

Supplemental Materials

Table S1 GC-MS confirmation results for our qualitative NMR findings:

Herb Name	Cannabinoid	Mass	Retention Time	Important m/z
Sweet Leaf	JWH-250	335	18.693	51, 91, 144, 214
	JWH-122	355	22.943	115, 214, 298, 355
	JWH-210	369	23.597	130, 195, 312, 369
Melon Code Black	JWH-203	340	18.574	89, 144, 214, 216
	JWH-122	355	22.95	169, 339, 355
Cloud Nine	UR-144	311	14.434	55, 229, 296
	XLR-11	329	15.628	77, 144, 232, 315
Ion Source	JWH-203	340	18.564	51, 89, 144, 218
	RCS-08	375	22.916	91, 144, 254, 375
Rack City	XLR-11	329	15.633	77, 144, 232, 287
Extremely Legal	JWH-122	355	22.973	115, 214, 298, 355
	JWH-210	369	23.624	144, 214, 254, 312
K250	JWH-250	335	18.758	89, 144, 214, 216
Head Trip	JWH-122	355	22.999	89, 169, 298, 355
	JWH-210	369	23.628	130, 195, 312, 369
Nuclear Bomb	JWH-122	355	22.954	77, 128, 284, 355
Zombie Matter	AM-2201	359	23.125	127, 232, 284, 359
	JWH-210	369	23.611	144, 183, 312, 369
Mr. Nice Guy	AM-2201	359	23.225	127, 232, 284, 359
	JWH-122	355	22.977	181, 298, 339, 355
Moon Spice	RCS-04	321	19.213	77, 135, 264, 321
	JWH-18	341	21.255	127, 214, 284, 341

BR-35ms column: 30m length x 0.25 mm ID x 0.25 um film thickness (5% phenyl, 95% dimethyl arylene siloxane)

Hydrogen carrier gas, flow rate 1.00 ml/min

Oven temp: 40 C to 100 C at 30 degrees/min, then to 150 C at 20 degrees/min, then to 300 C at 10 degrees/min, hold for 7 min

Injector temp: 280 C, 1 ul injections, 1:20 split

Detector/interface temp: 300 C

Table S2 LC-DAD results for herbal extract

Herbal Incense	ID1	Conc1 (mg/g)	ID2	Conc.2	ID3	Conc.3
Sweet Leaf	JWH-210	0.88±0.59	JWH-122	0.44±0.26	JWH-250	0.09±0.08
Cloud Nine	XLR-11	9.66±0.37	UR-144	10.6±0.32		
Melon Code Black	JWH-203	8.30±0.80	JWH-122	5.1±0.5		
Rack City	XLR-11	11.24±3.75				
Ion Source	RCS-8	2.57±0.46	JWH-203	1.16±0.05		
K-250	JWH-250	2.49±0.53				
Extremely Legal XXX	JWH-122	9.98±2.70	JWH-210	1.17±1.00		
Head Trip	JWH-122	12.6±0.53	JWH-210	2.48±0.44		
Nuclear Bomb	JWH-122	4.53±0.30				
Zombie Matter	AM-2201	6.53±0.17	JWH-210	5.8±0.8		
Mr. Nice Guy	AM-2201	47.0±3.18	JWH-122	12.8±2.33		
Moon Spice	JWH-018	6.6±0.8	RCS-4	2.44±0.60		

Separation conditions: Phenomenex Luna 5 u Phenyl-Hexyl column (150 * 4.6 mm),
70% Acetonitrile and 30% H₂O isocratic separation, 1.5 mL/min flow rate,
1 uL injection, 210 nm and 280 nm detection