

Rapid Quantification of Cannabidiol from Oils by means of Direct Analysis in Real Time Mass Spectrometry

SUPPORTING INFORMATION

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Tab.S1. Results of the CBD quantification of the real samples using LC-MS and DART-MS including the bias between both methods.

Sample code	LC-MS		DART-MS		Bias / %
	content of CBD / % (m/m)	RSD / %	content of CBD / % (m/m)	RSD / %	
RWS1_5_01	4.56	1.48	4.72	4.21	3.7
RWS1_5_02	5.19	0.29	5.40	5.94	4.1
RWS1_5_03	4.97	0.46	4.99	3.72	0.3
RWS2_5_01	5.15	0.29	5.13	2.82	-0.2
RWS2_5_02	4.75	1.02	5.21	6.96	9.8
RWS2_5_03	5.21	1.01	5.44	6.01	4.4
RWS3_10_01	11.29	0.96	13.16	9.01	16.6
RWS3_10_02	11.15	0.75	12.99	7.06	16.5
RWS3_10_03	11.65	0.71	13.36	3.42	14.6
RWS4_10_01	8.39	0.63	8.90	7.33	6.1
RWS4_10_02	9.75	1.01	9.67	5.65	-0.8
RWS4_10_03	10.31	2.27	10.60	5.65	2.8
RWS5_15_01	14.13	0.62	14.15	5.55	0.2
RWS5_15_02	14.61	1.36	14.29	4.04	-2.2
RWS5_15_03	14.52	0.36	14.74	11.29	1.5

Tab.S2. Validation parameters for the linear model of the LC-MS method.

Calibration level / mg L ⁻¹	Bias / %	RSD / %
20	2.1	1.5
40	-1.4	1.9
60	-1.8	1.8
80	-0.9	3.4
100	1.9	3.0

Tab.S3. Validation parameters for the determination of LOD and LOQ.

Calibration level / mg L⁻¹	Bias / %	RSD / %
2	-2.2	2.7
4	2.2	5.0
6	-0.4	12.5
8	2.6	6.1
10	-2.3	4.7

