

Figure S1. Chromatogram of standards (CBD, CBDA, CBN, THC, THCA) (**A**) and representative chromatogram of the sample N1-5 (**B**).

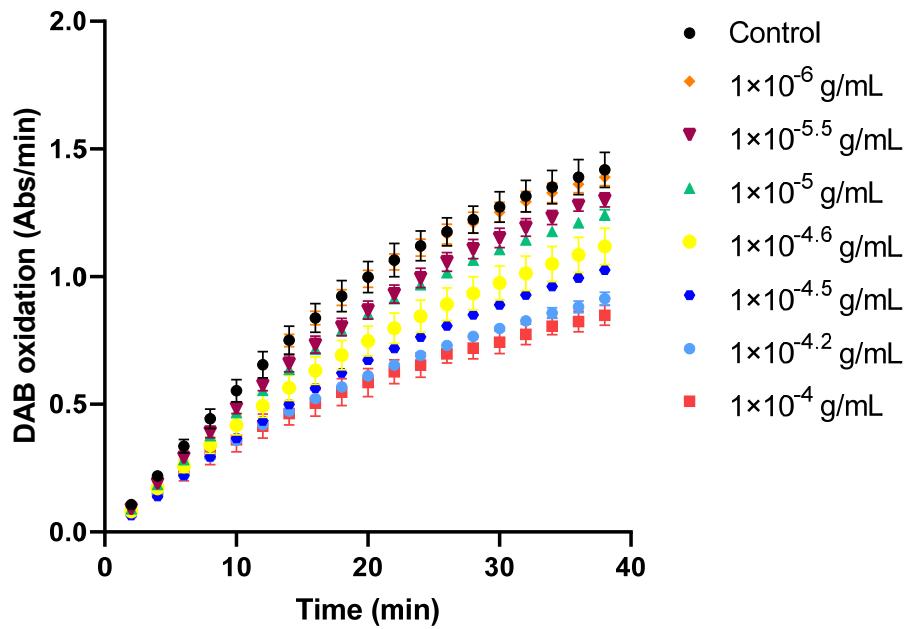


Figure S2. Representative graph of the DAB oxidation curves for the range of concentrations of the sample P0-3. Data are mean \pm SEM values.

