

## Seasonal Variability in the Essential Oils of Wild and Cultivated *Baccharis trimera*

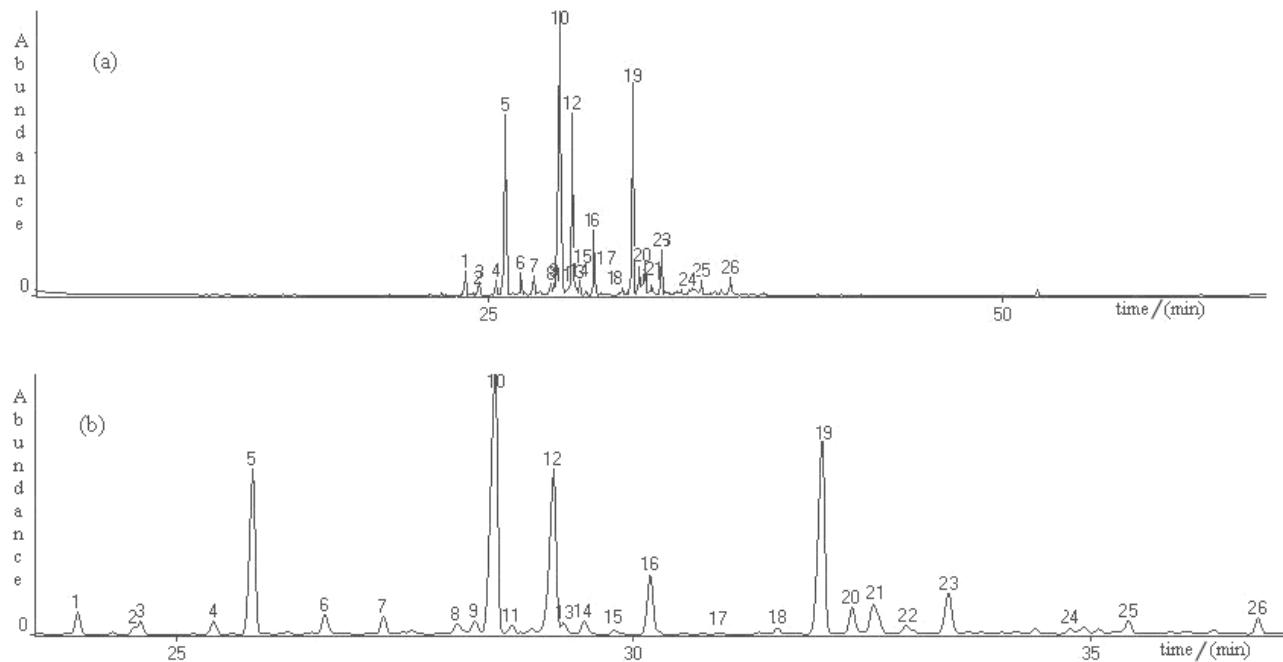
Fabiano G. Silva,<sup>a</sup> Carolina B. A. Oliveira,<sup>b</sup> José Eduardo B. P. Pinto,<sup>c</sup> Vivian E. Nascimento,<sup>c</sup> Suzana C. Santos,<sup>b</sup> José C. Seraphin<sup>d</sup> and Pedro H. Ferri<sup>\*b</sup>

<sup>a</sup>Laboratório de Cultura de Tecidos, Centro Federal de Educação Tecnológica de Rio Verde, CP 66, 75900-000 Rio Verde-GO, Brazil

<sup>b</sup>Laboratório de Bioatividade Molecular, Instituto de Química, Universidade Federal de Goiás, CP 131, 74001-970 Goiânia-GO, Brazil

<sup>c</sup>Laboratório de Cultura de Tecidos e Plantas Medicinais, Departamento de Agricultura, Universidade Federal de Lavras, CP 37, 37200-000 Lavras-MG, Brazil

<sup>d</sup>Núcleo de Estatística Aplicada, Instituto de Matemática e Estatística, Universidade Federal de Goiás, CP 131, 74001-970 Goiânia- GO, Brazil



**Figure S1.** (a) Total Ion Count (TIC) obtained by GCMS of carqueja essential oil (*Baccharis trimera*); (b) TIC zoom showed the constituents (peak number) arranged in order of elution.

