Testing Young Plants for Cannabinoid Content

LightLab offers an advanced mode called Young Plant Mode, designed to extract valuable data about plants during their early growth stages. This mode enables measurement of cannabinoid content with high precision, detecting levels as low as 0.1% and with an upper testing limit of approximately 4%.

Young Plant Mode is accessible for LightLab 3 users, however, if you are using our legacy instrument, you will not have access to this mode. In such cases, you can still use some of the techniques outlined below. For guidance on testing young plants with the legacy model, email support@orangephotonics.com.

Moist Samples vs. Dried Samples

When testing the cannabinoid content of young plants, you can use either moist or dried plant samples. Dried samples are recommended for easier sample preparation and more accurate results. It is essential to note that LightLab measures cannabinoid content as a percentage of the sample's weight. Therefore, testing a sample while it is still moist will yield a percentage of its moist weight, and testing the same sample after drying will yield a percentage of its dry weight. Dried samples produce higher percentages due to the reduction in weight after drying. If time allows, drying the plants before testing is recommended. Using a food dehydrator on high for approximately four hours is a good way to dry plant quickly.

Prepping Dry Samples

To prepare dry samples or dry leaves, use the grinder provided with your LightLab. For larger amounts of sample material, a coffee grinder is recommended, ensuring proper cleaning between samples to prevent cross-contamination. If you switch between THC-dominant and CBD-dominant samples, consider using two separate grinders for sample preparation.

Prepping Moist Samples

Handling fresh samples requires a different approach. Place the vial on the scale, tare it, and put freshly cut samples directly into the vial. Breaking up the sample helps it extract better into the solvent, and smaller cuts are ideal for better extraction.

Testing Young Plants for Accurate Data

To obtain accurate cannabinoid content data, it is advisable to use dried samples or apply moisture correction when testing moist samples. For moisture correction, you must know the moisture content of the sample and input it into LightLab during testing.

Testing Young Plants for Relative Data

For relative data, use a defined process consistently while testing young plants. Track the results over time to monitor cannabinoid strength changes during the growth process. This data can help optimize cultivation and harvest timing.

Running Young Plant Mode

Go to "Advanced > Young Plant" and follow the prompts.

Quick Tip on Moisture Correction

If you choose to test moist samples and want to correct for moisture, go to the advanced settings and enable moisture correction on your LightLab 3. When prompted, enter a value between zero and 90% to account for the sample's moisture content accurately. For more information, read our Tech Tips bulletin How To Correct For Moisture Content In Wet Samples.
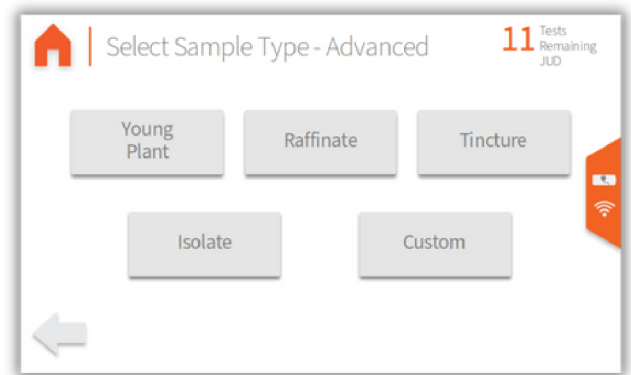
In Conclusion

Young Plant Mode in LightLab provides valuable insights into cannabinoid content during early plant growth stages. By following the recommended techniques for sample preparation and testing, growers can gather crucial data to optimize their cultivation process and achieve higher quality final products.

Still Need Help? We're Here For You.

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