

Certificate Issued To:
Lost Empire Herbs
8301 NW 101st Ter.
Kansas City, MO 64153-2321
United States



Work performed at:
Alkemist Labs
12661 Hoover Street
Garden Grove, CA 92841
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Certificate of Analysis: Gynostemma (BGYNO21FEB22)
Macroscopy & Microscopy with Digital Photo-Documentation

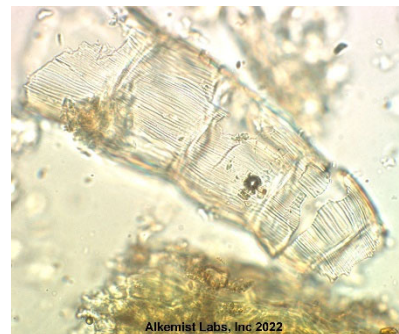
1



2



3



Company Name: Lost Empire Herbs
Title: Gynostemma
Plant Part: Leaf
Sample Received: 3/9/2022
Sample Description: Clear Reclosable Plastic Bag
Form of Botanical: whole/dry
Appearance: (1) Green Pieces
Lot : BGYNO21FEB22
Sample : 22068ROS_1
Latin Name: Gynostemma pentaphyllum (Thumb.) Makino [Cucurbitaceae]
Reference Sample : FK14902SWH; FK09113AP1 Gynostemma pentaphyllum (Thumb.) Makino [Cucurbitaceae] 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) Macroscopy
Chemical Reagents: (2) acidified chloral hydrate glycerol solution
Sample Findings: (2) wrinkled and shriveled leaf fragments, stem with longitudinal grooves, spherical fruits and thin tendrils
Magnification: (3) 400X
Chemical Reagents: (3) acidified chloral hydrate glycerol solution
Sample Findings: (3) fragment of a large multicellular trichome showing striated walls
Reference Source: Hong Kong Chinese Materia Medica Standards (HKCMMS); Chinese Medicinal Identification An Illustrated Approach, Zhao and Chen, 2014; Internal Reference Sample MIC-SOP-54-04, MIC-SOP-54-05, MIC-SOP-54-06, MIC-SOP-510-07

Comments & Conclusions: This sample has characteristics of *Gynostemma pentaphyllum* (Thumb.) Makino [Cucurbitaceae] aerial parts based on comparison with authenticated reference samples and the characteristics described in the references cited above. The characteristic cellular structures identified in this sample are the wrinkled and shriveled leaf fragments, stem with longitudinal grooves, spherical fruits and thin tendrils seen in micrograph (2) above. In micrograph (3) we see the fragment of a large multicellular trichome showing striated walls. **This test sample, *Gynostemma* (BGYNO21FEB22), has characteristics of *Gynostemma pentaphyllum* (Thumb.) Makino [Cucurbitaceae] aerial parts.**
NOTE: The presence of soluble excipients and other plant species material was not detected in this test sample.

Analyzed by: Iris Solorzano
Examined, Reviewed & Authorized by: Élan M Sudberg, CEO
ISO/IEC 17025

Report Date: 3/14/2022



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