

Evaluation of CBDVA from cheongsam matured stem extract, hemp in Andong city, Korea

- LC-MS/MS

Instrument: Agilent Technologies 6410 Triple Quad (LC-MS/MS)

Column: Unisol C18 (3.0 mm × 150 mm, 3.0 μm)

Solvent: A; 0.1% Formic acid in Water, B; 0.1% Formic acid in Acetonitrile

Flow rate: 0.4 mL/min

Injection vol.: 5 μL

Gradient :

	time(min.)	B%
1	0	70
2	12	100
3	15	100

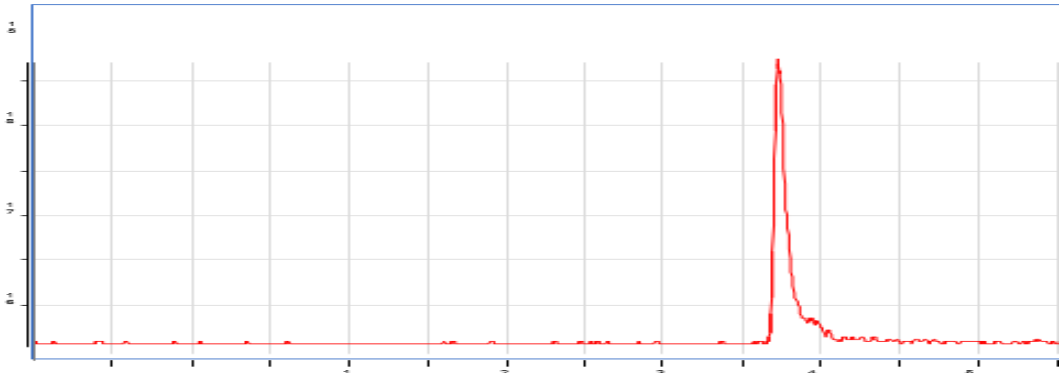
- CBDVA : CAS Number 31932-13-5

- MS condition

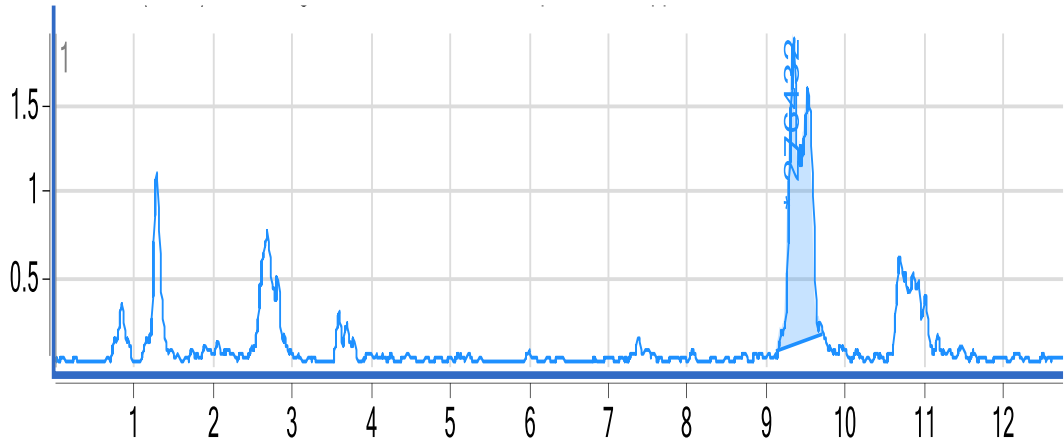
Ionization Mode	-ESI, scan mode
Gas temp.	350 °C
Capillary volt.	4000 V
Nebulizer	40 psig
Fragmentor	135 V

Results

Standard
(CBDVA)



MSE
(CBDVA)



MSE ; matured hemp stem extract

Calibration curve

Compounds	Regression equation	Linear range	Correlation coefficient
		(mg/mL)	(R ²)
CBDVA	y = 622,021.0959x - 5,764.0411	0.5-5	1.0000

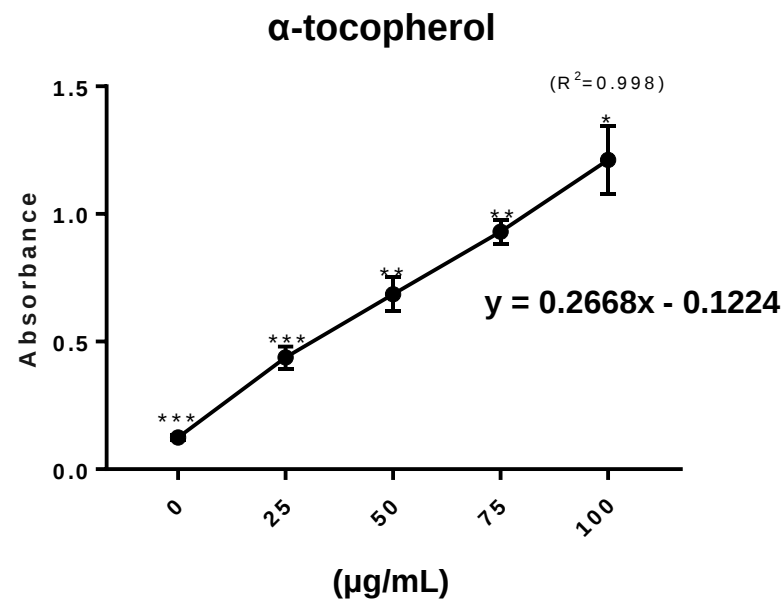
Results

Sample		
	Area	Sample 1mg
MSE	276,432	0.009 µg

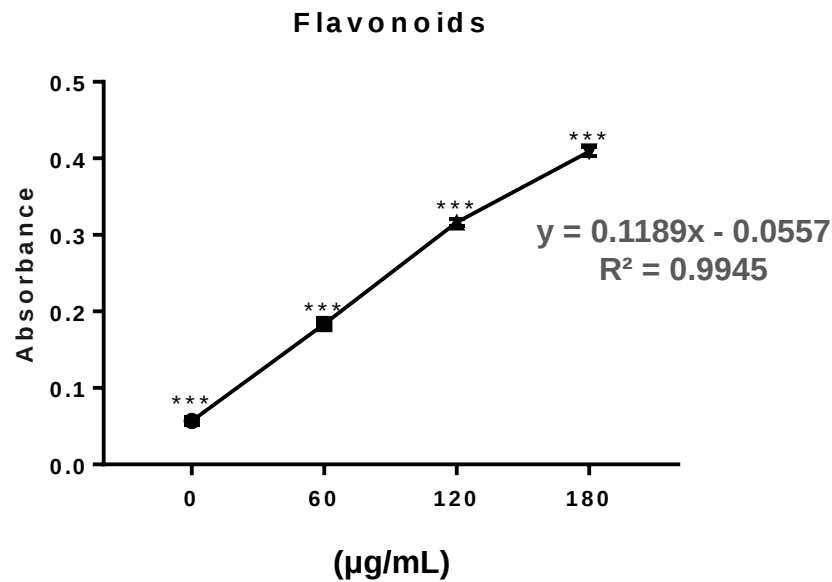
Flavonoids and α-tocopherol in MSE

Flavonoids : Plant Flavonoids Colorimetric Assay Kit, Elabscience

α-tocopherol : Alpha-Tocopherol ELISA Kit, abbexa



Result : 0.624 $\mu\text{g/}$ MSE 1mL



Result : 12.37 $\mu\text{g/}$ MSE 1mL

(*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$)