

## Template for Taxonomic Proposal to the ICTV Executive Committee To create a new Unassigned Genus

Code †  To create the species *Poinsettia latent virus*

Code †  To create a new genus\*

Code †  To name the new genus\*

Code †  To designate the species   
As the type species of the new genus\*

Code †  To designate the following as species of the new genus\*:

† Assigned by ICTV officers

\* repeat these lines and the corresponding arguments for each genus created in the family

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### Old Taxonomic Order

Order  
Family *Partitiviridae*  
Genus *Alphacryptovirus*  
Type Species  
Species in the Genus  
Tentative Species in the Genus *Poinsettia cryptic virus*

### New Taxonomic Order

Order  
Family  
Genus *Polemovirus*  
Type Species *Poinsettia latent virus*  
Species in the Genus *Poinsettia latent virus*  
Tentative Species in the Genus

## ICTV-EC comments and response of the SG

This proposal highlights the need to re-examine relationships within the Luteoviridae-Tombusviridae-Sobemovirus group. However, this particular virus needs to be classified and is best placed in its own genus.

## Argumentation to choose the type species in the genus

Only species

## Species demarcation criteria in the genus

Not applicable

## List of Species in the created genus

*Poinsettia latent virus* (PnLV) AJ867490

## List of Tentative Species in the created genus

None

### **Argumentation to create a new species an genus:**

The biochemical and genetic features of Poinsettia latent virus (PnLV, formerly named Poinsettia cryptic virus), which is spread worldwide in commercial cultivars of *Euphorbia pulcherrima* without inducing symptoms, have been determined using virus-purification, immunological techniques, electron microscopy, cloning, and sequencing. PnLV was found to be a chimeric virus with a single 4652 nt, plus strand RNA, showing a close relationship to poleroviruses within the first three quarters of its genome but to sobemoviruses in the last quarter. Thus, we propose to classify this virus as ‘‘polemovirus’’. Similarities of protein and nucleic acid sequences at the 5’ and extreme 3’ end of its RNA suggest a replication mode like that of poleroviruses, whereas the coat protein sequence is closely related to that of sobemoviruses. Consistent with these results, PnLV forms stable icosahedra of 34 nm in diameter.

### **Origin of the proposed genus name**

Sigla from “*Polerovirus*” and “*Sobemovirus*” to indicate the chimeric nature of the virus

### **References**

Aus dem Siepen M., Pohl J., Koo B.J., Wege C., Jeske H. (2005). Poinsettia latent virus is not a cryptic virus, but a natural polerovirus-sobemovirus hybrid. *Virology* 336: 240-250.

### **Annexes:**