

Template for Taxonomic Proposal to the ICTV Executive Committee

Removing Species in an existing genus

Code † To remove the following as species in the genus:

belonging to the family° :

Scallion virus X

† 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

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Old Taxonomic Order

Order

Family *Flexiviridae*

Genus *Potexvirus*

Type Species *Potato virus X*

Species in the Genus (28)

Tentative Species in the Genus

Unassigned Species in the family

New Taxonomic Order

Order

Family *Flexiviridae*

Genus *Potexvirus*

Type Species *Potato virus X*

Species in the Genus (27)

Tentative Species in the Genus

Unassigned Species in the family

ICTV-EC comments and response of the SG

Species demarcation criteria in the genus

The criteria demarcating species in the genus (Adams et al., 2004) are:

- Members of distinct species have less than *ca.* 72% identical nt or 80% identical aa between their CP or polymerase genes,
- Different reactions with antisera.

Argumentation to justify the removal of species in the genus

A proposal to create Scallion virus X as a species in the genus *Potexvirus* was originally submitted as 2004.026P.02 but there is no record of its subsequent progress. It was listed as a species in the 8th report but was identified as one that needed a formal taxonomic proposal to regularize its position.

Discussion amongst SG members revealed that Dr S Namba had recently sequenced an isolate of the long-standing member of the genus, *Asparagus virus 3*. His data, which have been submitted for publication and some of which are summarized below (Table 1) with his kind permission, indicate that ScaVX and AV3 are strains of the same species on the basis of established criteria. There are some biological data on AV3 (Fujisawa, 1986) but only a sequence for ScaVX (Chen et al., 2002) and the SG therefore recommends that ScaVX should now be removed from the species list and regarded as a strain of the species *Asparagus virus 3*.

Table 1: Percentage nucleotide (nt) and amino acid (aa) identity between ScaVX (AJ316085) and AV3 in selected genome regions

	nt	aa
Genome	73	-
Polymerase	73	78
Coat protein	81	87

List of removed Species in the genus

Scallion virus X

References

- Adams, M.J., Antoniw, J.F., Bar-Joseph, M., Brunt, A.A., Candresse, T., Foster, G.D., Martelli, G.P., Milne, R.G., Zavriev, S.K. and Fauquet, C.M. (2004). The new plant virus family *Flexiviridae* and assessment of molecular criteria for species demarcation. *Arch. Virol.*, **149**, 1045-1060.
- Chen, J., Zheng, H.Y., Chen, J.P. and Adams, M.J. (2002). Characterisation of a potyvirus and a potexvirus from Chinese scallion. *Arch. Virol.*, **147**, 683-693.
- Fujisawa, I. (1986). Asparagus virus III: a new member of Potexvirus from Asparagus. *Ann. Phytopath. Soc. Japan* **52**, 193-200.