

Colombian datura virus (CDV)

Background of the detection

The Colombian datura virus (CDV) was detected in *Brugmansia* sp. plants in New South Wales in 2007. Subsequent surveillance of *Brugmansia* plants in Victoria in 2007 detected the virus in one nursery in a variegated species.

The distribution of this virus in Australia is still unclear as affected plants may be asymptomatic, which makes the detection and spread potential difficult to predict. It is also unclear what effect this virus may have on other crops in Australia.

Symptoms

Symptoms of CDV can include, reduction in leaf size, vein banding, chlorotic flecking on leaves followed by mottling, and plant stunting. Infection can be symptomless, however, if plants are stressed, leaf mottling and mosaic patterns will become evident.

CDV affects *Brugmansia* species, terrestrial orchids (*Spiranthes cernua*); *Juanulloa aurantiaca*; *Petunia hybrida*; glasshouse tomatoes (*Lycopersicon esculentum*); tobacco (*Nicotiana tabacum*); cape gooseberry (*Physalis peruviana*); and pepino (*Solanum muricatum*).

The virus is transmitted by a vector (aphid non-persistent transmission by *Myzus persicae* [order Hemiptera]), by mechanical inoculation and by grafting (Salamon 2005).

Summary of worldwide detections

In 1996, CDV was detected in about 300 plants of tomato variety Cabrion in one greenhouse in the Netherlands. Evidence was obtained that the tomato plants were infected by *Myzus persicae* that acquired the virus from a CDV-infected *Brugmansia* plant present in the same greenhouse (Verhoeven 1996).

In Hungary, CDV has been found to infect angel trumpets (*Brugmansia* spp.) frequently and cape gooseberry (*Physalis peruviana*) and pepino (*Solanum muricatum*) sporadically. The symptoms persist or disappear soon after infection (Salamon 2005).

The virus has recently been detected in the USA and is known to occur in the Netherlands, Poland, Colombia, Germany, Hungary and Japan.

References

Salamon, P. 2005. Occurrence of Colombian datura virus in *Brugmansia* hybrids, *Physalis peruviana* L. and *Solanum muricatum* Ait in Hungary. *Acta Virol.* 2005 ;49:117-22 16047739.

Verhoeven, J. 1996. First report of Colombian Datura potyvirus in tomato. *European Journal of Plant Pathology*, Volume 182, pgs: 895-898.



Severe symptoms of CDV in *Brugmansia* sp. (French 2003)



Symptoms of CDV in *Brugmansia* sp. (University of Florida Department of Plant Pathology)

Please report any suspected cases of *Colombian datura virus* to your industry representative.

To report suspect pests and diseases, call the Exotic Plant Pest Hotline:

1 800 084 881

For further information, visit the Plant Standards web page:

www.dpi.vic.gov.au/psb