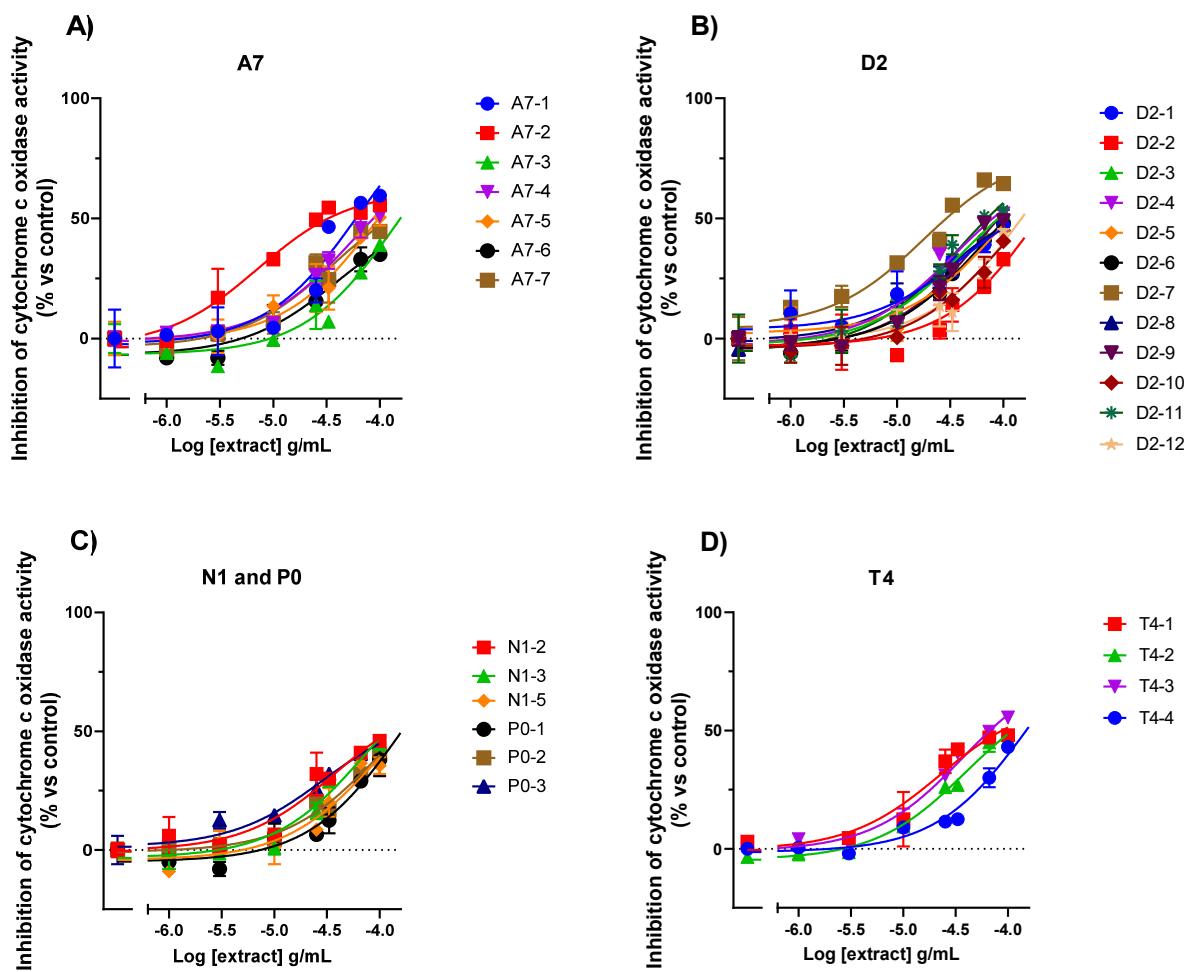


Figure S3. The concentration-effect curves of the variety A7 (A), variety D2 (B), varieties N1 and P0 (C), and variety T4 (D) on the CCO activity expressed as a percentage over the control. Data are mean \pm SEM values.

Table S1. Chemical composition of the *Cannabis sativa* varieties analyzed ($\mu\text{g}/\mu\text{g}$ extract) and Log EC50 \pm SEM obtained in the CCO activity study. Samples within variety are clones obtained from the same mother plant.

Variety	Sample	Log EC50 \pm SEM	CBD	CBDA	THC	THCA
A7	A7-1	-4.21 \pm 0.27	0.568	0.1061	0.075	0.011
	A7-2	-5.15 \pm 0.14	0.576	0.075	0.072	0.011
	A7-3		0.586	0.045	0.073	0.011
	A7-4	-4.26 \pm 0.13	0.594	0.033	0.066	0.01
	A7-5	-4.03 \pm 0.32	0.588	0.09	0.074	0.008
	A7-6	-4.40 \pm 0.21	0.614	0.023	0.054	0.008
	A7-7	-4.44 \pm 0.20	0.66	0.025	0.063	0.008
D2	D2-1	-4.38 \pm 0.28	0.65	0.057	0.063	0.001
	D2-2		0.601	0.01	0.0563	0.002
	D2-3	-4.38 \pm 0.12	0.628	0.015	0.0703	0
	D2-4	-4.44 \pm 0.11	0.597	0.01	0.074	0.003
	D2-5	-4.05 \pm 0.26	0.582	0.026	0.07	0.002
	D2-6	-4.21 \pm 0.13	0.696	0.018	0.062	0.004
	D2-7	-4.75 \pm 0.14	0.612	0.015	0.089	0.004
	D2-8	-4.50 \pm 0.15	0.655	0.019	0.074	0.001
	D2-9	-4.20 \pm 0.14	0.651	0.013	0.08	0.001
	D2-10	-4.01 \pm 0.32	0.66	0.012	0.064	0.007
	D2-11	-4.41 \pm 0.19	0.668	0.004	0.072	0.001
	D2-12		0.659	0.054	0.062	0.001
N1	N1-2	-4.42 \pm 0.22	0.66	0.04	0.071	0.0054
	N1-3	-4.13 \pm 0.22	0.61	0.055	0.0775	0.0045
	N1-5	-4.04 \pm 0.34	0.634	0.047	0.0462	0.0021
P0	P0-1		0.6	0.025	0.046	0.007
	P0-2	-4.04 \pm 0.17	0.649	0.0421	0.05	0.007
	P0-3	-4.54 \pm 0.17	0.642	0.0193	0.062	0.01
T4	T4-1	-4.55 \pm 0.27	0.63	0.024	0.086	0.008
	T4-2	-4.40 \pm 0.10	0.621	0.066	0.073	0.008
	T4-3	-4.43 \pm 0.10	0.631	0.068	0.063	0.003
	T4-4		0.613	0.045	0.067	0.005

Table S2. Extraction yield expressed as % plant dry weight

Variety	Sample	% Yield
A7	A7-1	29.78
	A7-2	31.57
	A7-3	41.04
	A7-4	36.40
	A7-5	31.98
	A7-6	26.08
	A7-7	26.34
D2	D2-1	25.30
	D2-2	40.18
	D2-3	26.54
	D2-4	32.74
	D2-5	32.31
	D2-6	29.88
	D2-7	28.94
	D2-8	29.32
	D2-9	28.58
	D2-10	36.32
	D2-11	27.90
	D2-12	29.43
N1	N1-1	29.23
	N1-2	26.72
	N1-3	28.45
	N1-4	29.82
	N1-5	23.20
P0	P0-1	26.05
	P0-2	29.54
	P0-3	21.05
T4	T4-1	26.70
	T4-2	32.20
	T4-3	29.71
	T4-4	32.32