WE-Test Sample Collection Protocol

Standard Operating Procedure (SOP)

1. Purpose

The purpose of the SOP-TD-004 is to give relevant and helpful information to the customer for sampling techniques for the WE-Test kit.

2. Scope

The intended audience is for customers who purchased the WE-Test kit.

3. Responsibilities

The customer is responsible for sampling correctly and accurately without contamination by following this SOP. If customer needs assistance, there is a training video at https://vernebio.com/protocols-training-videos/ or customer service is available to assist.

4. Disclaimers

I. CANNABIS GENETIC TESTS DISCLAIMER:

It is recommended to verify that any Cannabis genetic tests will work for your unique Cannabis genetics. Cannabis genetics are complex and not fully mapped out. While the DNA markers we use have been validated with plant material from common regions, the diversity of cannabis genetics may lead to inconsistencies in the DNA markers associated the physical outcome. Therefore, it is advisable to confirm that our DNA markers are consistent with your unique strains. For example, for male genetic test validate on both male and female plants from the parents or offspring of your current cannabis strains.

5. Considerations

The most critical step in the testing process is how and where you take a sample from your plant or your plant's environment.

I. Choose the right plant material and plants to test. We recommend:
   i. Mother plants or clones
   ii. Plants showing symptoms

II. Identify the part(s) of the plant to test:
   i. Piece of root clean of ANY soil
   ii. Piece of petiole (new leaf) on the lowest branch
   iii. Piece of any plant material that shows visibly abnormal symptoms (discoloration, wrinkling leaves, stunted growth, decay)

****Piece = no bigger than pinky nail size****

Generally, our recommendation is to provide us with **multiple** parts of the **same** plant as different plants have different infection patterns.

6. Supplies

I. We provide a barcoded sample lock cap tube & a box for tube placement
II. We provide a return shipping label
III. Disposable Gloves (Latex or Nitrile)
IV. Scissors or blades
V. Marker/metric tag
VI. 2D scanner (optional)
VII. Sample info sheet (can be found at https://vernebio.com/protocols-training-videos/)
VIII. Disinfectant (recommendation is 10% bleach solution)

7. Sampling Procedure

I. Wear gloves
   i. Always wear gloves to avoid contamination & change frequently

II. Make note of test tube ID & plant ID
   i. Our QR codes are unique to you as a customer. 2D capable scanners with an Excel spreadsheet make for quick tracking.
   ii. Fill out a sample info sheet to submit with your order. Sheets can be downloaded from the Verne Bio website (link in section 5-VI). Definitions of Sample Info Sheet can be found in section 10.

III. Clean scissors/blade
   i. Expose any tools used to 10% bleach solution for 5 minutes between samples.
   ii. Rinse with water and dry off.
   iii. Recommended to use multiple tools for efficiency in sampling.

IV. Collect the Sample
   i. See section 1-II.

V. Place sample in test tube & place tube in box holder
   i. Please do not over pack your tubes. If you can't close them easily, you are taking too much plant material.

VI. Store samples in fridge
   i. Well hydrated samples can last 1 week before degradation occurs.
   ii. Store in a freezer if you need to store for a longer period of time.

VII. Repeat for all desired samples

8. Ship Samples to Lab

I. Place tube boxes in a shipping box
II. Make sure the boxes fit tightly in the box or add shipping materials to prevent movement during shipment as boxes could spill if left with too much wiggle room.
III. Place the provided return label on the outside of shipping box
IV. Drop shipping box off at UPS or arrange for a pickup by calling or going to ups.com

9. Clean up

Since you are dealing with potential plant pathogens, it is essential to clean all tools and surfaces thoroughly to prevent any spread.

10. Important Tips

I. Do NOT sample plants that are wet (i.e. right after watering or rain)
   i. Excess moisture can cause significant degradation of the sample and potential pathogens
II. Make sure to test enough to cover the range of visible symptoms
III. The quicker the samples arrive at the lab the better. Delays may lead to decay of samples or decrease in accuracy of results

11. Sample Info Sheet Definitions

I. "Provided_Lab_ID" = Sample Tube ID
II. "Customer_Sample_ID" = Your ID for plants
   i. OR "Metrc" = If you want use to track that id
III. "Strain_Name" = Strain Name if wish to track
IV. "Test_Assay" = Which Test (Male or HpLVD)

Documents: SOP short-form

V. "description" = Any Notes you want to track