What information is implied by the non-assignment of a taxon to any realm?

As of the time of writing, one class, 19 families, and two genera are not assigned to any higher ranks. What information is implied by this non-assignment? I presume it is supposed to be understood in one of the two following ways:

- An unassigned taxon is *incertae sedis*; it may or may not be related to other viral lineages, but further research is needed to make that determination.
- An unassigned taxon represents a unique lineage that has no evolutionary relation to any other viral lineages, but is not assigned to a realm by itself, due to a lack of known diversity or the assignment is pending.

Which is correct?

Regards,

James

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Hi James, thanks for your question. In assessing the status of taxa unassigned to a higher rank, *incertae sedis* is the operating principle. These taxa may be assigned to an existing higher rank as additional data is obtained; they may be assigned to a new higher rank as information is
obtained on both the taxon in question and other existing or newly identified taxa; or they may remain where they are, comfortable in their chosen position.

Currently, the ICTV Code ([https://ictv.global/code/](https://ictv.global/code/)) stipulates that species must be assigned to a genus. (There are currently 63 species unassigned to a genus, and we are working to assign them to an existing or new genus.) But there is no rule that mandates genera be assigned to a family or any other higher rank taxon be assigned to the next higher rank. That is, use of ranks higher than genus is optional, and the decision should be based on the available data and current knowledge regarding the properties and evolutionary history of the viruses under study.

Best,

Elliot

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**Offline James K. Douch, 128.250.0.36 5 months ago in reply to Elliot Lefkowitz**

Hi Elliot. Thanks for your prompt response.

Ok, I understand now, thank you. So essentially, what I meant by the first bullet point is the correct interpretation.

Regards,

James