PARTIAL CHARACTERISATION OF TWO UNIDENTIFIED CARLA-LIKE VIRUSES FROM *DIOSCOREA OPPOSITA* (DISCOREACEAE) AND *GYNURA* SP. (ASTERACEAE)

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Quarantined *Dioscorea opposita* (yam) from China and *Gynura* sp. plants from Australia were tested for viruses. Numerous filamentous particles (600-750 nm long) were observed by transmission electron microscopy in sap from *Gynura* sp. but extracts from yam contained no such particles. Mechanical inoculation to a range of herbaceous plants was successful for the *D. opposita* but not for *Gynura* sp. Both samples tested negative for *Potyvirus*, *Potexvirus*, *Capillovirus*, *Trichovirus* and *Foveavirus* by RT-PCR using broad-spectrum primers, but a positive RT-PCR amplification was obtained with universal primers for *Carlavirus*. The yam virus showed a high amino acid similarity with *Hop latent carlavirus* (87.9%), *Aconitum latent carlavirus* (86.8%) and *Potato virus M* (86.8%). The virus from *Gynura* sp. had a high nucleotide identity with an unidentified *Verbena*-infecting *Carlavirus* from Israel (92.7%). The *Carlavirus* found in *Gynura* sp. seems to be different to the one previously reported in the literature. This is the first report of a Carla-like virus infecting yam. Further work is in progress to complete the identification and characterisation of these viruses.

DETECTION OF POINSETTIA MOSAIC VIRUS IN *EUPHORBIA* SPECIES IN NEW ZEALAND

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Poinsettias (Euphorbia pulcherrima) are commonly infected with *Poinsettia mosaic virus* (PnMV) overseas and an infection of up to 94% has been reported in the USA. The presence of PnMV in New Zealand has never been demonstrated. Ten *E. pulcherrima* samples and samples of *E. atropurpurea*, *E. lambii*, *E. leuconeura*, *E. mellifera*, *E. milii* and *E. piscatorial* were collected in the Auckland area in 2002. Viral-isometric particles 26-30 nm in diameter were observed by electron microscopy in 3 out of 10 *E. pulcherrima* samples. Sap from these samples caused systemic chlorosis and crinkling symptoms when mechanically inoculated onto *Nicotiana benthamiana* and tested PnMV positive by ELISA. A RT-PCR using PnMV-specific primers was developed to further characterise the virus. The sequence analysis of the three PnMV isolates showed 96.8-97.5% nucleotide identity to the published PnMV sequence (AJ271595). No particles or symptoms on *N. benthamiana* were observed with the other *Euphorbia* species which also tested PnMV negative by ELISA. *E. pulcherrima* plants have been imported into New Zealand for nearly 40 years and the virus is probably widespread.