Sowbane Mosaic Virus

a. Virus/pathogen name, including accepted acronyms and synonyms
Sowbane mosaic virus (SoMV), Chenopodium mosaic virus, Apple latent virus 2, Chenopodium star mottle virus, Rubus chlorotic mottle virus (RuCMV), genus *Sobemovirus*, Family *Solemoviridae*, Order *Sobelivirales*

b. Host Range:
SoMV primarily infects species in the family *Chenopodiaceae* (Dias and Waterworth, 1967) but has also been reported in *Rubus,* grapevine and fruit trees (McGavin and MacFarlane, 2009; Bancroft and Tolin, 1967; Bercks and Querfurth, 1969; Pozdena et al., 1977).

c. Symptoms on crop host:
The virus causes severe downward capping in raspberry cv. Gaia, whereas symptoms on the most commonly used indicator, *Chenopodium quinoa*, include severe mottling and leaf sinuation Symptoms on other indicators, the majority of which belong to the family Chenopodiaceae range from asymptomatic to severe stunting (Kado, 1967)

d. Geographic distribution:
SoMV is a cosmopolitan and should be assumed present wherever there are plants in the *Chenopodiaceae.* The presence of the virus in National Clean Plant Network crops in the United States is unknown because of lack of surveys for the virus

e. Means of spread
SoMV is efficiently transmitted by seed and pollen (Kado, 1967; Bennett and Costa, 1961) as well as thrips (Hardy and Teakle, 1992), leaf miners (Costa et al., 1958) and leafhoppers (Bennett and Costa, 1961)

f. Recognized diagnostic tests
The virus is readily detectable by ELISA and RT-PCR (Eastwell et al., 2010). Nepoviruses tend to have higher titer in newer tissue at the beginning of the season.

h. Management strategies for the pathogen and the vector(s) of the pathogen.
The high pollen transmissibility of the virus may be of concern given the evidence that pollen can transfer viruses between plant taxa. Virus-indexed planting stock is critical because little in known of the virus pathology in most Rubus, grapevine and fruit tree cultivars whereas there have not been any studies on SoMV effects in mixed infections with other viruses in perennial crops.

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