This form should be used for all taxonomic proposals. Please complete all those modules that are applicable (and then delete the unwanted sections).

Code(s) assigned: ***2008.019B*** (to be completed by ICTV officers)

Short title: create species named Endosymbiont phage APSE-1 unassigned within the family Podoviridae
(e.g. 6 new species in the genus *Zetavirus*; re-classification of the family *Zetaviridae* etc.)

Modules attached (please check all that apply):	**1** ☐ **2** ☐ **3** ☐ **4** ☐ **5** ☒ **6** ☐ **7** ☐

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ICTV-EC or Study Group comments and response of the proposer:

MODULE 5: **NEW SPECIES**

Code	***2008.019B***	(assigned by ICTV officers)

To create new species assigned as follows:

Genus:	**unassigned**	Fill in all that apply. Ideally, species should be placed within a genus, but it is acceptable to propose a species that is within a Subfamily or Family but not assigned to an existing genus (in which case put "unassigned" in the genus box)
Subfamily:	-	
Family:	***Podoviridae***	
Order:	***Caudovirales***	

Name(s) of proposed new species:

Endosymbiont phage *AP*SE-1

Argument to justify the creation of the new species:

If the species are to be assigned to an existing genus, list the criteria for species demarcation and explain how the proposed members meet these criteria.

A bacteriophage infecting the secondary endosymbiont of the pea aphid Acyrthosiphon pisum was isolated and characterized. The phage was tentatively named bacteriophage APSE-1, for bacteriophage 1 of the A. pisum secondary endosymbiont.
The genome consists of a circularly permuted and terminally redundant double-stranded DNA molecule of 36524 bp (NC_000935). Fifty-four open reading frames, putatively encoding proteins with molecular masses of more than 8 kDa, were distinguished.
The virions of APSE-1.1 resemble P22 virions (appended figure), which is reflected by the structural protein homology, but APSE-1 differs the P22-like viruses in its metabolic genes, excluding this phage from this genus. Within a subfamily setting, APSE-1 and the P22-like phages would be related.

References:

** van der Wilk F, Dullemans AM, Verbeek M, van den Heuvel JF. (1999) Isolation and characterization of APSE-1, a bacteriophage infecting the secondary endosymbiont of Acyrthosiphon pisum. Virology. 15;262(1):104-13.

Annexes:

Include as much information as necessary to support the proposal. The use of Figures and Tables is strongly recommended.

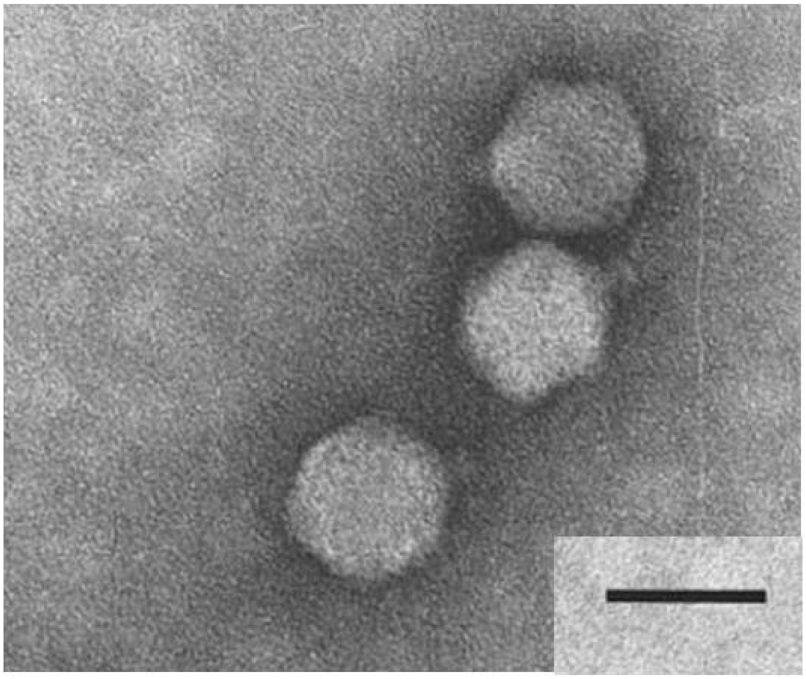

Figure 1: EM of APSE-1; phage particles were negatively stained with 2% uranyl acetate (Bar 50nm)