

Air Sample Collection Guide

This document details the steps to collect air particle samples for testing in TUMI Genomics laboratories. Turnaround for results is 10 business days.

1 Prepare Materials

Provided Materials



There are 2 dishes labeled 'Control'



9 petri dishes

Parafilm strips

User Supplied Materials



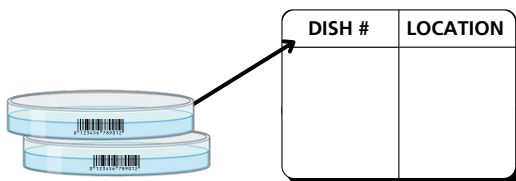
Disposable gloves



70% Ethanol

2 Identify and Label Plant

Select 7 locations within the facility to gather air samples. Before collecting samples, document which dish number corresponds to which location the sample is collected from.



Two locations will have two dishes, one dish that will be open for sample collection and the other dish will be a Control dish that remains closed.

3 Collect Root Tissue

Remove zip lock bags from the shipping box and make sure plates are not broken. **DO NOT OPEN** the zip lock bag until ready to use.

Store plates in ziploc bags, as they were shipped, in the fridge upside down (lids on the bottom).

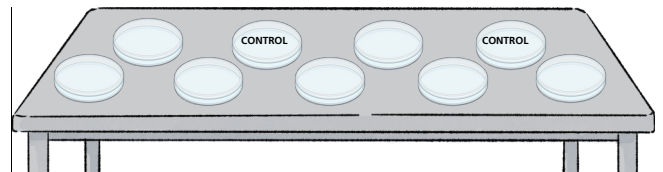
4 Day 1 - Acclimation

Wipe your working surface with 70% ethanol.

Wearing clean gloves, remove plates from the ziploc bag. **WITHOUT OPENING** the dish, pinch the plate between your fingers and thumb, and use your other hand to carefully remove the wrap.

Set each plate on the table with the lid closed. The closed dish should be facing up, the agar gel will be on bottom. Leave dishes for at least 24 hrs.

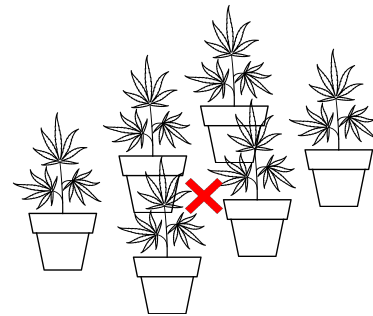
Do not stack plates on top of each other.



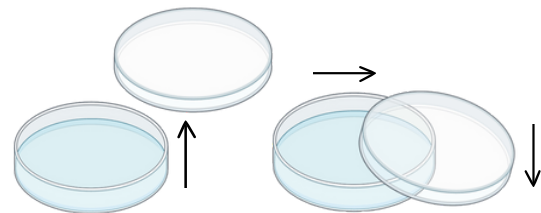
5 Day 2 - Sample Collection

Reminder: DO NOT OPEN the Control dishes

Place plates in areas between rows of plants.



Remove lid, and rest upon the edge of the bottom dish - lid should be right-side up.



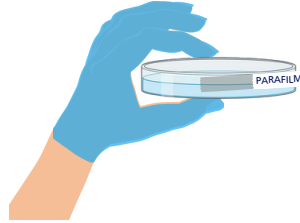
Leave the open dishes for 60 minutes and then replace and seal the lids.

6 Sealing Petri Dishes

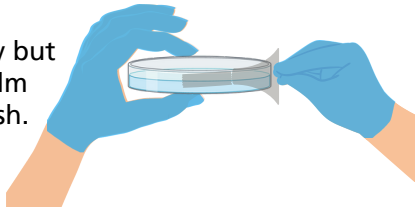
After 60 minutes, place the lid on the dish and seal using the parafilm tape.

Similar to a bandaid, each tape strip has two removable segments.

Remove the first segment and stick the strip to the closed dish.



Remove the second segment and gently but firmly stretch the film around the petri dish.



7 Return Samples to TUMI Genomics

Petri dishes should be shipped the same day they are used to collect samples.

Place all the samples and the Control dishes in a sealed, ziplock bag.

If possible, ship the dishes in a cardboard box versus an envelope to avoid breakage during shipping. Ship samples to:

TUMI Genomics
320 East Vine Drive Suite 129
Fort Collins, CO 80524

International Clients



USDA Permit Packet

This packet must be printed and packed into your return shipment to the TUMI Genomics lab.



Shipping Guide

This video details how to pack and ship your samples to return to the TUMI Genomics lab.

Have more questions?

See the FAQ section of our website or contact us at (720) 807-8864 or sales@tumigenomics.com