



Nexus Diagnostics Plant Pathogen Testing Submission Form

Company Information:

Company Name: _____

Contact Person: _____

Email Address: _____

Phone Number: _____

Plant Tissue Sampling Instructions

(Full Viral Panel, Reduced Viral Panel & Fungal Pathogen Panel)

Read this entire guide before sampling. Proper collection ensures accurate results.

1. Gather the Required Materials

- Pre-labelled sample tubes containing DNA/RNA stabiliser
 - **Viral panel tubes:** barcode only (e.g. **AA00123**)
 - **Fungal panel tubes:** barcode **ending in "F"** (e.g. **AA00456F**)
- New sterile scalpel blades (one per plant)
- Nitrile gloves (one pair per plant/sample)
- Sample Submission Table (paper or electronic)
- Cool, clean workspace free of dust & debris



2. **Choose the Right Moment**

3. **Collect** early in the morning, immediately after the first irrigation **when the plants are fully hydrated and cellular activity is highest.**

4. **Collect the THREE Required Tissues (per plant)**

- **Fine root** – Cut a 1 cm section of a fine, white feeder root (≈ 1 mm diameter). *Avoid woody root material.*
- **Shoot tip** – Snip the very apex containing the meristem and primordial leaves (≈ 2 – 3 mm). *Use only the youngest tissue.*
- **Mature leaf petiole** – Excise a 0.5 – 1 cm² slice from the petiole of a fully expanded, healthy leaf. *Avoid very young or very old leaves.*

Tip: Keep total tissue volume small enough to stay fully submerged in the stabiliser—**less is more**. When in doubt, submit less material not more

5. **Prevent Cross-Contamination Every Plant, Every Time Prevent Cross-Contamination Every Plant, Every Time**

- Put on a **new pair of nitrile gloves**.
- Open a **new sterile scalpel blade**.
- Wipe your workspace with 70 % ethanol.

6. **Pick the Correct Tube**

- Decide which test you need:
 - **Full Viral Panel**
 - **Reduced Viral Panel**
 - **Fungal Pathogen Panel**
- Select the matching tube:
 - Viral panels (full panel and reduced panel) → **standard barcode**
 - Fungal panel → **barcode ending in “F” (Fungal DNA extraction requires a different tube chemistry which is not interchangeable with the Viral extraction tube)**

7. **Introduce the Tissue**

- Hold the tube upright and **loosen the cap slowly** – avoid spilling the stabiliser.
- Insert the root, shoot and leaf sections from the same plant **together** into one tube.
- Keep tissue below the liquid level; **do not over-fill**.
- Check for debris on the lip or thread; wipe clean if needed.
- Close the cap firmly, then **shake for 5 seconds** to coat all tissue with stabiliser.

8. Document Immediately

Fill out the Sample Submission Table below for **each tube**:

Internal traceability: Maintain your own private log (spreadsheet or notebook) that maps each barcode to its plant ID or block. This keeps sample testing impartial while still letting you match results to plants in your own records later.

9. Reset for the Next Plant

- Return the sealed tube to the submission box **upright**.
- Dispose of the scalpel blade in a sharps container.
- **Change gloves** before sampling the next plant.

10. Package & Ship the Same Day

- Confirm all caps are tight; tubes upright in the provided box.
- **Place a printed copy of the completed submission table inside** or **email the electronic file to: submissions@nexus-diagnostics.co.za**
- Ship via **The Courier Guy (Overnight)** to: **Unit D, Fabriek Nationale Building, 9 Fabriek Street, Franschhoek, Western Cape, South Africa, 7690.**

Sampling Notes For the Lab:

(add any additional information useful for the lab here)

Additional Information:

Previous Testing History: _____

Symptoms Observed: _____

Other Relevant Information: _____

Agreement:

I, _____, hereby affirm that the information provided herein is accurate to the best of my knowledge. I give my informed consent for Nexus Diagnostics to conduct diagnostic testing on the submitted samples. I further acknowledge and consent that the resulting data will be securely stored by Nexus Diagnostics. Nexus Diagnostics commits to maintaining the confidentiality of the data and agrees not to disclose this information to any third parties without my explicit written consent. I agree to the below terms and conditions.

Signature: _____

Date: _____

For Nexus Diagnostics Use Only:

Sample Received By: _____

Date Received: _____

Condition on Arrival: _____

Remarks: _____

Terms and Conditions:

1. **Scope of Services:** Nexus Diagnostics agrees to perform diagnostic testing on the submitted samples using its proprietary methods and technologies. Please note that testing is limited to detecting known sequences in identified pathogens.
2. **Confidentiality:** Nexus Diagnostics will ensure the confidentiality of all data and results derived from the samples. The information will be securely stored and not disclosed to any third parties without the client's explicit written consent.
3. **Sample Integrity:** The client is responsible for ensuring that all samples are collected, stored, and shipped in accordance with the provided instructions. Nexus Diagnostics is not liable for any degradation or contamination of samples occurring prior to receipt. Nexus Diagnostics reserves the right to reject any sample not submitted in accordance with the sample collection and submission instructions.
4. **Data Ownership:** The client retains ownership of all data generated from the testing of their samples. Nexus Diagnostics reserves the right to utilize anonymized data for research and development purposes.
5. **Liability:** Nexus Diagnostics' liability for any claims arising from the testing services is limited to the amount paid by the client for the services. Nexus Diagnostics is not liable for any indirect, incidental, or consequential damages.
6. **Payment Terms:** Payment for services must be made in accordance with the agreed payment schedule. Nexus Diagnostics reserves the right to withhold results until full payment is received.
7. **Governing Law:** These terms and conditions are governed by and construed in accordance with the laws of South Africa. Any disputes arising from these terms shall be resolved in the courts of South Africa.
8. **Amendments:** Nexus Diagnostics reserves the right to amend these terms and conditions at any time. Clients will be notified of any significant changes.