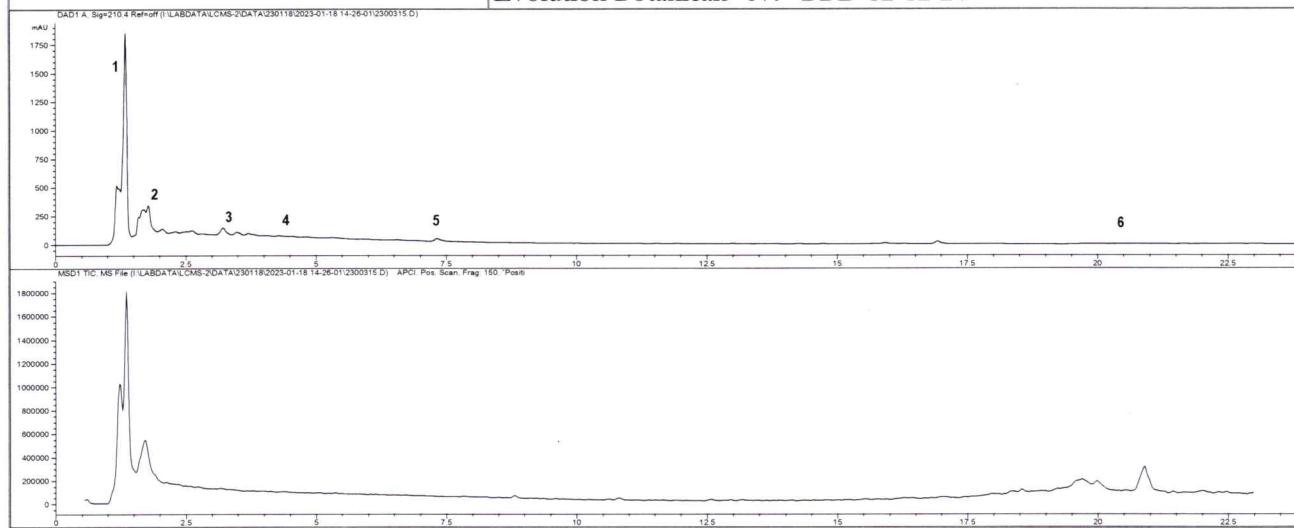


## CERTIFICATE OF ANALYSIS

<b>SAMPLE NAME</b>	Organic Turkey Tail Mushroom Powder Evolution Botanicals		
<b>FORM</b>	Powder		
<b>CUSTOMER NAME</b>	Evolution Botanicals Australia PTY LTD		
<b>CERTIFICATION DATE</b>	16 February 2023		
<b>CUSTOMER REFERENCE</b>	Batch Evolution Botanicals 079 BBD 12-12-24		
<b>ARL JOB #</b>	A230089	<b>LAB REF. #</b>	ARL2300315
<b>ANALYSIS</b>	Herb Authentication	<b>METHOD</b>	ARL-TM125
<b>TEST PROFILE (below)</b>	Organic Turkey Tail Mushroom Powder Evolution Botanicals Batch Evolution Botanicals 079 BBD 12-12-24		



**TABLE 1. PEAK IDENTIFICATION**

Peak #	RT (min)	Fragment ions [M+H]	Tentative ID (MW)
1	1.2 - 1.4	136, 268, 276, 294	mixed peaks - phenolic amine, nucleotides, amino acids
2	1.6 - 2.1	120, 166, 328, 136, 268	mixed peaks- nucleotides, amino acids, polysaccharides, hydroxy methylfurfural
3	3.2, 3.5, 3.7	194	phenolic derivatives - hydroxybenzoic acid, vanillic acid, phenolic acid
4	4.3, 4.5	-	phenolic derivatives
5	7.4	-	unidentified
6	19.7, 20.0, 20.9	599, 534, 696, 710, 548, 726	fungal cerebrosides