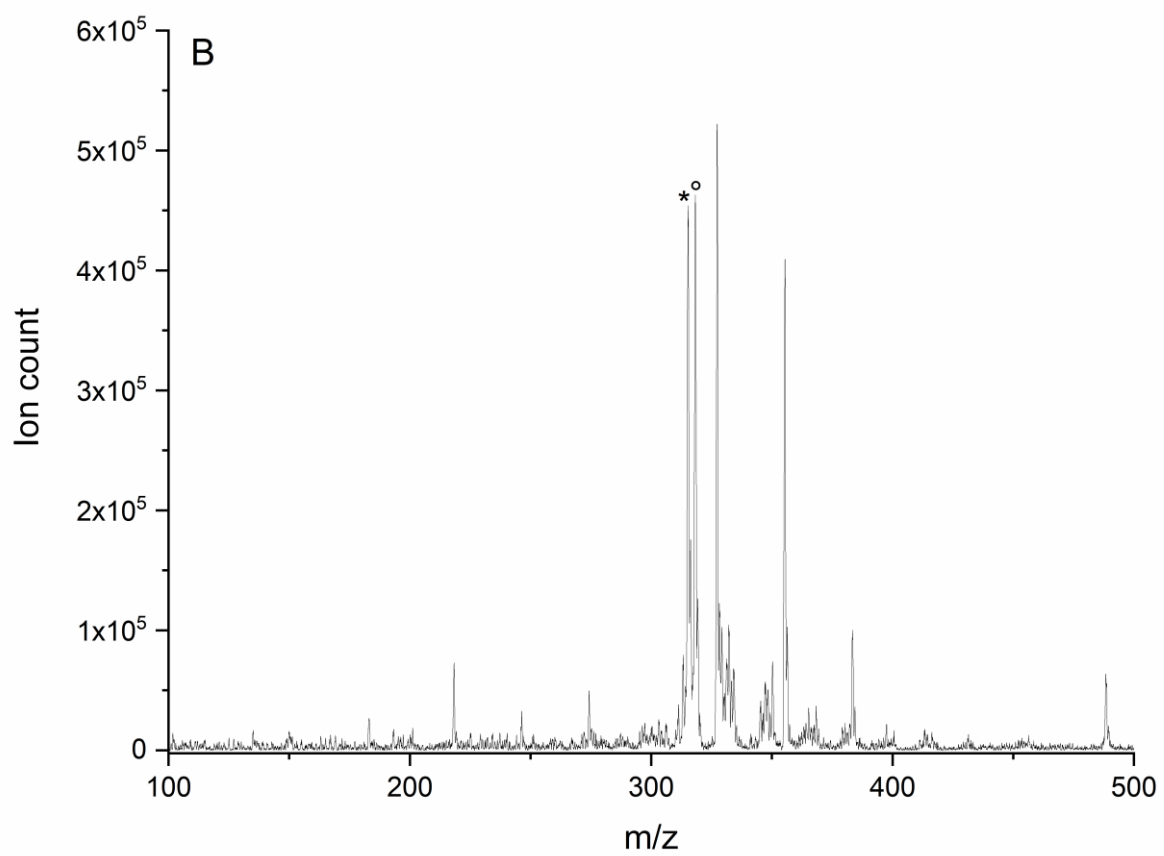
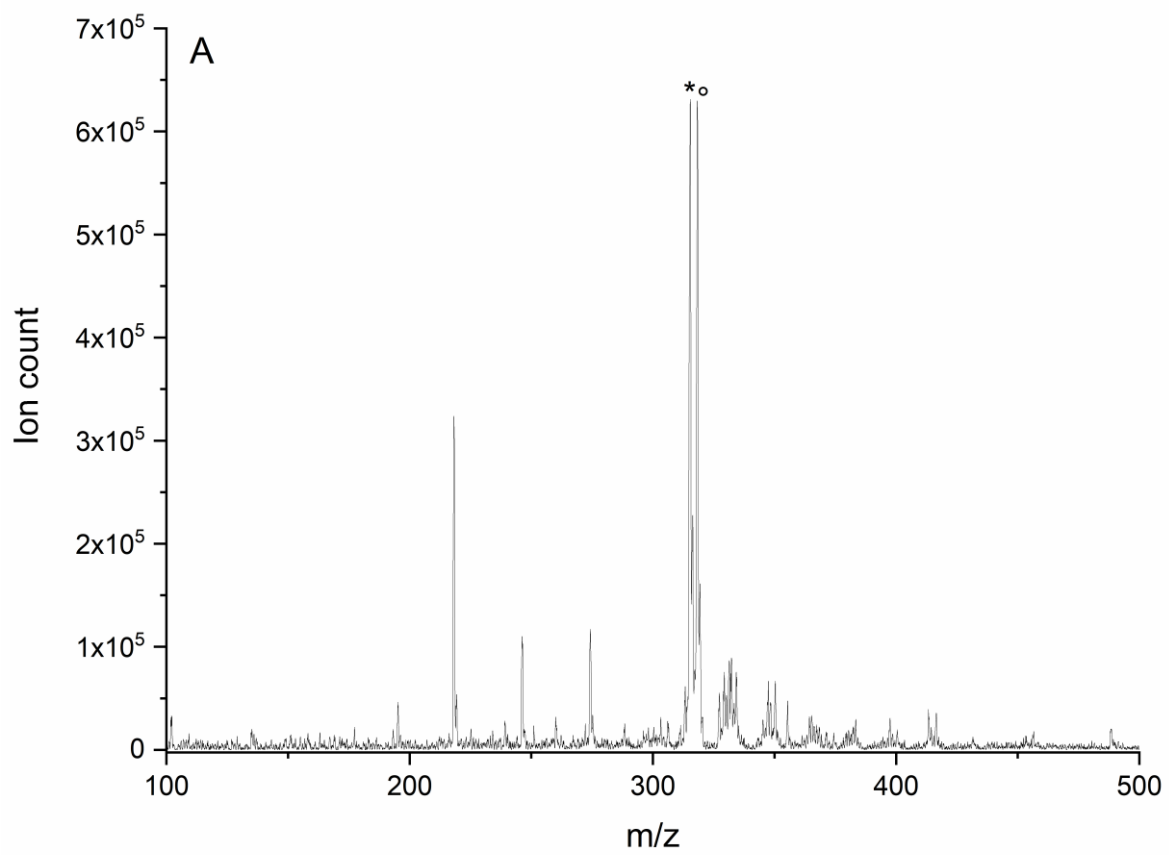


Fig.S1. DART mass spectra of real samples RWS1_5 (A) and RWS2_5 (B). Peaks of CBD (*) and CBD-D₃ (°) are marked.