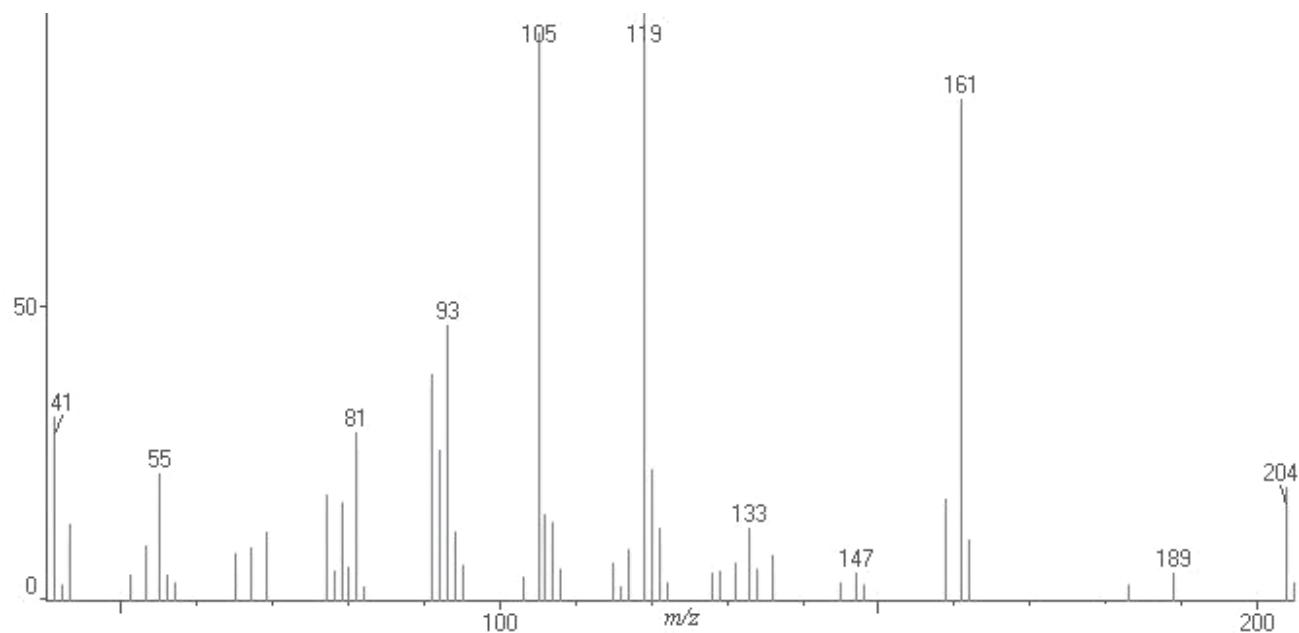


Figure S2. Mass spectrum of  $\alpha$ -copaene (peak 1).