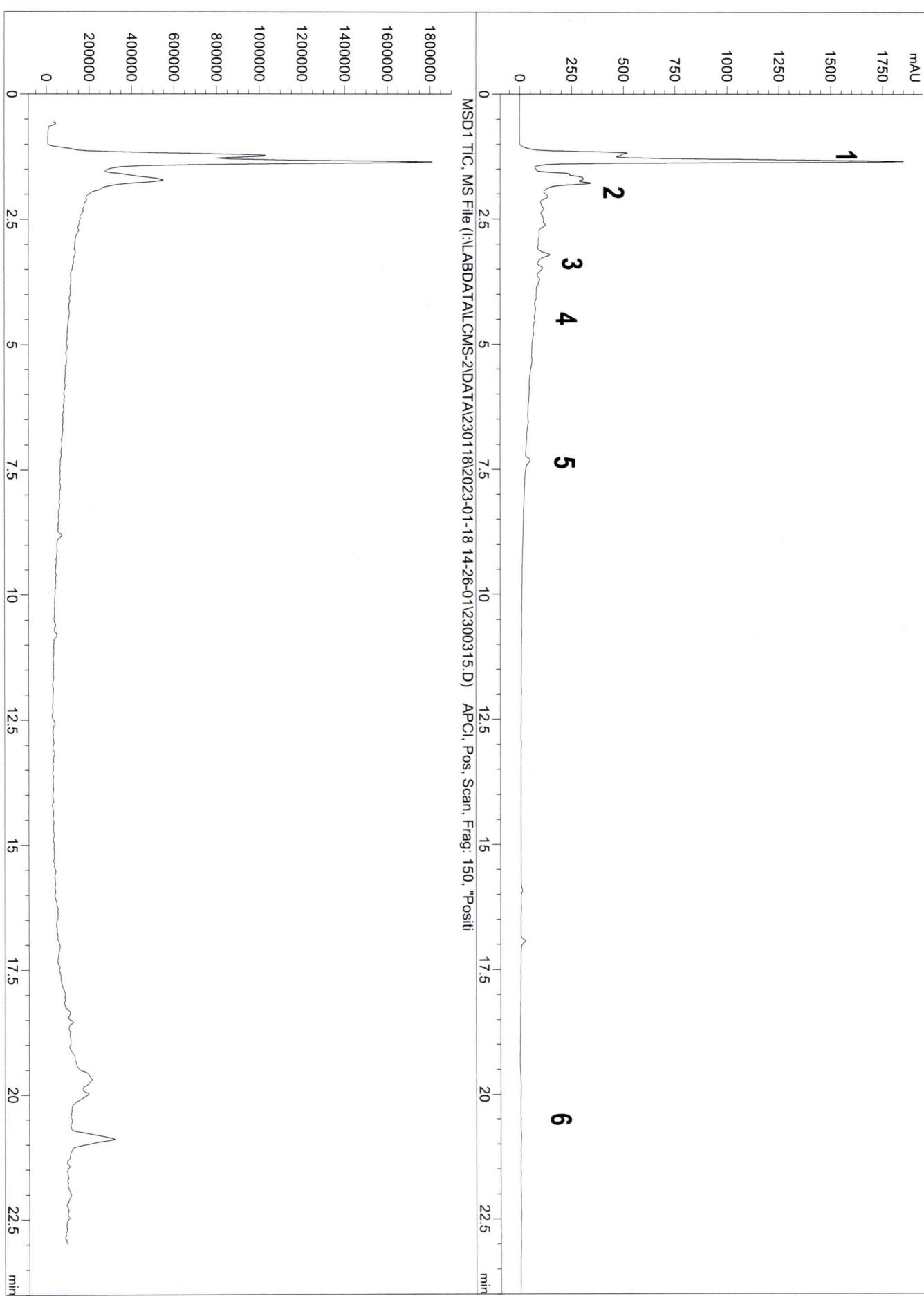
**COMMENTS**

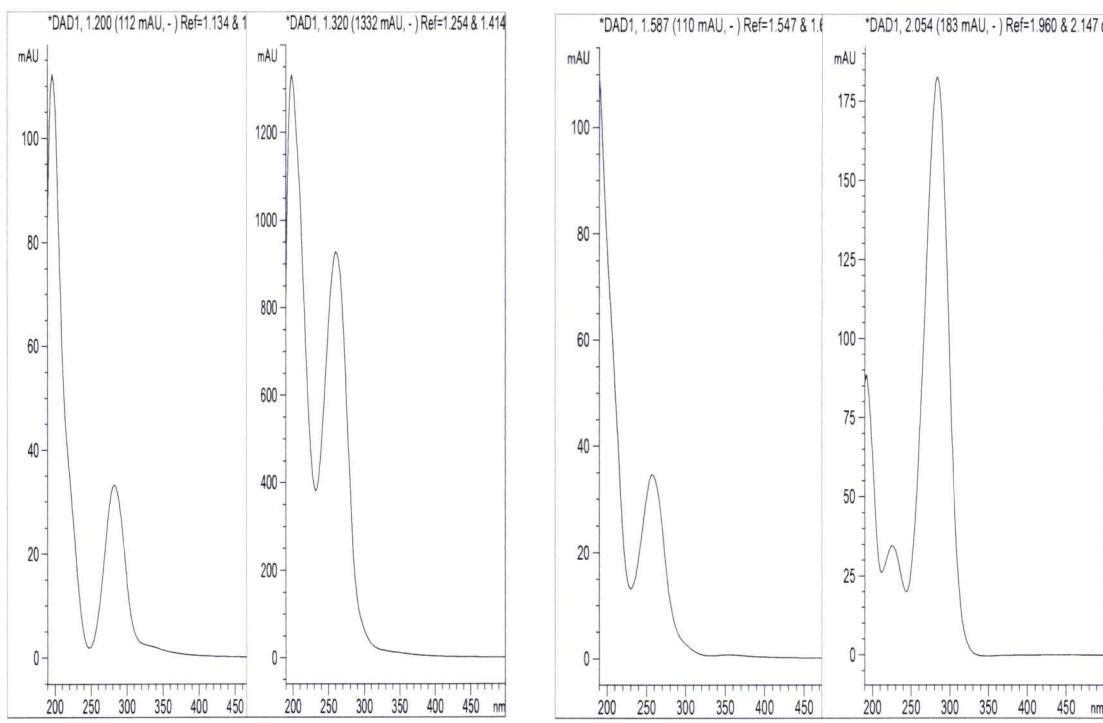
The HPLC-MS profile of the test sample is given above with some major components from the plant extracts indicated. The peaks able to be identified appear primarily to be amino acids, nucleotides, phenolic