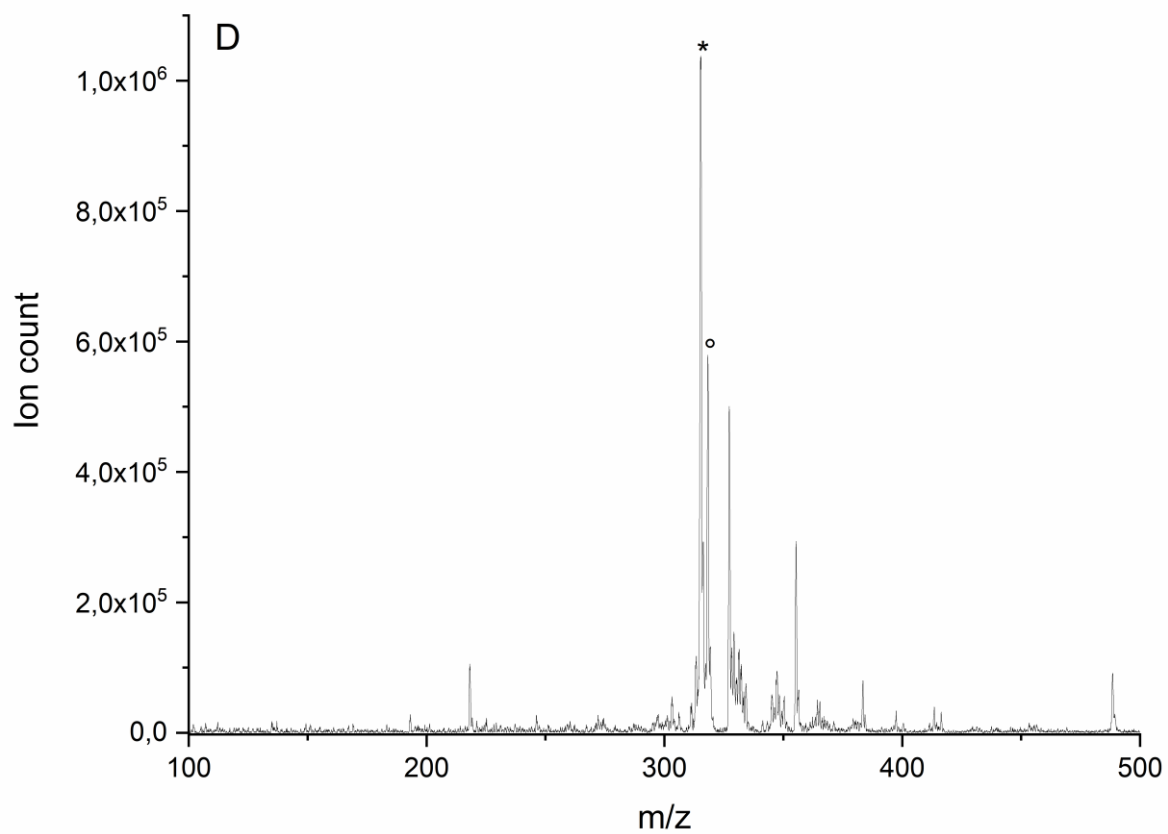
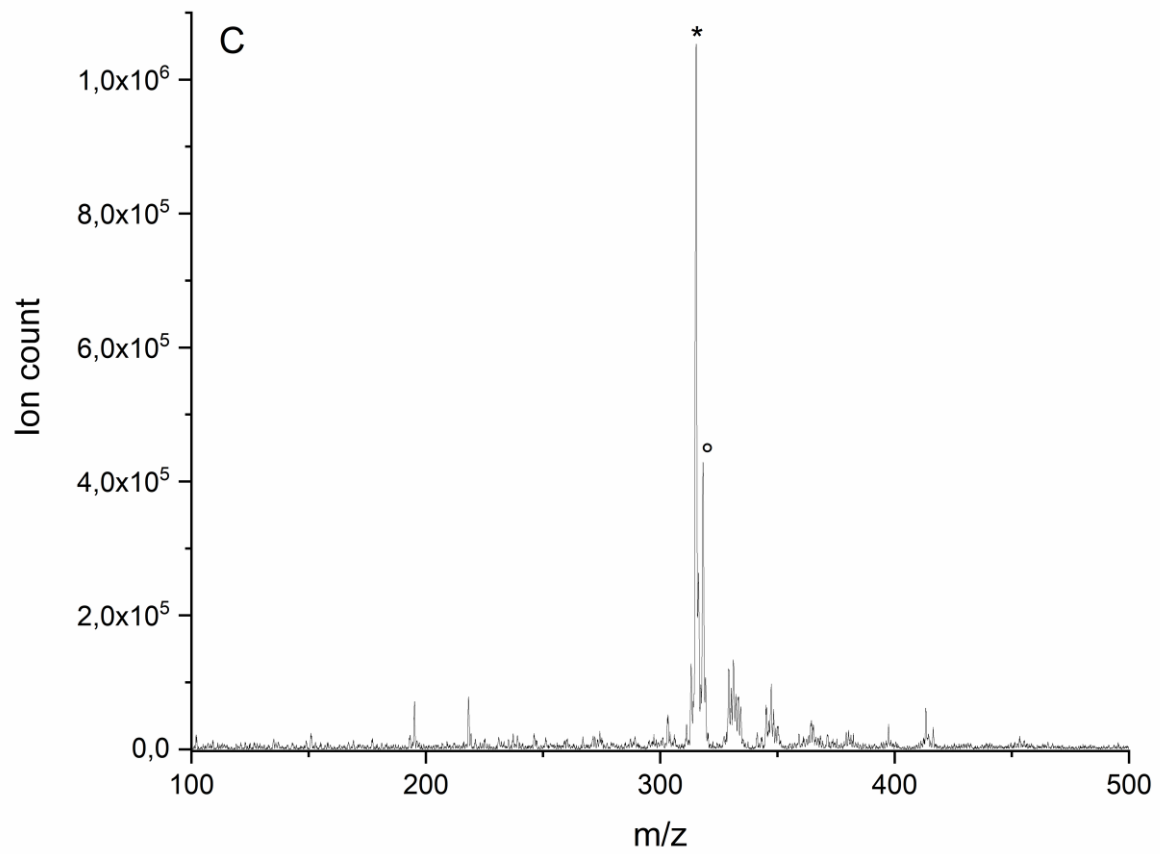


