

 <b>ONWARD ANALYTICS</b>	<b>FRM-023-OA: Hop Latent Viroid Sampling Practices</b>	Version Effective Date	01 09/14/2023
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### **About Hop Latent Viroid**

Hop Latent Viroid (HLVd) is a plant pathogen that causes disease in cannabis plants. Like viruses, viroids are completely dependent on their host plant’s metabolism for replication. However, unlike viruses, viroids do not have a protective layer and are composed solely of genetic material. Surprisingly stable, experiments have shown that at room temperature the viroid remains detectable for up to 5 days on gloves and 4 weeks on dry leaves.

Experiments have shown that:

- 2 weeks after infection, HLVd can be detected in the roots,
- 4 weeks after infection, HLVd can be detected in young leaves,
- 6 weeks after infection, HLVd can be detected throughout the entire plant.

This means that if one were to test a plant less than 6 weeks after infection, some tissues will test positive for HLVd while others will test negative.

### **Best Practices for Collecting Samples for Hop Latent Viroid Testing**

HLVd is easily transferred through mechanical transmission. Always disinfect tools and surfaces with 10% bleach, and exchange gloves between samples.

If providing ROOT samples:

- Collect sample 2+ weeks after suspected infection, otherwise roots may not have enough viroid accumulated for detection.
- Tap roots are preferred, followed by peripheral roots.
- Please brush off as much soil as possible.
- Store samples refrigerated (4°C / 40°F) to inhibit mold growth.
- Please provide a total of at least 6 inches worth of roots in your sample submission.

If providing LEAF samples:

- Collect samples 6+ weeks after suspected infection. Otherwise leaves may not have enough viroid accumulated for detection.
- May provide leaves, petioles.
- Store samples refrigerated (4°C / 40°F) to inhibit mold growth.
- Please provide a minimum of 2 leaves in your sample submission.

Please bring samples to Onward Analytics promptly after sample collection.