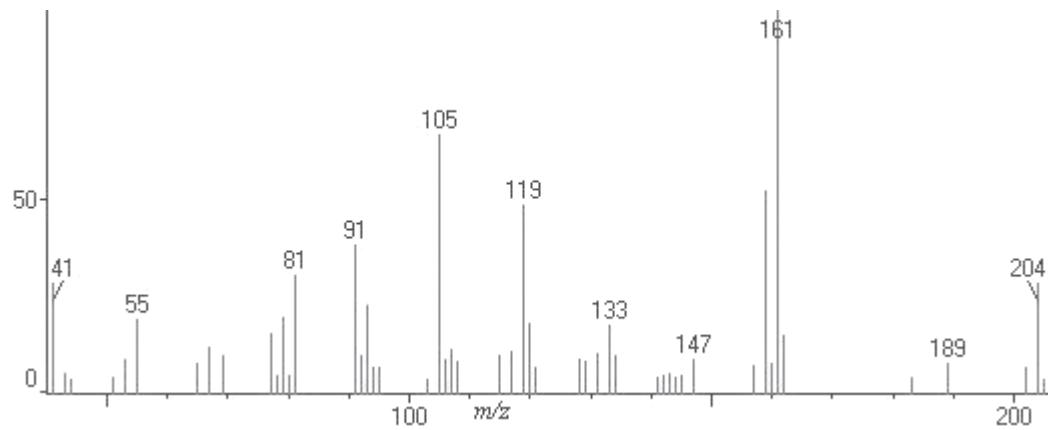


Figure S3. Mass spectrum of  $\beta$ -cubebene (peak 2).

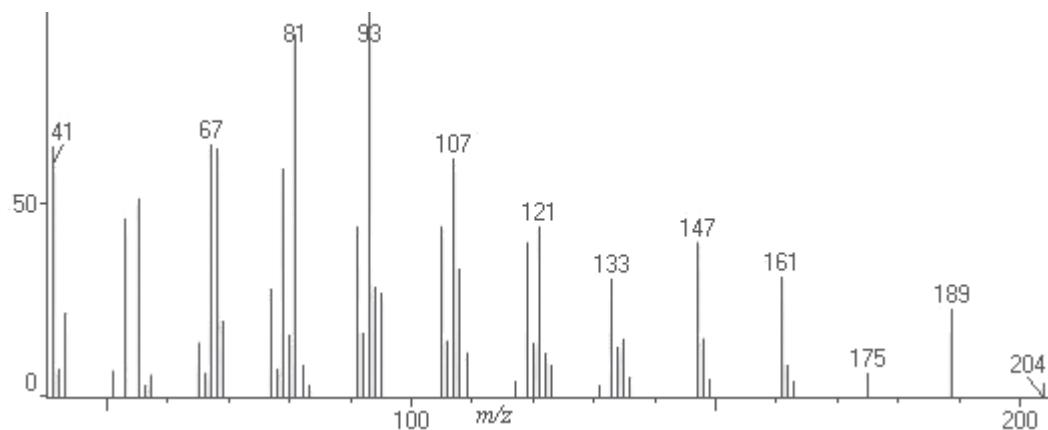
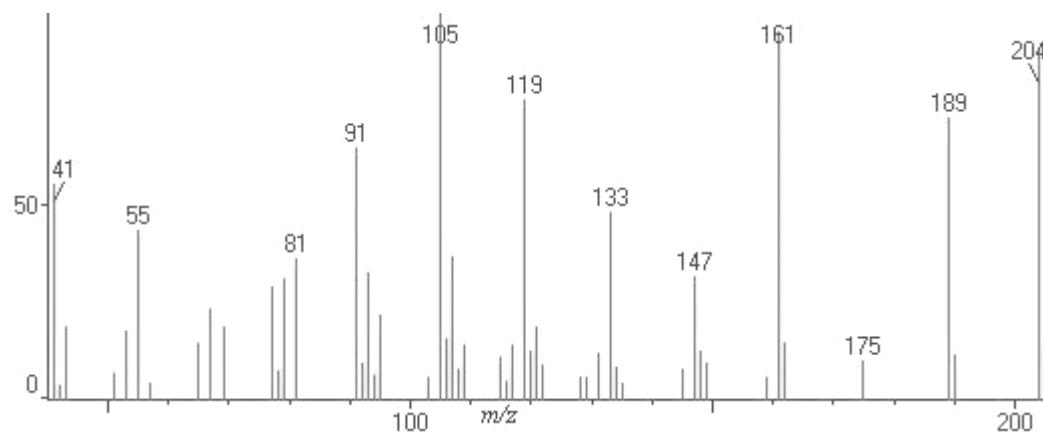
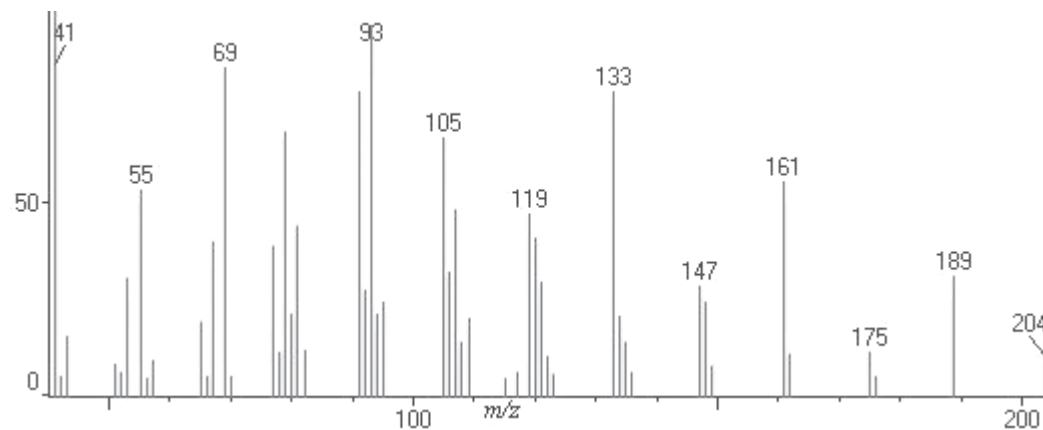


