FARMER FREEMAN

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Pathogen Diagnostic Report

Russet Mite

CUSTOMER NAME	**REPORT DATE**
Taylor Kim	October 15, 2026
COMPANY / ORGANIZATION	**RUN DATE**
Farmer Freeman	October 15, 2026
EMAIL	**DATE OF LAB RECEIPT**
support@farmerfreeman.com	October 14, 2026

Diagnostic Results

Sample ID	Strain	Nickname	Sample Type	Russet Mites	IC
VT00001	Blue Dream	BD-A01	3x Leaf	NOT DETECTED	PASS 26.10
VT00002	Wedding Cake	WC-B02	3x Leaf	NOT DETECTED	PASS 25.40
VT00003	OG Kush	OGK-C03	3x Leaf	NOT DETECTED	PASS 24.90
VT00004	Gelato 41	G41-D04	3x Leaf	NOT DETECTED	PASS 25.80
VT00005	Girl Scout Cookies	GSC-E05	3x Leaf	DETECTED 32.40	N/A 24.30

- DETECTED — Pathogen present; IC not required for detection
- NOT DETECTED — No pathogen signal; IC valid
- UNDER ANALYSIS — IC failed; being retested, ready in 1–2 business days
- Lower Cq values typically correlate with a greater pathogen load in the sample.

Interpretation Summary

Pathogen Detected

One or more samples tested positive for: **RMT**. Immediate action is recommended. Isolate affected plants and equipment. Do not take cuttings from positive plants. Sanitize tools between plants. Contact a cultivation advisor to develop a remediation plan.

About the Pathogens Tested

Russet Mites (RMT)

Channel: FAM **Type:** Pest **Threshold:** Cq < 35

Russet Mites (RMT) detects hemp russet mite (Aculops cannabicola) DNA from live or dead mites and mite eggs present on plant tissue. Russet mites are microscopic and difficult to identify visually; infestations cause leaf curling, russeting, and significant yield loss if left unmanaged. A positive result warrants immediate quarantine of affected material and targeted miticide intervention.

Methodology

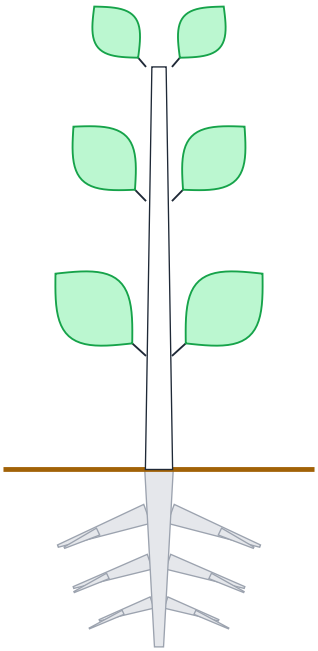
This report utilizes quantitative PCR (qPCR) performed on an Agilent AriaMX Real-Time PCR instrument. DNA is extracted from plant tissue using a validated extraction protocol. Each reaction includes an internal extraction and amplification control (IC/HEX channel) to confirm assay validity. A Cq threshold of 35 cycles is applied for most targets (40 cycles for Russet Mite): samples with Cq at or below threshold are reported as Detected. Samples with Cq between 35 and 40 cycles are also reported as Detected when the IC Cq is below 35, confirming assay validity. A positive target result is reported as Detected regardless of IC status. Wells with no target signal and a failed IC are reported as Under Analysis and will be retested by the laboratory.

Questions? Contact support@farmerfreeman.com or call 202-697-7640. Submit new samples at www.farmerfreeman.com.

