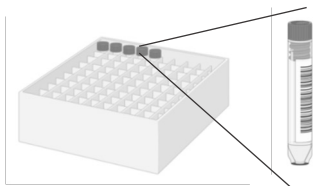


# Sample Collection Instructions HLVD (Side 1)

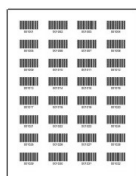
Hop latent viroid is a molecular plant pathogen that results in stunted growth and “dudged” flower development in cannabis. Accurate, repeated testing and removal of infected plants is critical for maintaining consistent yields. This document details the steps to collect cannabis tissue samples for HLVD testing at TUMI Genomics Laboratories.

## 1. SET UP

### Supplies Included



Testing Vials



Extra Barcode Stickers

### Supplies Needed



Disposable Gloves



Spray Bottle of 10% Bleach



Scissors



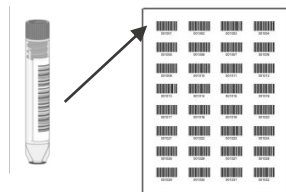
10% Bleach



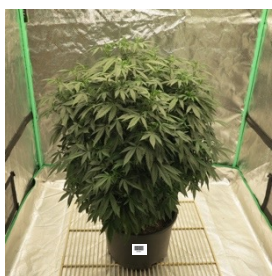
Paper Towels

## 2. IDENTIFY AND LABEL PLANT

Identify the plant(s) to be tested and add the barcode sticker that corresponds to the selected testing vial. Number on barcode will appear in your testing report.



Identify sticker corresponding to number on the sample tube.



Add corresponding sticker to plant pot.

## 3. COLLECT TISSUE

### Petiole Samples X 4



**Middle Area**

Collect 4 petiole samples from around the middle 2/3rds of the plant. Try to cut petioles close to the main stem if possible.



Place petiole samples on a clean paper towel or add directly to sample tube (see section 5).

## 3. (CONT) COLLECT TISSUE

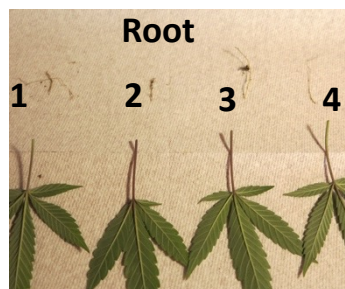
### Root Samples X 4



Lightly brush topsoil of plant to reveal surface root. Pull gently on root to break it away from the root mass. Only a small amount of root tissue is needed (~the length of a pinky fingernail).

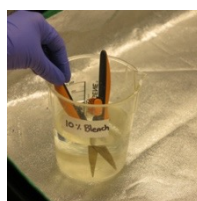


Collect four root samples evenly spaced around the base of the plant.



Place root tissue on a clean paper towel, or directly into sample tube after brushing off excess growing medium (see section 5).

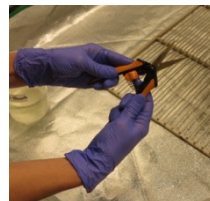
## 4. STERILIZE HANDS AND TOOLS IF SAMPLING MORE THAN ONE PLANT



Soak trimming tool in 10% bleach for 60 seconds.



If handles of trimming tool were not submerged, spray with 10% bleach and spread evenly on surface.



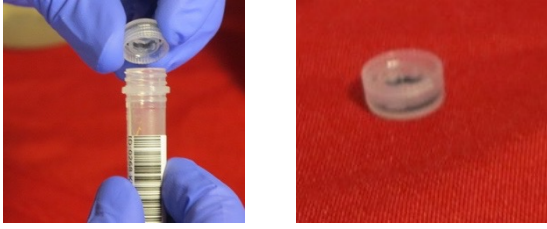
Spray gloved hands with 10% bleach and spread evenly as you would hand sanitizer.