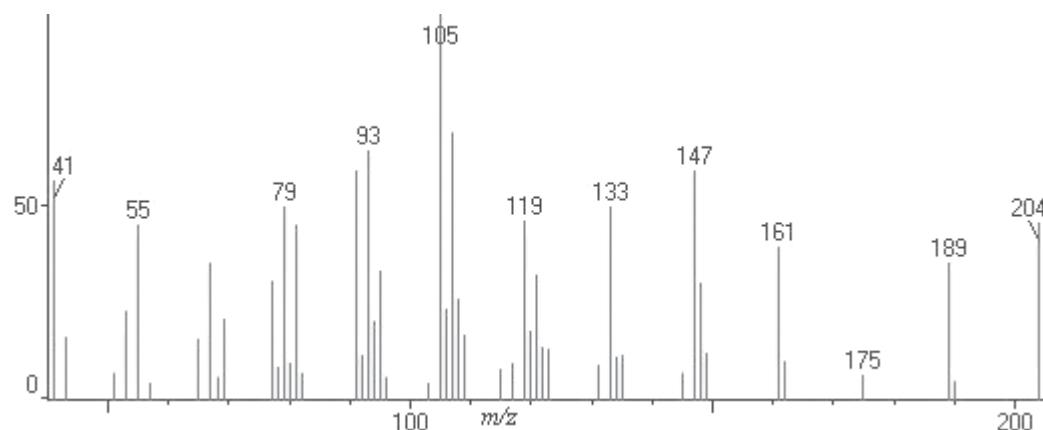
Figure S4. Mass spectrum of  $\beta$ -elemene (peak 3).



