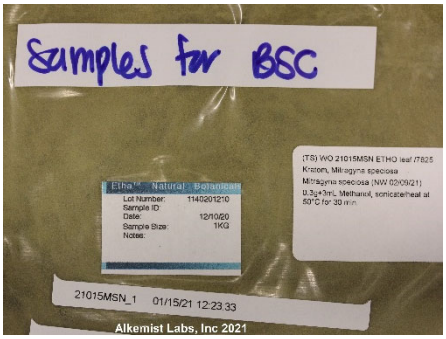
Certificate Issued To:
Ethos Natural Medicine LLC
1950 Cordell Court
El Cajon, CA 92020

Work performed at:
Alkemist Labs
12661 Hoover Street
Garden Grove, CA 92841
714-754-HERB (4372)
sales@alkemist.com

Certificate of Analysis: Mitragyna Speciosa, Dry Leaf (1140201210)

Microscopy with Digital Photo-Documentation

1



2

3

Company Name:	Ethos Natural Medicine LLC
Title:	Mitragyna Speciosa, Dry Leaf
Plant Part:	Leaf
Sample Received:	1/15/2021
Sample Description:	Clear Reclosable Plastic Bag
Form of Botanical:	crude plant powder
Appearance:	(1) Fine Green Powder
Lot :	1140201210
Sample :	21015MSN_1
Latin Name:	Mitragyna speciosa
Reference Sample :	WO08909MIC Mitragyna speciosa authenticated by macroscopic, microscopic &/or TLC studies according to the reference sources cited below; held at Alkemist Labs, Garden Grove, CA.
Analyst:	E. Sudberg & I. Solorzano
Magnification:	(2) 400X
Chemical Reagents:	(2) acidified chloral hydrate glycerol solution
Sample Findings:	(2) circular crystal rosette cells
Magnification:	(3) 400X
Chemical Reagents:	(3) acidified chloral hydrate glycerol solution
Sample Findings:	(3) unicellular covering trichomes
Reference Source:	THE ENTHEOGEN REVIEW, VOLUME XII, NUMBER 2 SUMMER SOLSTICE 2003; Comprehensive methodology for identification of Kratom in police laboratories. Forensic Sci Int. 2013 Dec 10;233(1-3):238-43. doi: 10.1016/j.forsciint.2013.09.016. Epub 2013 Sep 27. MIC-SOP-54-04, MIC-SOP-54-05, MIC-SOP-54-06, MIC-SOP-510-07

Comments & Conclusions: This sample has characteristics of Mitragyna speciosa [Rubiaceae] leaf based on comparison with an authenticated reference sample and the characteristics described in the reference cited above. The characteristic cellular structures identified in this sample are the circular crystal rosette cells seen in micrograph (2) above. In micrograph (3) we see the unicellular covering trichomes. **This test sample, Mitragyna Speciosa, Dry Leaf (1140201210), has characteristics of Mitragyna speciosa [Rubiaceae] leaf.**

NOTE: The presence of soluble excipients and other plant species material was not detected in this test sample.

Elan Sudberg
CEO

Digitally signed by Elan Sudberg
DN: cn=Elan Sudberg, o=Alkemist, ou, email=elan@alkemist.com, c=US
Date: 2021.02.11 14:51:56 -08'00'
Adobe Acrobat version: 2021.001.20135

Analyzed by: Iris Solorzano
Examined, Reviewed & Authorized by: Élan M Sudberg, CEO

Report Date: 2/10/2021

ISO/IEC 17025
ACCREDITED
CERTIFICATE #3851.01