derivatives including benzoic acid derivatives and fungal cerebrosides eluting after ~18 minutes Spectral data in support of peak identification is attached.

**QC AUTHORISED**

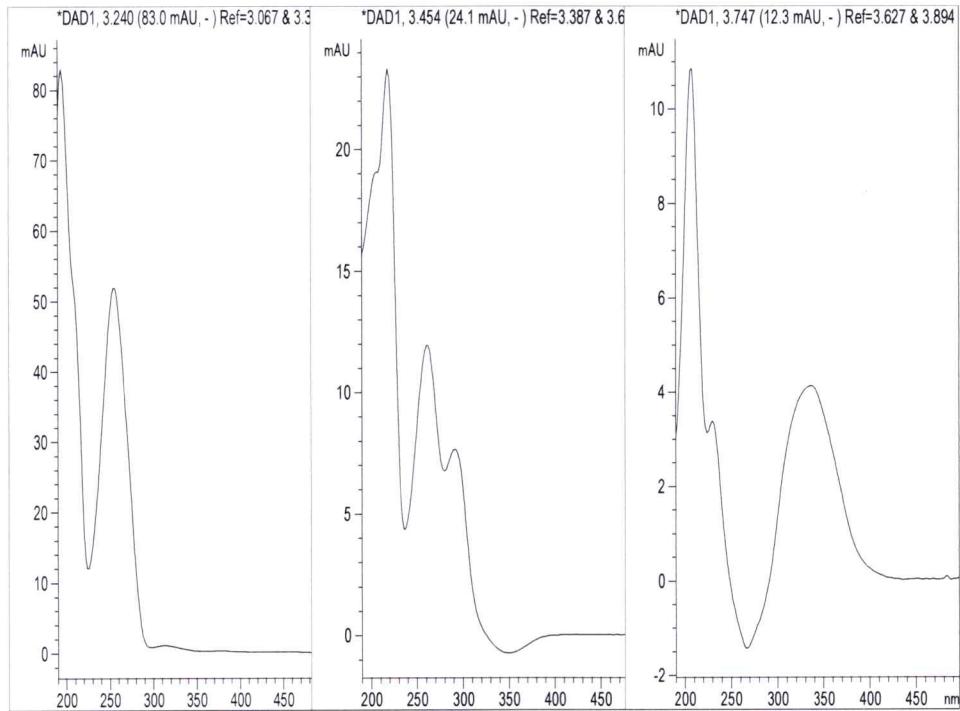
**Reference:** Dictionary of Natural Products, CRC Press, 2020

