



Phytodex

Analytical Services

phytodex.com 

Certificate of Analysis

HPLC Quantitative Analysis Report

Test Number

PHY-2026-733

Sample ID

[20260915-4463](#)

Sample Name

Sceletium Extract - Healing Herbals

Sample Type

Concentrate

Panel

Sceletium Alkaloids Panel

Submitted

Sep 15, 2026

Completed

Sep 15, 2026

Status

Completed

Analytical Method

Phytodex Sceletium Mesembrine-type Alkaloids Method HPLC-DAD

Quantitative Results

Compound	% Conc.	mg/g	LOD (ppm)	LOQ (ppm)
----------	---------	------	-----------	-----------

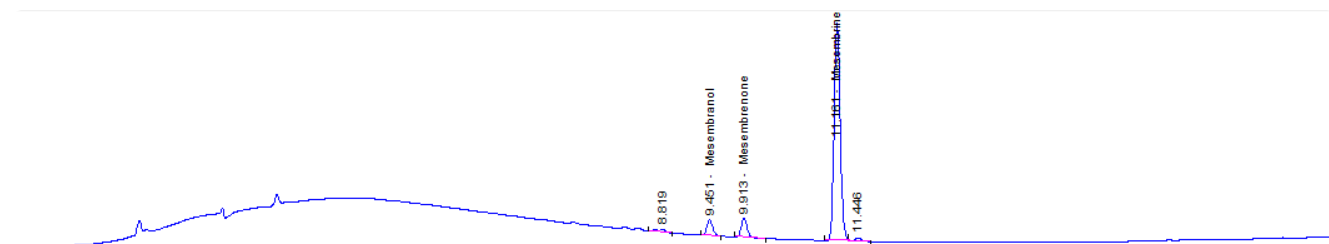
Mesembrine	4.5209%	45.21	0.086	0.261
Mesembranol	0.3252%	3.25	0.040	0.121
Mesembrenone	0.3255%	3.25	0.038	0.114
Δ7-Mesembrenone	ND	ND	0.081	0.245
TOTAL	5.1716%	51.72	—	—

ND = Not Detected (below limit of detection) · LOD = Limit of Detection · LOQ = Limit of Quantification

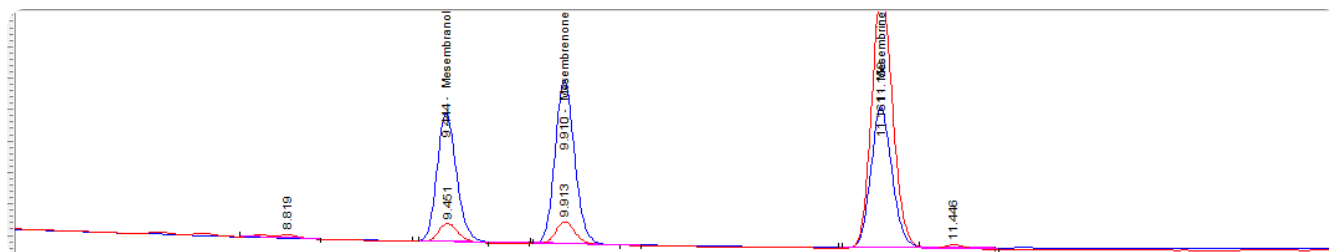
📷 Sample Photos



📊 Chromatography Spectrum



Overlay Chromatogram



Analysis Summary

This analysis identified 3 compounds belonging to the Mesembrine alkaloid class. The primary psychoactive alkaloid found in *Sceletium tortuosum* (Kanna). Acts as a potent serotonin reuptake inhibitor (SRI) and phosphodiesterase 4 (PDE4) inhibitor, contributing to its mood-elevating and anxiolytic effects. A reduced form of mesembrine found in *Sceletium tortuosum*. One of the four major alkaloids in Kanna, contributing to its overall pharmacological activity. A major alkaloid found in *Sceletium tortuosum*, closely related to mesembrine. Acts as a serotonin reuptake inhibitor and contributes to the overall psychoactive profile of Kanna preparations.

Mesembrine

Class: Mesembrine alkaloid

Potent SRI with $K_i \sim 1.4$ nM at SERT; PDE4 inhibitor; anxiolytic and mood-elevating properties; traditionally chewed, smoked, or brewed as tea.

Mesembranol

Class: Mesembrine alkaloid

Dihydro derivative of mesembrine; serotonin reuptake inhibitor with lower potency than mesembrine; found in both fresh and fermented Kanna.

Mesembrenone

Class: Mesembrine alkaloid

Serotonin reuptake inhibitor; often the most abundant alkaloid in fermented Kanna; contributes to anxiolytic and mood-enhancing effects.

This certificate is issued by Phytodex Analytical Services.

For questions, contact us at phytodex.com

Important Disclaimers

Medical: This information is not a substitute for professional medical advice.

No Advocacy: Phytodex does not promote or encourage the use of illegal or controlled substances.

Legal Status: Compound legality varies by jurisdiction. Users must comply with local laws.