



August 2024 Cannabis Newsletter

DISEASE DIAGNOSTIC METHODS COMPARISON

A&L Canada Laboratories has extensive Disease Diagnostic capabilities including a wide range of analytical methods. The table below compares the available methods and their respective merits. The more sensitive methods further down the list are capable of detecting trace amounts, allowing for better management decisions.

METHOD	ACCURACY	ANALYTE	NOTES	RESULT FORMAT
Enzyme linked immunosorbent assay (ELISA)	Lowest	Tissues	Low accuracy. Tends to produce false positives due to presence of other viruses or false negatives if the virus load is low.	Presence/Absence (P/A)
Culture	Low	Water, growing media	Only measures living microbes. Good for checking the effectiveness of treatments and for monitoring.	Enumeration (CFU/g)
Polymerase chain reaction (PCR)	High	Tissues, water, growing media	Highly sensitive and specific but does not distinguish between living & dead pathogens.	Semi-Quantitative (low, medium, high)
Reverse transcription PCR (RT-PCR)	High	Tissues, water	Highly sensitive and specific. Great method for virus testing, but costs more.	Semi-Quantitative (low, medium, high)
Sequencing	Highest	Finished product	Can identify top 3-5 species of mold, yeast, bacteria, etc. (beyond disease/virus).	Species Level
Next Generation Sequencing (NGS)	Highest	All products	Can identify 100s of species of mold, yeast, bacteria, etc. and their relative ratios (best for researchers).	Species Level and Ratios

VISUAL DISEASE DIAGNOSTICS FOR \$25

A&L offers an affordable disease diagnostics solution through the SmartSubmit mobile app. This feature allows you to submit images of your concern directly to our Plant Disease Diagnostics team for visual analysis.

If a diagnosis cannot be reached through visual interpretation, it may be recommended that you submit a physical sample to the lab for further analysis. In this case, the cost of visual diagnostics will be credited towards your in-house disease scan.



To request login credentials, contact us at portalsupport@alcanada.com
For more information on our Plant Disease Diagnostic services, contact A&L.

DISEASE TESTING PRICE REDUCTIONS

A&L Canada has made the decision to reduce pricing for a number of Cannabis Disease Testing options. The most notable of which are listed below. Additional discounts will not be applied to the new pricing. Contact your A&L Representative for a quote or to inquire about our discount structure for Cannabis clients.

PACKAGE NAME	FEEDCODE	PARAMETERS	PRICE DROP
Cannabis Virus Scan by ELISA	BCVDS	1. Cucumber Mosaic Virus (CMV) 2. Tobacco Mosaic Virus (TMV) 3. Tobacco Streak Virus 4. Alfalfa Mosaic Virus (AMV) 5. Arabis Mosaic Virus (ArMV) 6. Tomato Bushy Stunt Virus (TBSV)	27%
Hop Latent Viroid by RT-PCR	BVHLVD	1. Hop Latent Viroid (HLVd)	25%
Cannabis Viruses by RT-PCR	BCVDP	1. Hemp Streak Virus (Cannabis Cryptic Virus) 2. Lettuce Chlorosis Virus 3. Beet Curly Top Virus (BCTV) 4. Hop Latent Viroid (HLVd)	64%



A&L Canada Laboratories is the *exclusive* dealer for Agdia products in Canada.



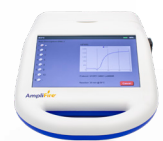
Agdia has been a leading provider of plant pathogen diagnostics since 1981.

www.agdia.com

Click [here](#) to generate an order online or contact us at clientcarecannabis@alcanada.com

NEW StudFinder™ Sex Determination Test Kit from Agdia – learn more [here](#) or read the [Press Release](#)

Contact A&L to order in-field diagnostic tools including the AmpliFire® Isothermal Fluorometer and ImmunoStrip® tests.



WHY A&L?

- Plant pathologist and agronomists on staff for support; clients can take pictures and email in for assistance
- Dr. Keri Wang (*Director of Biological Services*) participates in ongoing research and is published in a number of journals - including this study on [Hop Latent Viroid \(HLVd\) in the Canadian Journal of Plant Pathology](#)
- Custom disease packages are specific to cannabis and many methods are developed in-house
- Multiple diagnostic methods available and ability to develop new methods as new diseases are found
- Ability to sequence unknown diseases