Template for Taxonomic Proposal to the ICTV Executive Committee
To create a new Family

Code†	2005.233P.02	To create a new family* to accommodate the unassigned genus *Ophiovirus*°
Code†	2005.234P.02	To name the new family* ***Ophioviridae***
Code†	2005.235P.02	To designate the following genera as part of the new family*: ***Ophiovirus***

† Assigned by ICTV officers
° Leave blank is not appropriate
* repeat these lines and the corresponding arguments for each genus created in the family

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Old Taxonomic Order

Order
Family -
Genus ***Ophiovirus***
Type Species ***Citrus psorosis virus***
Species in the Genus ***Citrus psorosis virus***
Ranunculus white mottle virus
Tulip mild mottle mosaic virus
Mirafiori lettuce big-vein virus
Lettuce ring necrosis virus
Tentative Species in the Genus **Freesia ophiovirus (tentative name)**
Unassigned Species in the family -

New Taxonomic Order

Order
Family ***Ophioviridae***
Genus ***Ophiovirus***
Type Species ***Citrus psorosis virus***
Species in the Genus ***Citrus psorosis virus***
Ranunculus white mottle virus
Tulip mild mottle mosaic virus
Mirafiori lettuce big-vein virus
Lettuce ring necrosis virus
Tentative Species in the Genus **Freesia ophiovirus (tentative name)**
Unassigned Species in the family **-**

ICTV-EC comments and response of the SG

Argumentation to create a new family:

The genus Ophiovirus with its peculiar characteristics cannot be inserted in any existing Family. For this reason a new Family named Ophioviridae, is proposed.

All viral species belonging to the Ophiovirus genus infect plants. The virions are naked filamentous nucleocapsids about 3 nm in diameter, forming kinked (probably internally coiled) circles of at least two different contour lengths, the shortest length about 760 nm.
The ssRNA genome is 11.3-12.5 kb in size and consists of three or four segments and appears to be negative-sense.
The virion morphology resembles that of the tenuiviruses and the internal nucleocapsid component of members of the family Bunyaviridae. However, members of the genus Ophiovirus do not, like the tenuiviruses, infect Gramineae, and do not, like members of the family Bunyaviridae, possess an envelope. The absolute conservation of identical nucleotides at the genomic RNA termini, observed for the tenui- and phleboviruses (family Bunyaviridae) appears to be absent in ophioviruses, in which, as proposed for MiLV, a “corkscrew”-like conformation (as in Orthomyxoviridae) or other not yet identified structures may be present.
RdRp aa sequences show similarity with Paramyxo-, Rhabdo-, Borna- and Filoviridae, and Varicosavirus. The RdRp aa sequence also contains a motif typical of Orthomyxo-, Arena- and Bunyaviridae. However, phylogenetic reconstructions using the sequences of the conserved RdRp motifs of representative negative-stranded RNA viruses, reinforce the taxonomic relatedness of the ophioviruses studied (CPsV, MLBVV, RWMV and LRNV), and suggest their separation as a monophyletic group. As new sequence information becomes available for all species, taxonomic revisions, such as creating a second genus within the proposed Family may be considered.

Origin of the proposed family name

The proposed family name origins from the name of the genus *Ophiovirus*.

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Annexes: none