

Proposal from the *Tymoviridae* Study Group

- FT2003.013P.01. To recognize *Chayote mosaic virus* (previously a tentative species) as a new species in the genus *Tymovirus* in the family *Tymoviridae*, with Chayote mosaic virus (ChaMV) as an isolate of that species.
- FT2003.014P.01. To recognize *Petunia vein banding virus* as a new species in the genus *Tymovirus* in the family *Tymoviridae*, with Petunia vein banding virus (PetVBV) as an isolate of that species.

The entire genomic sequence of Chayote mosaic virus (ChMV) is now known (accession AF195000) and there is considerable ultrastructure, transmission, susceptibility and serology information. All characteristics clearly support classification as a tymovirus, and coat protein and RP sequences are distinct enough (<60% identity to most closely related tymovirus) to justify classification as a distinct species.

References:

1. Bernal, J.J., Jimenez, I., Moreno, M., Hord, M., Rivera, C., Koenig, R., and Rodriguez-Cerezo, E. (2000) Chayote mosaic virus, a new tymovirus infecting Cucurbitaceae. *Phytopathology* 90: 1098-1104.
2. Hord, M., Villalobos, W., Macaya-Lizano, A.V., and Rivera, C. (1997) Chayote mosaic virus, a new disease in *Sechium edule* caused by a tymovirus. *Plant disease* 81:374-378.

Petunia vein banding virus (PetVBV) can be firmly classified as a tymovirus on the basis of its virion structure, pathology ultrastructure, serology and partial nucleotide sequence (994 nt covering the 3'-end fo the RP gene and the entire coat protein gene; accession AF210709). The serology and nucleotide sequence support classification as a distinct species (coat protein has only 65% identity to CP from the most related tymoviruses).

Reference:

- Alexandre, M.A.V., Duarte, L.M.L., Rivas, E.B., Chagas, C.M., Barradas, M.M. and Koenig, R. (2000) *Petunia vein banding virus*: characterization of a new tymovirus from *Petunia x hybrida*. *Plant Disease* 84:739-742