

Sampling Procedures Taken Directly From Medicinal Genomics Website Jan. 17, 2024

<https://medicinalgenomics.com/product-literature/>

Plant Tissue Sampling

Some studies have shown that sampling different parts of an HLVd-infected plant will produce different results. Roots typically produce the strongest qPCR signal if a plant is infected with HLVd, and in some cases, roots have tested positive for HLVd, while leaves from the same plant tested negative.

Sampling multiple locations of the plant will result in a more comprehensive assessment of infection. As many as 3 tissue samples in a single well can be used, however, using more than 3 tissue samples (punches) in a single well can overload the assay and reduce the accuracy of the test.

Items needed for sampling:

- 1.5mL centrifuge tubes, or something to collect samples
- Disposable gloves
- Spray bottle of 10% bleach
- Scissors
- Cup/beaker of 10% bleach solution
- Paper towels

When at the grow location, make sure to clearly label the plants you are sampling from, and the containers for the samples. It is very important that samples are clearly and properly labeled.

Sterilize hands and tools between samples

- Soak trimming tool in 10% bleach solution for 60 seconds
- Spray 10% bleach solution onto any tool parts that were not submerged in bleach solution
- Pro Tip: Put on two pairs of gloves and change the outer set between plants or spray your hands with 10% bleach solution in between each sample.

Root Sampling

1. Lightly brush the topsoil of the plant to reveal surface root.



2. Pull gently on the root to break it away from the root mass.
3. Only a small amount of root tissue is needed (~5 - 10 cm).
4. For soilless media, use sterile scissors to cut small pieces of exposed root tissue.
5. Place root tissue on a clean paper towel or directly into a sample tube after brushing off excess growing medium.