

**Serological relations of Piper yellow mottle virus (PYMV) and Cucumer mosaic virus (CMV)- black pepper strain found in Sri Lanka Black Pepper (*Piper nigrum* L.)**

*Piper* yellow mottle virus (PYMV) disease is one of the most important diseases affecting black pepper cultivation in Sri Lanka. *Piper* yellow mottle badnavirus is confirmed as the causal agent of the disease. However, infected leaves contained a mixture of viruses including PYMV (130 x 30 nm), Cucumber Mosaic Virus - black pepper strain (CMV) (30 nm diameter) and another two different unidentified virus - like particles (30 nm diameter).

Electron microscopy, trapping and decoration methods were used to find out the serological relationships between PYMV and other Badnaviruses. PYMV and Dioscoria small bacilliform virus (DBV) particles were trapped to each heterologous antiserum.

Furthermore relationship between two viruses. This is the only serological relationship of PYMV found so far.

Serological relationship of the CNV - black pepper strain was studied using Ouchterlony double diffusion testes. CMV isolate No. 13 showed a relationship only with CNV - B Isolate No. 18 was serologically related to CMV -C, CMV -Fiji and CMV - passiflora, but all the available CMV isolates showed serological relationships with CMV - Fiji.