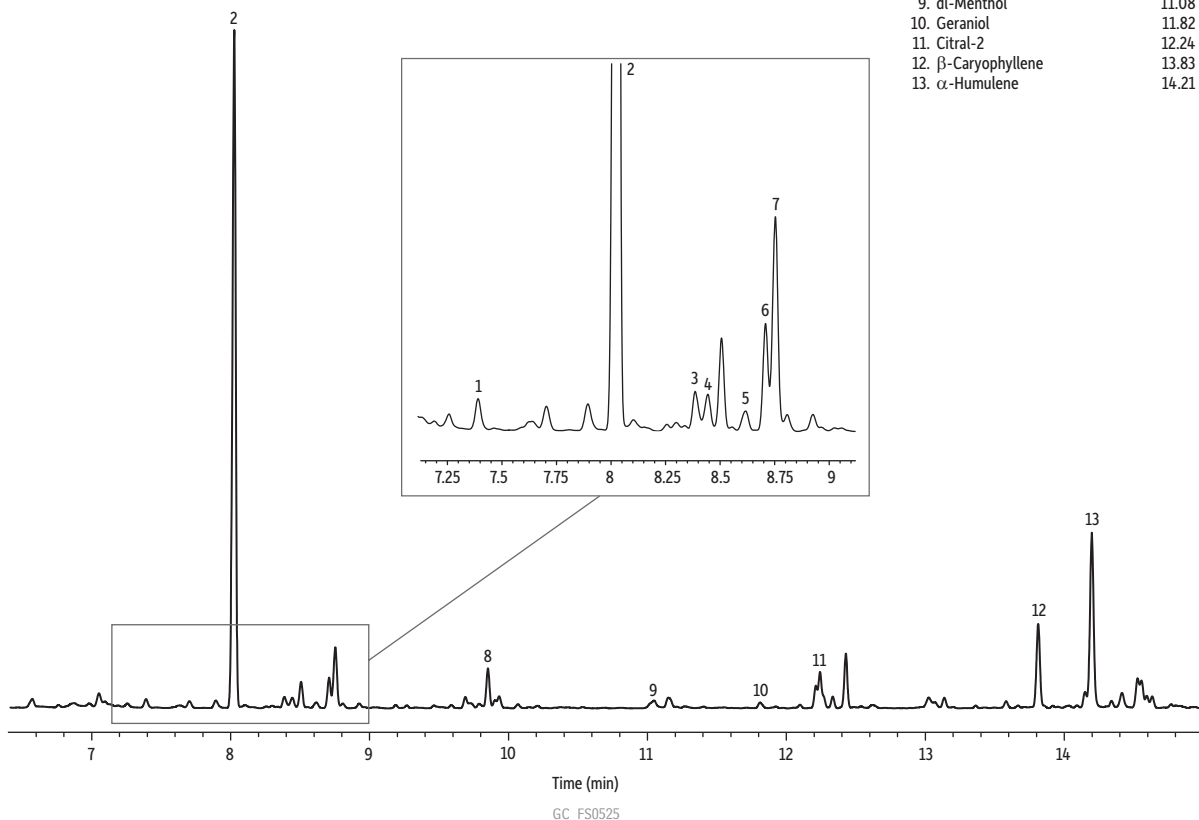


Terpene Profile of Citra Hops on Rxi®-624Sil MS by FET-HS-GC

Peaks	tr (min)
1. α-Pinene	7.39
2. β-Myrcene	8.02
3. α-Phellandrene	8.40
4. δ-3-Carene	8.44
5. Ocimene	8.61
6. Limonene	8.71
7. p-Cymene	8.75
8. Linalool	9.87
9. dl-Menthol	11.08
10. Geraniol	11.82
11. Citral-2	12.24
12. β-Caryophyllene	13.83
13. α-Humulene	14.21



Column Rxi®-624Sil MS, 30 m, 0.25 mm ID, 1.40 µm (cat.# 13868)
Sample
 Conc.: 10 mg of ground Citra hops
Injection headspace-loop split (split ratio 10:1)
 Liner: Premium 1.0 mm ID straight inlet liner (cat.# 23333.1)
Headspace-Loop
 Inj. Port
 Temp.: 250 °C
 Instrument: Tekmar HT-3
 Inj. Time: 1.0 min
 Transfer Line
 Temp.: 160 °C
 Valve Oven
 Temp.: 160 °C
 Needle Temp.: 140 °C
 Standby flow rate: 50 mL/min
 Sample Temp.: 140 °C
 Platen temp equil. time: 1.0 min
 Sample Equil. Time: 30.0 min
 Vial Pressure: 20 psi
 Pressurize Time: 5.0 min

Pressure Equilibration
 Time: 0.20 min
 Loop Pressure: 15 psi
 Loop Fill Time: 2.0 min
Oven
 Oven Temp.: 60 °C (hold 0.10 min) to 300 °C at 12.50 °C/min (hold 3.0 min)
Carrier Gas He, constant flow
 Linear Velocity: 33 cm/sec
Detector FID @ 320 °C
 Make-up Gas
 Flow Rate: 45 mL/min
 Make-up Gas
 Type: N₂
 Hydrogen flow: 4.0 mL/min
 Air flow: 450 mL/min
 Data Rate: 20 Hz
Instrument Agilent/HP6890 GC