An Electron Microscope Study on the Size of *Launaea* Mosaic Virus  

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With one figure  

Summary  

*Launaea* Mosaic Virus has long thread-like particles, measuring from 750—930 nm. in length and 16—18 nm. in width.  

A virus disease on *Launaea nudicaulis* Hook f. was described by Padma, Verma, and Singh (1973). The present investigation was undertaken to study the length distribution of this virus.

The quick-dip method (Brandes 1957) of preparing specimens for electron microscopy was used; freshly cut surfaces of leaves were employed. The grids were stained with 2 per cent PTA (phosphotungstic acid), pH 6.5. An electron microscope, Philips EM 300, was used. Length measurements were done at 25920 magnification.

The original source plant was *L. nudicaulis*, infected with the virus in an insect-proof glasshouse. Several preparations from infected leaves revealed that the virus comprises flexuous long thread-like particles. The length of the particles varied from 750—920 nm; but the most common length was 800 to 825 nm., and all the particles were 16—18 nm. wide, as shown in the figure. The particles were very uniform in most preparations and present in good concentration. However, no particles were observed in healthy leaves.

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Fig. 1. Electron micrograph of *Launaea* Mosaic Virus, $\times$ 25920.
The virus described here resembles in morphology and transmission the Potyvirus group of Harrison et. al. (1971) classification of plant viruses. There is no other virus of this group restricted to the genus Launaea only. It is proposed to consider this a new virus. It was named "Launaea Mosaic Virus".


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References


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