**Figure S5.** Mass spectrum of  $\alpha$ -gurjunene (peak 4).



**Figure S6.** Mass spectrum of (*E*)-caryophyllene (peak 5).



**Figure S7.** Mass spectrum of  $\alpha$ -guaiene (peak 6).

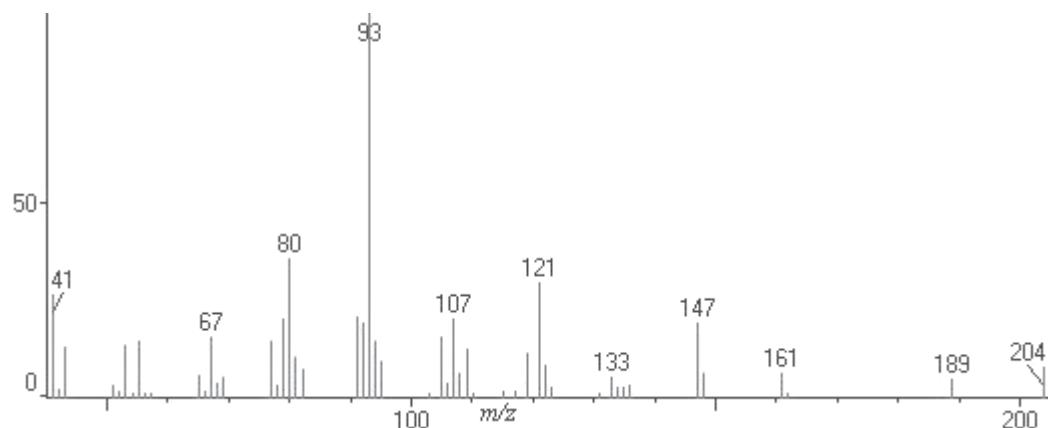


Figure S8. Mass spectrum of  $\alpha$ -humulene (peak 7).

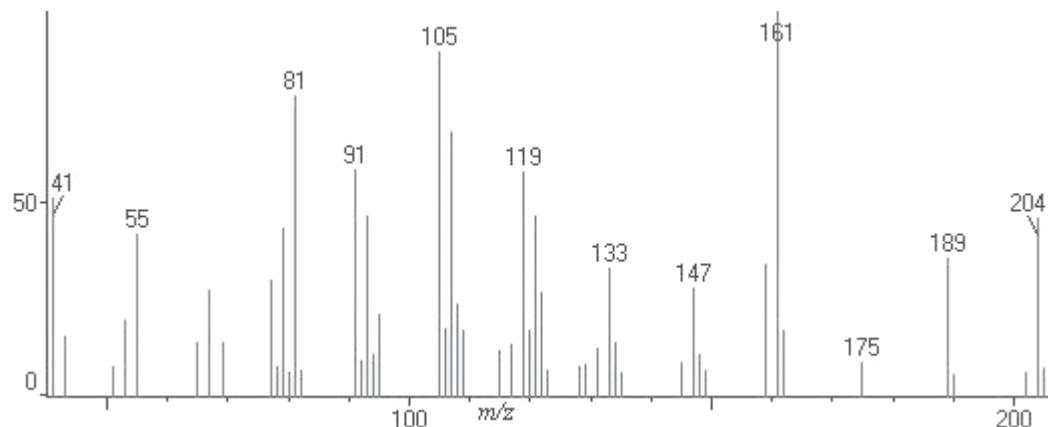


Figure S9. Mass spectrum of  $\gamma$ -gurjunene (peak 8).

