

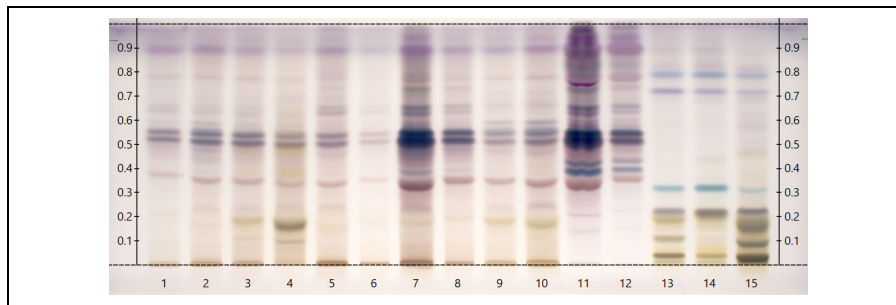
Certificate Issued To:
Lost Empire Herbs
8301 NW 101st Ter.
Kansas City, MO 64153-2321
United States



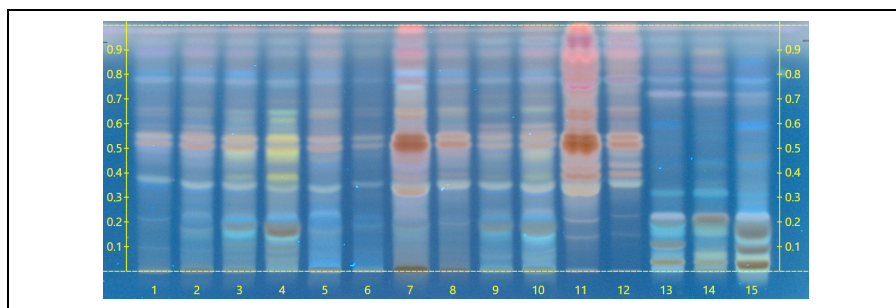
Work performed at:
Alkemist Labs
12661 Hoover Street
Garden Grove, CA 92841
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714-668-9972 (FAX)
Sales@Alkemist.com
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Certificate of Analysis: Bacopa (BBACO02FEB23)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name:	Lost Empire Herbs	Sample Received:	02/21/23
Title:	Bacopa	Form of Botanical:	powdered extract
Plant Part:	leaf	Lot Number:	(BBACO02FEB23) → Lanes 5(2µl), 6(0.5µl)
Appearance:	Ultrafine brown powder	Sample:	23052UUD_1
Sample Packaging:	Clear Reclosable Plastic Bag		

Latin Name: *Bacopa monnieri* (L.) Pennell [Scrophulariaceae]
Reference Sample: Lane 2(2µl) (UL36110SC), Lane 3(2µl) (UL21010CRB), Lane 4(2µl) (UL21010CRB) *Bacopa monnieri* (herb); Lane 13(2µl) (DA20109CRB), Lane 15(2µl) (DA20109CRB) *Centella asiatica* (aerial part); Lane 14(2µl) (DA36110SC2) *Centella asiatica* (leaf); held at Alkemist Labs, Garden Grove, CA.

Analyst: A.Foult, 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 194663

Sample Preparation: 0.3g+3mL 70% grain Ethanol, sonicate/heat at 50° C for 30 min.

Stationary Phase: Silica gel 60, HPTLC plates

Mobile Phase: Dichloromethane: methanol: water [7/3/0.5]

Detection: (1) Vanillin/Sulfuric, 110°C, 2min, vis (Reich, E., 2007)
(2) Vanillin/Sulfuric, 110°C, 2min, 366nm (Reich, E., 2007)

Reference Standard: Lane 1(3µl) Powdered Bacopa Extract (F0J416, USP)

Reference Source: Method Developed by Alkemist Labs
IDT-SOP-72-01

Comments & Conclusions: Lanes 5, 6 are the test sample Bacopa (BBACO02FEB23). Lanes 2, 3, 4, 13, 14, 15, are the reference samples used for comparison. This test sample, Bacopa (BBACO02FEB23) is consistent with the chromatographic profile of the reference samples of *Bacopa monnieri*, used above. **This test sample Bacopa (BBACO02FEB23) has characteristics of *Bacopa monnieri* herb.**

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.

Examined, Reviewed & Authorized by: Syhem W Kabbaj, HPTLC Production Supervisor, Alkemist Labs

Report Date: 02/27/23



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to BBACO02FEB23.
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