Last Updated: March 2023

Fact sheet: Emaravirus actinidiae



New to science, from the genus *Emaravirus*, a genus of negative-strand RNA viruses which infect plants. Recently found in Haywayrd and G3 kiwifruit in five provinces of central and western China causing reduced vine survival and fruit yields. Detected in recent surveys. Emaraviruses are known to have a narrow host range, recent reports have found it in four species: *Actinidia chinensis*, (G3) *A. deliciosa (green kiwifruit) A. kolomikta* and *A.eriantha*. The trade of illegal materials, nursery stock and fresh produce pathways are of particular concern.

Identification

Detectable via high-throughput sequencing (HTS) and conventional Sanger sequencing





Images: Actinidia chlorotic ringspot virus (AcCRaV) showing vein yellowing on kiwifruit and Nicotiana benthamiana leaves. Source: Zheng et al, 2016

Distribution and climate range

Reported in central and western China. No information to suggest climate suitability. The western and central China regions are generally cooler and wetter than New Zealand (mountainous climate in western China). The virus is transmitted by an eriophyid mite vector. The virus is also mechanically sap transmissible to *Nicotiana benthamiana*. May be spread through plant movements and contaminated equipment, little information on spread at current.



Signs and symptoms

Infected plants show chlorotic leaf ring spots and vein yellowing. Impact are largely unknown but potential to reduce kiwifruit yield and vine survival with significant economic implications.

Control

Mitigation measures for this virus should be focused on the control of spread. Currently, there are no incursion tools available. Transmission in kiwifruit is unknown. However, it is likely to be through seed, pollen and mechanically, during orchard activities, emphasising the need for best practice orchard hygiene and high health

What should you do if you think you have seen symptoms of this virus?







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