VT00001

Blue Dream

BD-A01



No pathogen detected
Pathogen detected
Not tested

PANEL
Russet Mite

SAMPLE TYPE
3x Leaf

DATE OF RECEIPT
October 14, 2026

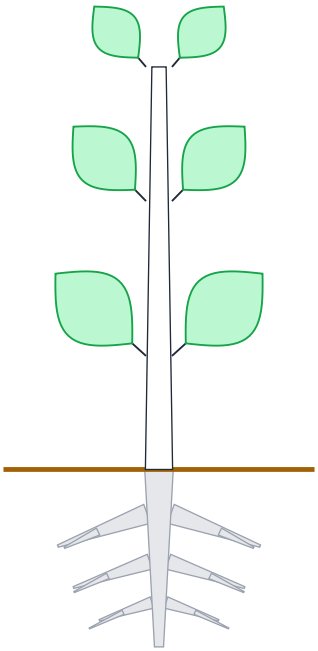
Results

Russet Mites	**NOT DETECTED**	No Cq
Internal Control (IC)	**PASS**	Cq 26.10

VT00002

Wedding Cake

WC-B02



No pathogen detected
Pathogen detected
Not tested

PANEL
Russet Mite

SAMPLE TYPE
3x Leaf

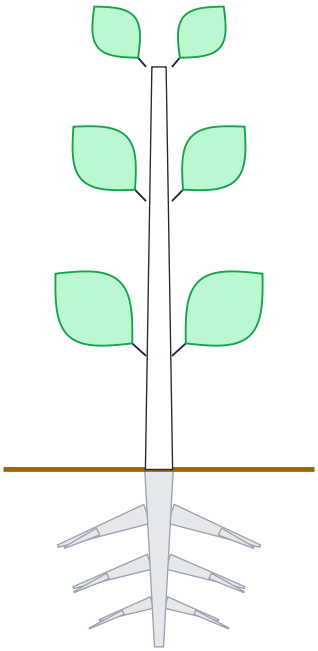
DATE OF RECEIPT
October 14, 2026

Results

Russet Mites	**NOT DETECTED**	No Cq
Internal Control (IC)	**PASS**	Cq 25.40

VT00003

OG Kush
OGK-C03



No pathogen detected
Pathogen detected
Not tested

PANEL
Russet Mite

SAMPLE TYPE
3x Leaf

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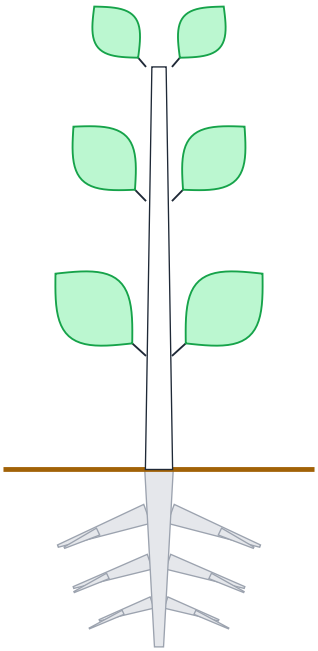
Results

Russet Mites	**NOT DETECTED**	No Cq
Internal Control (IC)	**PASS**	Cq 24.90

VT00004

Gelato 41

G41-D04



No pathogen detected
Pathogen detected
Not tested

PANEL
Russet Mite

SAMPLE TYPE
3x Leaf

DATE OF RECEIPT
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Results

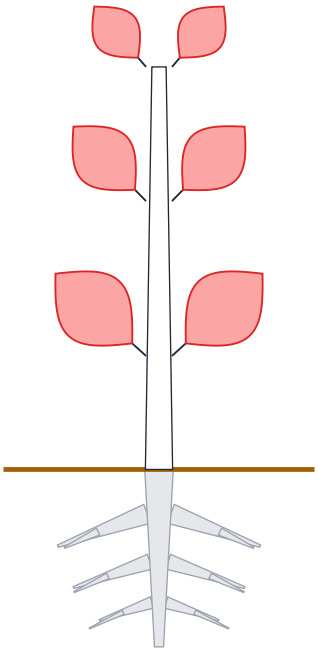
Russet Mites	**NOT DETECTED**	No Cq
Internal Control (IC)	**PASS**	Cq 25.80

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VT00005

Girl Scout Cookies

GSC-E05



No pathogen detected
Pathogen detected
Not tested

PANEL
Russet Mite

SAMPLE TYPE
3x Leaf

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Results

Russet Mites	**DETECTED**	Cq 32.40
Internal Control (IC)	**PASS**	Cq 24.30