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

Work performed at:
Alkemist Labs
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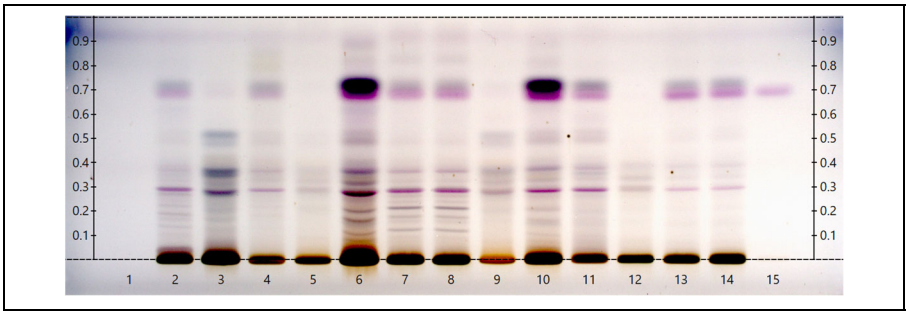
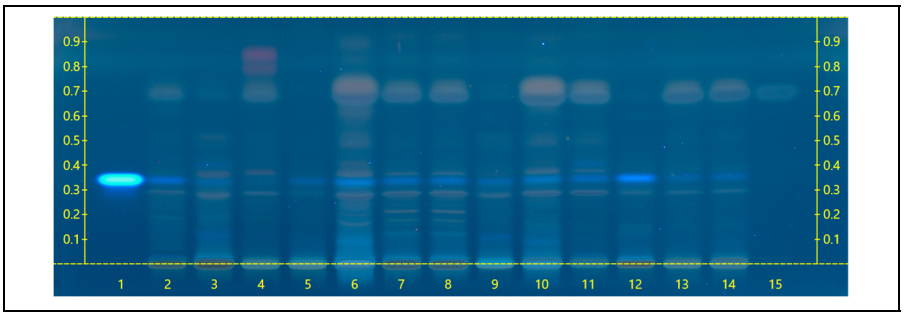
Certificate of Analysis: Nettle Root (BNETR17JUL23)

High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name:	Lost Empire Herbs	**Sample Received:**	08/07/23
Title:	Nettle Root	**Form of Botanical:**	powdered extract
Plant Part:	root	**Lot Number:**	(BNETR17JUL23) →Lane 9(10µl)
Appearance:	light brown powder	**Sample:**	23219TMJ_1
Sample Packaging:	Clear Reclosable Plastic Bag		

Latin Name: *Urtica dioica* L. [Urticaceae]
Reference Sample: Lane 2(5µl) (WC31508TLF), Lane 3(5µl) (WC27216AHP2) Urtica dioica (leaf); Lane 11(5µl) (WC27216AHP1), Lane 12(5µl) (WC00507PB), Lane 13(5µl) (WC05416NC1), Lane 14(5µl) (WC28918NC1) Urtica dioica (root); held at Alkemist Labs, Garden Grove, CA.
Analyst: A.Foults, D.Robinson, J.Mares, K.Chopra, K.Montoya, K.Tran, L.Tang, M.Fox, N.Alvarez, N.Hoang, N.Afendikova, N.Waldstreicher, P.Hoang, S.Kabbaj, S.Sudberg 206335
Sample Preparation: 0.3g+3mL Methanol, sonicate/heat at 50°C for 30 min.
Stationary Phase: Silica gel 60, HPTLC plates
Mobile Phase: Toluene: Ethyl Formate: Formic Acid [5/4/1]
Detection: (1) Vanillin/Sulfuric, 110°C, 2min, vis (Reich, E., 2007)
(2) Vanillin/Sulfuric, 110°C, 2min, 366nm (Reich, E., 2007)
Reference Standard: Lane 15(3µl) β-Sitosterol (0000120099, SigAl), Methanol (22I2061037, VWR); Lane 1(0.5µl) Scopoletin (YKODK-YA, VWR), Methanol (22L2761003, VWR)
Reference Source: Method Developed by Alkemist Labs
IDT-SOP-72-01

Comments & Conclusions: Lane 9 is the test sample Nettle Root (BNETR17JUL23). Lanes 2, 3, 11, 12, 13, 14, are the reference samples used for comparison. This test sample, Nettle Root (BNETR17JUL23) has characteristics of the chromatographic profile of the reference samples of *Urtica dioica*, used above. **This test sample Nettle Root (BNETR17JUL23) indicates the presence of *Urtica dioica* root.**

NOTE: The above conclusion may be a function of the natural variance found in botanicals &/or the extraction process used to create specific extracts. The growing and drying conditions, age, seasonal variations, geographic location, extraction solvents, etc. all play a role in the phytochemical fingerprint of botanicals as well as their extracts; hence, chromatographic variations are expected.

Digitally signed by Khanh Tran
Date: 2023.08.11 16:06:40 -07'00'

Examined, Reviewed & Authorized by: Khanh N Tran, HPTLC, R&D Supervisor, Alkemist Labs

Report Date: 08/10/23

ISO/IEC 17025 ACCREDITED CERTIFICATE #3851.01

Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to BNETR17JUL23.