Current Chromatogram(s)  
DAD1 A, Sig=210.4 Ref=off (I:\LABDATA\LCMS-2\DATA\230118\2023-01-18 14:26:01\2300315.D)

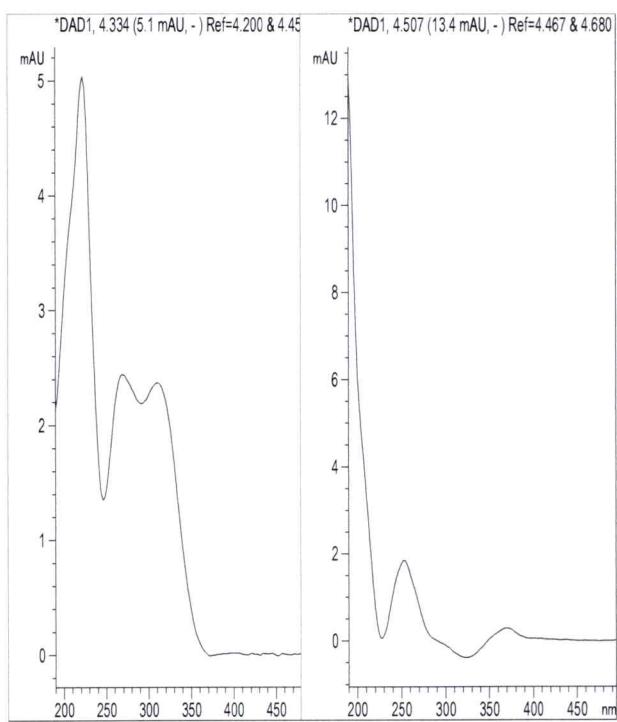




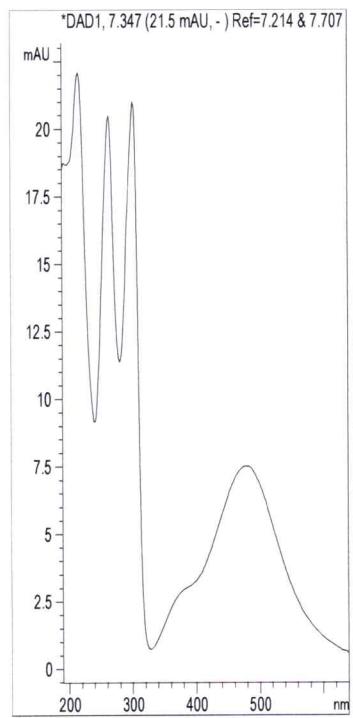
**Figure 1.** UV-Vis spectra from peaks #1 and #2 identified as possible phenolic amine, nucleotides and hydroxy-methyl furfural derivatives based on characteristic spectra



**Figure 2.** UV-Vis spectra of peak #3 identified as hydroxybenzoic acid, vanillic acid (hydroxy-methoxy benzoic acid) and a phenolic acid based on characteristic spectra



**Figure 3.** UV-Vis spectra of peaks #4 identified as phenolic acid and phenolic derivatives



**Figure 4.** UV-Vis spectra of peak #5 unidentified but characteristic constituent of *Trametes versicolor*