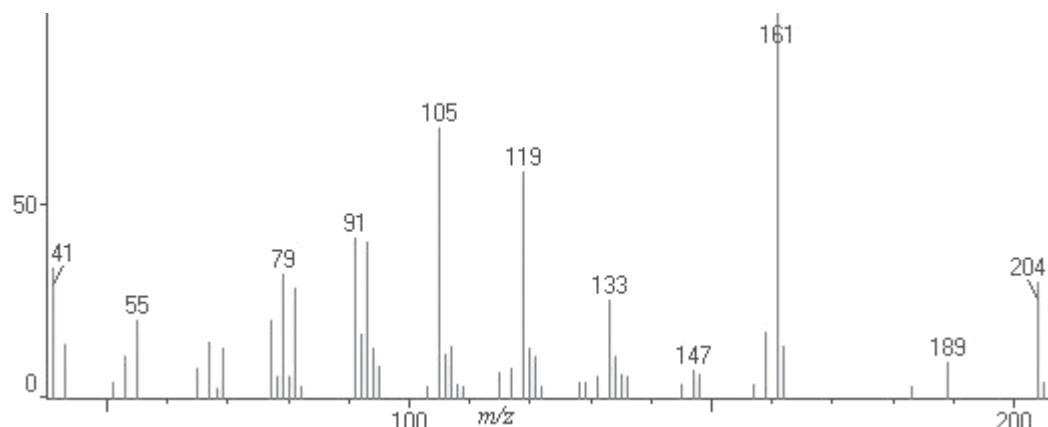
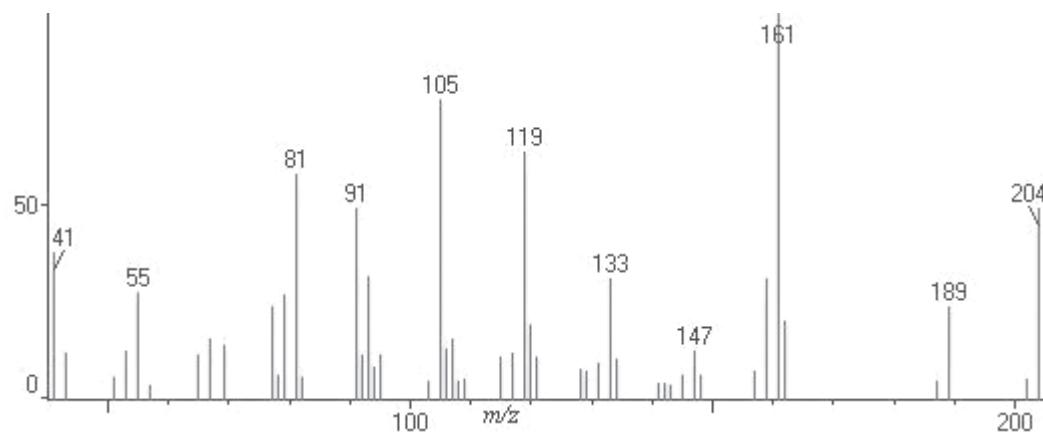
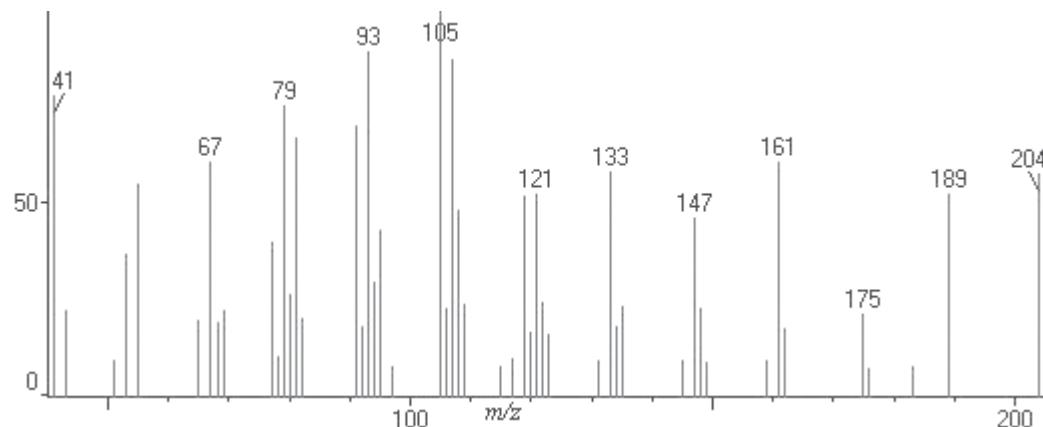


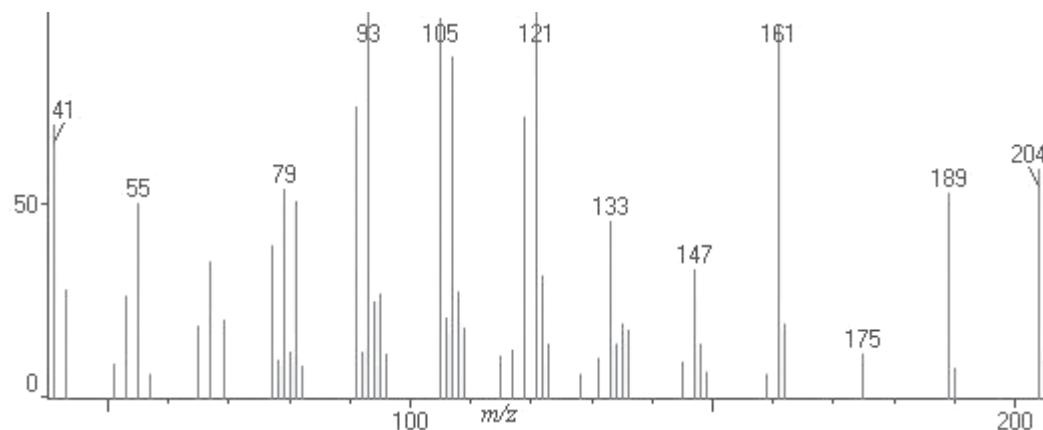
Figure S10. Mass spectrum of  $\gamma$ -muurolene (peak 9).



