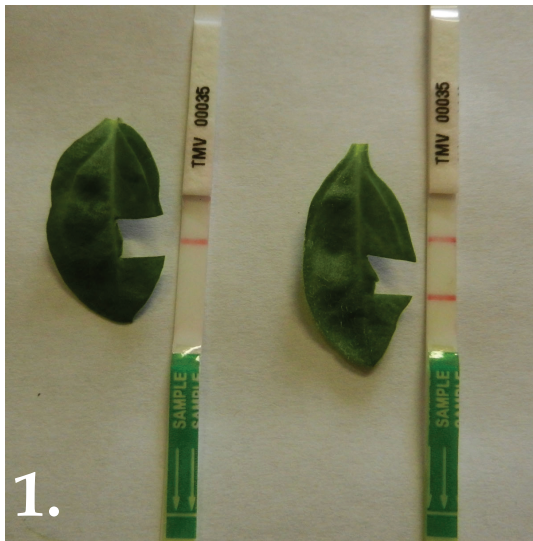


TIP OF THE MONTH

The Use of a French Cooking Technique, Chiffonade, To Improve Accuracy for Virus Testing

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Have you ever had an unexpected negative serological test result of tissue from a symptomatic leaf sample only to find that when you retested tissue collected from a different portion of the exact same symptomatic leaf or another leaf with similar looking symptoms (fig 1) the test was positive? Some of the procedures (serological 'dipsticks' and lateral flow units) used to test plant material for viruses require the use of a relatively small amount of tissue to avoid false positive test results. Ensuring that the test tissue is representative of the plant or plants in the sample can be a challenge. The sample may consist of multiple plants in a container or tray. Is a small amount of tissue from a single leaf sufficiently representative? Chance may lead the



diagnostician to sample an area of the plant where the virus may be present in very low titer or not at all. The higher cost of multiple serological 'dipstick' tests or lateral flow units to ensure accuracy may not bode well with clientele. There is an easy solution!!

To maximize detection of the virus while increasing randomization in your sample try using a chiffonade. Cooks are probably familiar with

this term which means thin strips or shreds and is used when leafy vegetables or herbs are sliced to garnish a dish. Stack up 4-5 leaves, roll them tightly into a cylinder (cigar-shape) (fig 2) then slice across the cylinder, cutting the leaves into thin strips (figs 3-4). 'Voila' — the sample will now represent multiple leaves with symptoms instead of a single leaf while not exceeding the amount of tissue recommended for the test procedure (fig 5). 🌿

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