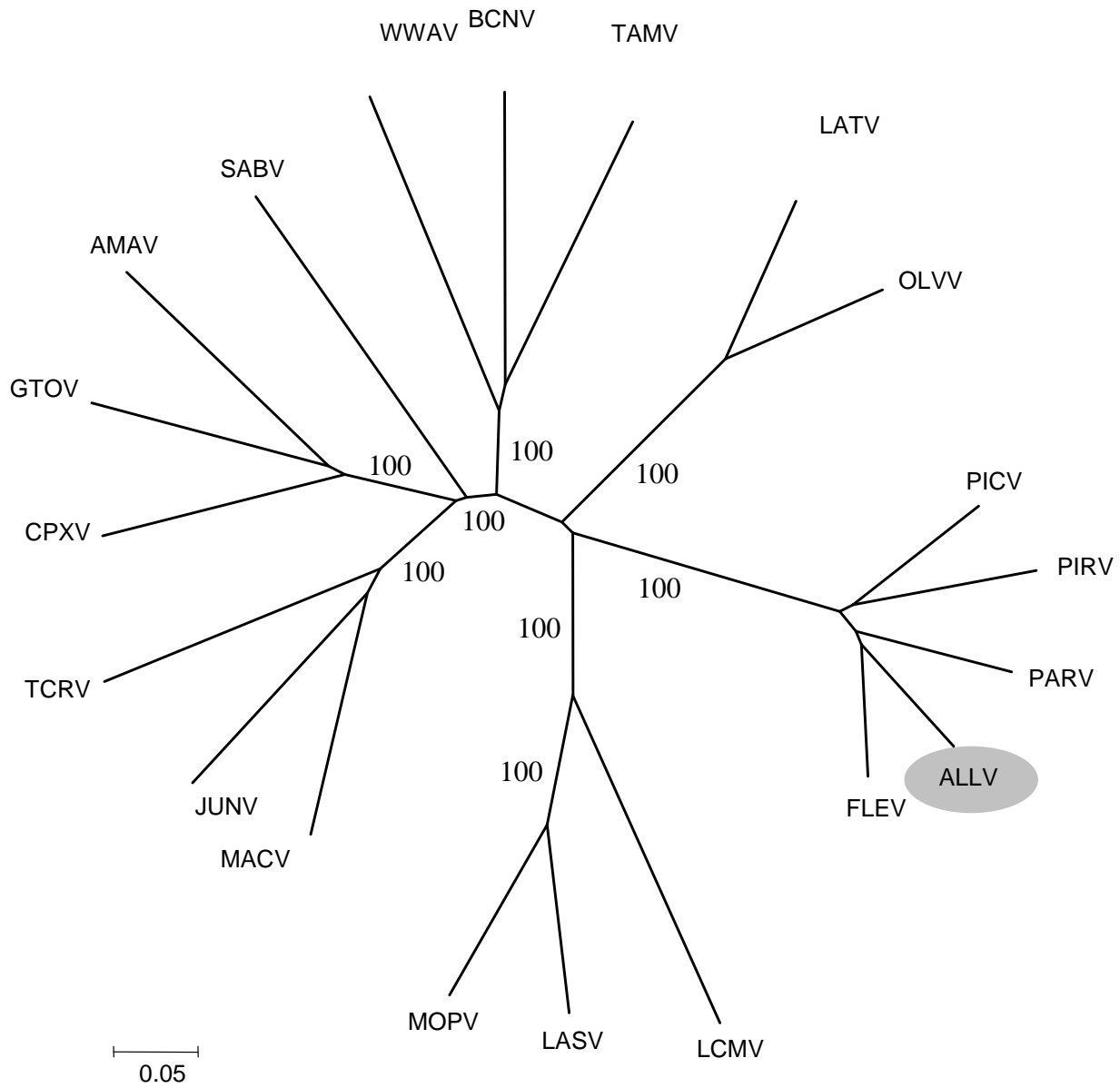


Fig.2. Phylogenetic tree showing the relationship between arenavirus species and the proposed species *Allpahuayo virus* (ALLV), using complete glycoprotein precursor amino acid sequences.