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# Response from members of the Rhabdoviridae Study Group



Offline Peter J Walker 120.148.75.226 over 2 years ago

Members of the *Rhabdoviridae* Study Group (as listed below) wish to submit a response to the recommendations outlined in the *Archives of Virology* article "Binomial nomenclature for virus species: a consultation" and the associated taxonomic proposal 2018.001G.Ud.binomial\_species.

Whilst we do have concerns about the logistics and practical consequences of changing the current approach to assigning species names, we understand and accept the arguments in favour of establishing a standardized binomial nomenclature. We also recognize the advantages of adopting a format comprising two elements with the genus name followed by a specific epithet. However, we are <u>strongly opposed to mandatory Latinization</u> of the specific epithet and instead <u>favour freeform</u>.

#### **Latinized form**

We do not consider the arguments presented in favour of Latinization to be convincing:

- We see no imperative to conform with other biological taxonomies which adopted Latinization in a past era when Latin was regarded to be the universal language of science. We should embrace the opportunity for modernization.
- 2. We do not see that Latinization is necessary to make it obvious that a name is that of a species an italicized binomial in which the first element is the genus name would be adequate for this purpose.
- 3. We see the stated advantages of Latin as a language (minimal character set, no diacritics, universality, stability and keyboard access and grammatical forms) also apply largely to English and would be irrelevant if freeform were to be adopted.
- 4. We see the flexibility offered by Latinization, in facilitating continuity in an evolving taxonomy and links to existing species names, also applies equally to freeform.

We consider the disadvantages of Latinization listed in the article far outweigh the advantages:

1. We expect the application of Latinization would be cumbersome, requiring that virologists understand and

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apply correctly the Latin grammatical rules. This would be an unnecessary imposition considering the weaknesses of arguments in favour of Latinization.

- 2. We see that creating Latinized names for tens/hundreds of thousands of new viruses will become entirely unmanageable when there may be little specific information accompanying the genome sequences. This situation could be accommodated more easily if freeform were to be adopted.
- 3. As stated above, we see no imperative to conform precisely with other systems of biological nomenclature and we agree that there is no formal correlation between the species concept in virology and that used in the biology of higher organisms. It would therefore be disadvantageous to adopt a format that suggest such a correlation.

## Alphanumeric form

We consider the use of an alphanumeric species epithet to be potentially viable and offer some simplicity and utility in assigning very large numbers of new viruses. However, the disadvantages outlined in the article, with respect to confusion and loss continuity during revisions of taxonomy and when alphanumeric systems are in use for genotypes/serotypes, are quite compelling. We therefore do not support mandatory adoption of the alphanumeric form.

#### Freeform

We consider the advantages of a freeform species epithet to be entirely compelling, particularly with respect to simple and easily recognisable translation from many existing species names. We also consider the flexibility offered by freeform would not preclude the adoption, on a case-by-case basis, of either Latinized or alphanumeric forms if desired.

We consider the potential disadvantages of freeform outlined in the article to be minor or manageable. Alphanumeric elements could be used if ultimately needed to accommodate large numbers of viruses and issues associated with uncomfortable, strange or unpronounceable names could easily be accommodated by study groups.

In summary, the following members of the *Rhabdoviridae* Study Group support the introduction of a binomial nomenclature for virus species comprising a generic epithet (genus name) followed by a specific epithet. However, we <u>do not support the mandatory use of a Latinized form</u> (as proposed in 2018.001G.Ud.binomial\_species). We recommend the use of freeform for the specific epithet.

## Members of the ICTV Rhabdoviridae Study Group

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Peter J Walker (Chair)
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Note:
One other member of the Study Group has indicated support for Latinization and another member has not responded to communication on the issue.

**Previewing Staged Changes**