TURN OVER AND CONTINUE TO STEP 5 →

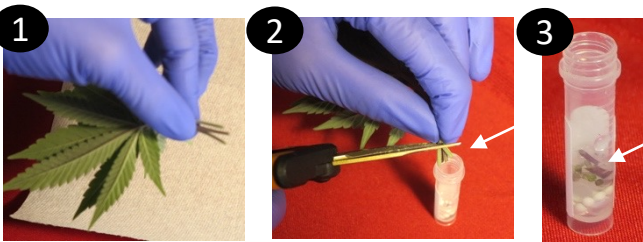
# Sample Collection Instructions HLVd (Side 2)

## 5. ADD TISSUE TO TESTING VIAL



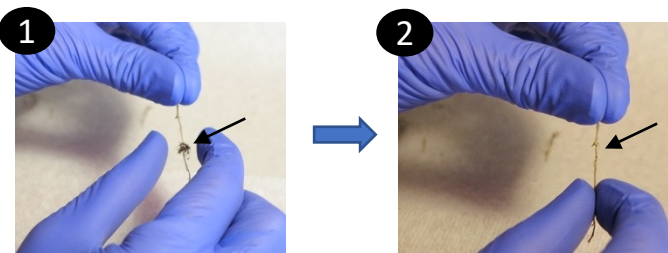
Remove lid of sample tube and place on a clean surface facing up. Take care to not expose inside of cap to contaminated areas as this could affect the accuracy of your results.

### Petiole Samples X 4

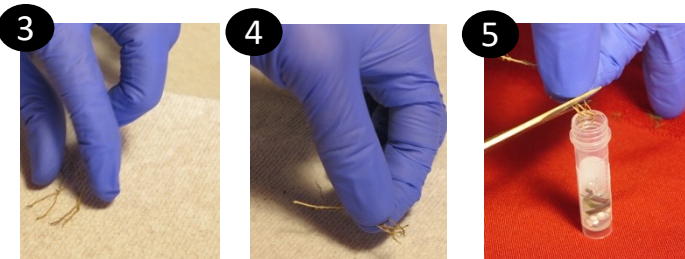


Gather petiole samples together. Using the trimming tool, cut about ¼ of an inch from petiole samples into the testing vial.

### Root Samples X 4



Remove excess soil or growing medium from root tissue by gently sliding hands along the root hair. The small amount of growing medium that remains will not interfere with the assay.

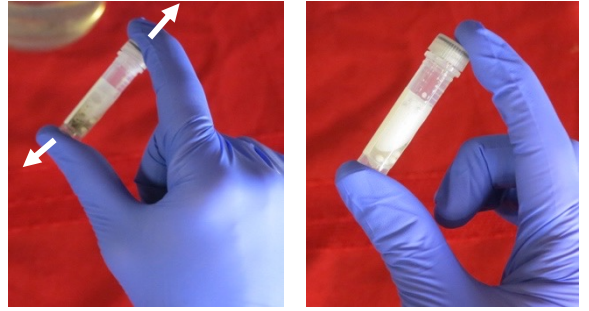


Gather root samples together. Using the trimming tool, cut about ¼ of an inch from root samples into the testing vial.



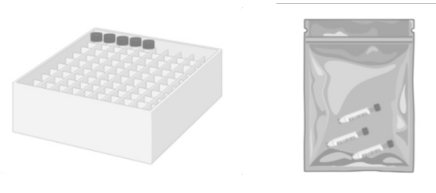
Screw the lid back on sample tube tightly. Tap the tube gently on a hard surface to gather the tissue in the solution at the bottom of the tube.

## 6. PREPARE SAMPLE



Shake the tube vigorously for 10- 15 seconds. A white foam will appear at the top of the tube, which is normal. Your sample is now ready to ship.

## 7. SHIP SAMPLES TO TUMI GENOMICS



Confirm the lid is screwed on tightly. Place vials with prepared tissue in the white box they were shipped in or a sealed plastic bag. Ship samples to:

**TUMI Genomics**  
320 East Vine Drive  
Suite 213  
Fort Collins, CO 80524

## COMMON QUESTIONS

### How long does the test kit last?

The testing vials are good for three months at room temperature and up to a year if stored in the refrigerator.

### Should I add extra tissue to get a better result?

No, excessive tissue can reduce the accuracy of the test. The most critical factor is to include small amounts of tissue from multiple parts of the plant, including the root.

### How long is the sample stable after collecting it?

We encourage customers to ship samples back to us as soon as possible. However, tissue samples are stable in the collection solution for a week or more. If storing for a prolonged period of time (more than 3 days), refrigeration is recommended.

### Should I ship my samples on ice?

Ice is not necessary when shipping samples. The stabilization solution is very effective even in warm, summer temperatures.



Have more questions? See the FAQ section of our website or contact us at (720) 807-8864 or via email at [sales@tumigenomics.com](mailto:sales@tumigenomics.com)

<https://tumigenomics.com/>