Fig.S2. DART mass spectra of real samples RWS3_10 (C) and RWS4_10 (D). Peaks of CBD (*) and CBD-D₃ (°) are marked.

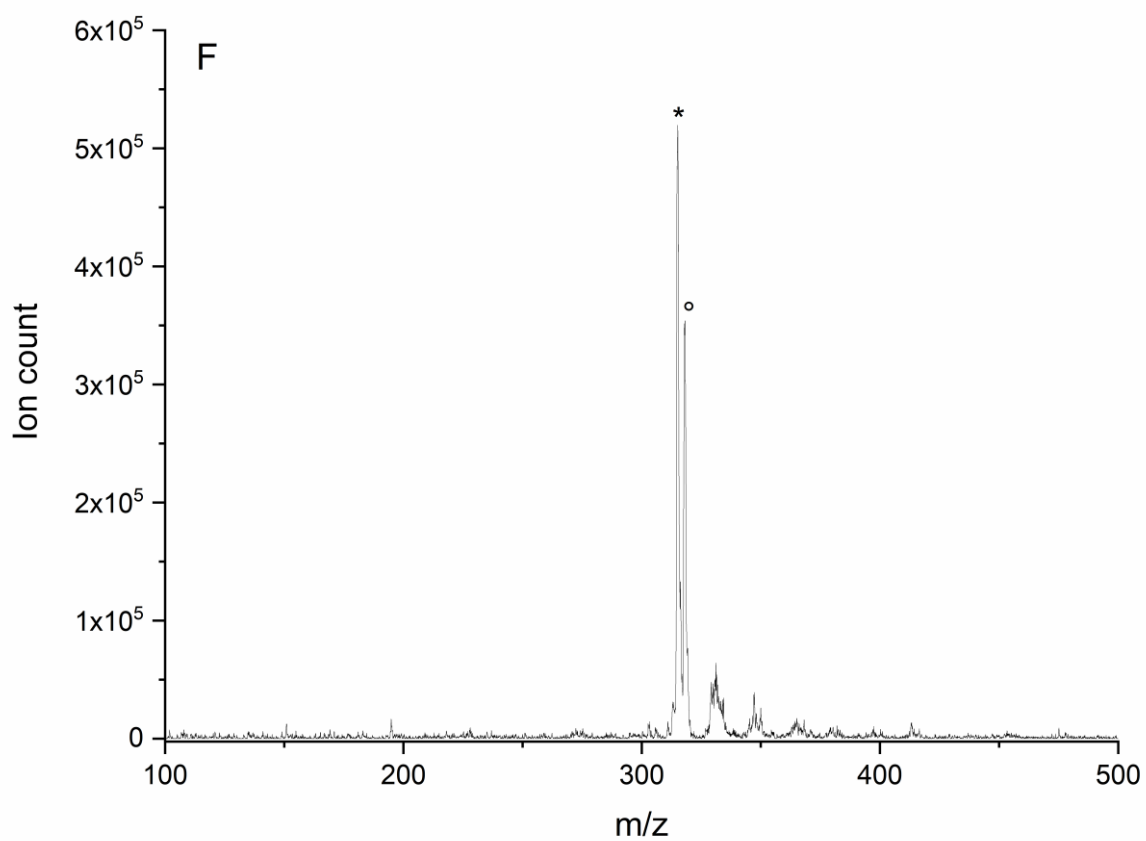
