Blueberry Necrotic Ring Blotch Virus

a. Virus/pathogen name, including accepted acronyms and synonyms

Blueberry necrotic ring blotch virus (BNRBV)

b. Host range, including resistance or tolerance within the crop hosts, alternate hosts

BNRBV host range is limited to *Vaccinium*; it has only been detected in several cultivars of southern highbush blueberries.

c. Symptoms on crop host including varietal differences with images of symptoms when available

BNRBV induces chlorotic rings on the upper and lower surface of the leaf, which progress to necrotic rings or blotches. In severe cases this can lead to defoliation and impact production (Quito-Avila et al., 2013). There is also a 'red variant' that induces red concentric rings that can expand the width of the leaf but does not cause defoliation (Cantu-Iris et al., 2013). In both cases the lesions can have green centers. Under greenhouse conditions, symptoms appear to develop quite quickly (Robinson et al., 2012).

d. Geographic distribution:

BNRBV has only been observed in the southeastern U.S in southern highbush blueberries (Martin et al., 2012; Martin and Tzanetakis, 2018).

e. Means of spread:

The vector for this virus is *Calacarus corymbosi*, an eriophioid mite. Spread through cuttings is limited, suggesting the virus moves very inefficiently in plants- it can take up to a year to reach the roots (Tassi et al., 20250

f. Recognized diagnostic tests with cited references:

BNRBV can be detected by RT-PCR (Quito-Avila et al., 2013).

g. Sampling recommendations for each pathogen including timing and tissue to be sampled

Symptomatic tissues should be selected for testing. The virus appears to move very slowly if at all from infected leaves.

h. Management strategies for the pathogen and the vector(s) of the pathogen

The use of virus-indexed planting stock is the most critical step in virus management.

References:

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