CERTIFICATE OF ANALYSIS



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Report Issued To: Lost Empire Herbs

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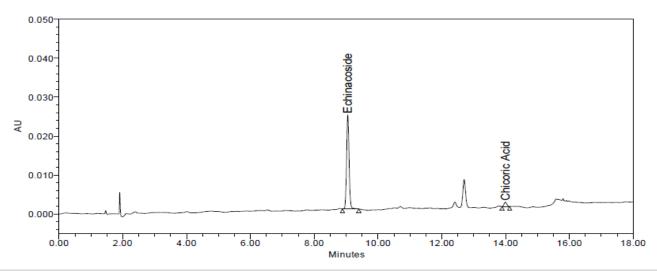
Sample Name: Cistanche

Description: Powdered extract; Fine brown powder

Lot #: BCIST6025MAR24 AL #: 24092TZC 1

Analysis ID: 225973 **Received:** 04/01/24

Determination of Total Phenols Content by HPLC



Ret. Time	Amount (%)				
(min)	Compound Name	Amount (%)	ODB	Specification	Result
9.1	Echinacoside	38.313	39.745	Report only	N/A

Chromatographic Conditions:

Method: USP 43 - Powdered Echinacea Purpea Extract Column: AP373 Zorbax SB C18 5µm 100A (250 x 4.6 mm)

Temperature: 35° C Flow Rate: 1.5 mL/min Injection Volume: $5 \text{ } \mu\text{L}$ UV Detection: 330 nm

Mobile Phase: 0.1% Phosphoric Acid in water

Acetonitrile

HPLC Instrument: Alliance_2

Sample Preparation:

Transferred approximately 2000 mg to a 50 mL round bottom flask. Added 25 mL of 70% Ethanol. Refluxed for 15 minutes. Let cool. Diluted the supernatant 1:1000 with 70% Ethanol. Mix by inversion and filtered through 0.45µm PTFE filter into HPLC vial for analysis.

Report Summary:

Conclusion: This "Cistanche" test sample contains 40 % Echinacoside on the dried basis.

OOS Reference: N/A Loss on Drying; 3.604 %

Empower Reference: 09924 Phenols in Echinacea

Analysis Date: 04/08/24 Analyzed By: H Pham Authorized By: Celine Decasiano,
Analytical Chemistry Supervisor