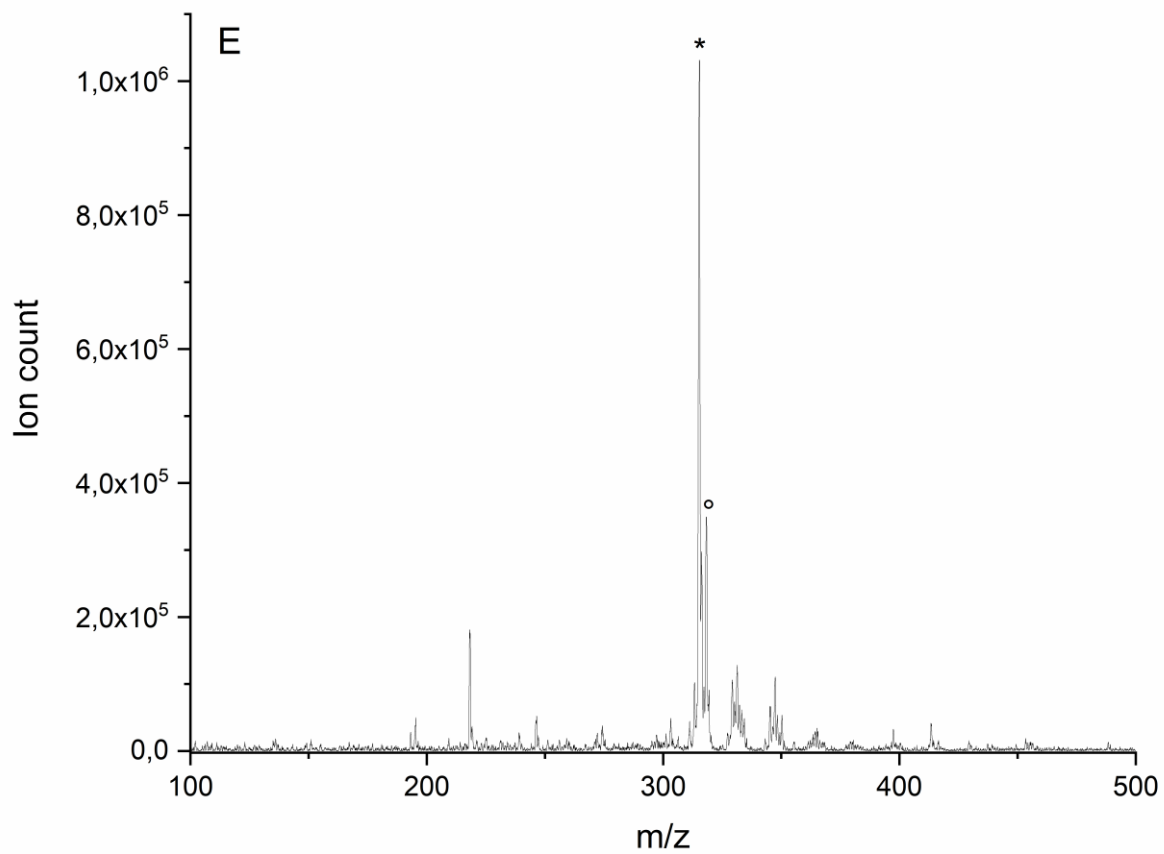


Fig.S3. DART mass spectra of real sample RWS5_10 (E) and spiked sample CBD_30 (F). Peaks of CBD (*) and CBD-D₃ (°) are marked.