**Figure S11.** Mass spectrum of germacrene D (peak 10).



**Figure S12.** Mass spectrum of  $\beta$ -selinene (peak 11).



**Figure S13.** Mass spectrum of bicyclogermacrene (peak 12).

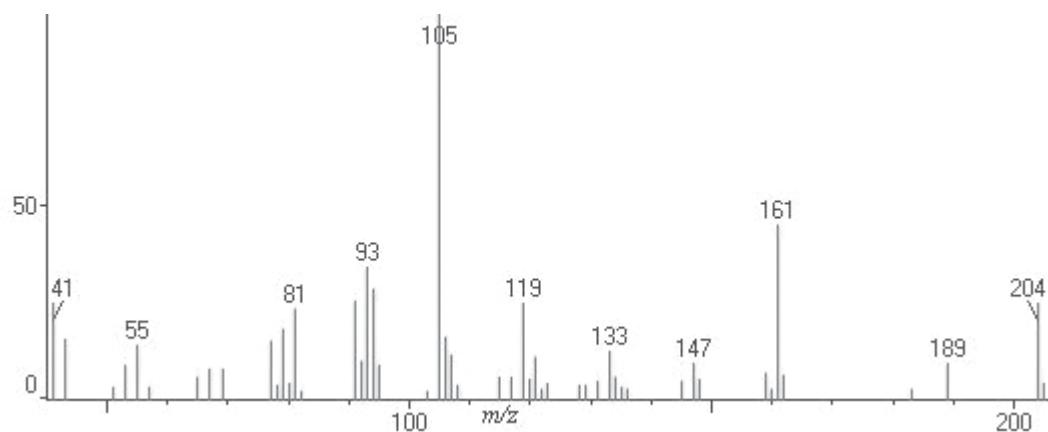


Figure S14. Mass spectrum of  $\alpha$ -muurulene (peak 13).

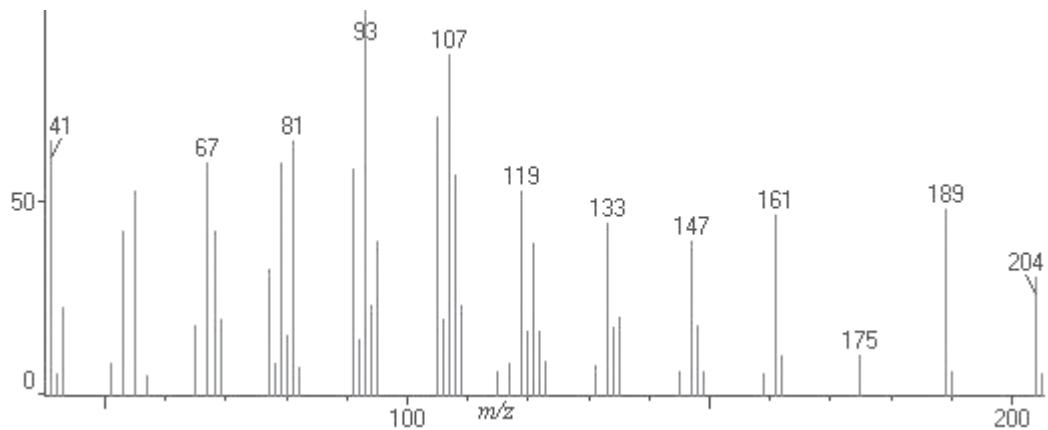


Figure S15. Mass spectrum of  $\alpha$ -bulnecene (peak 14).

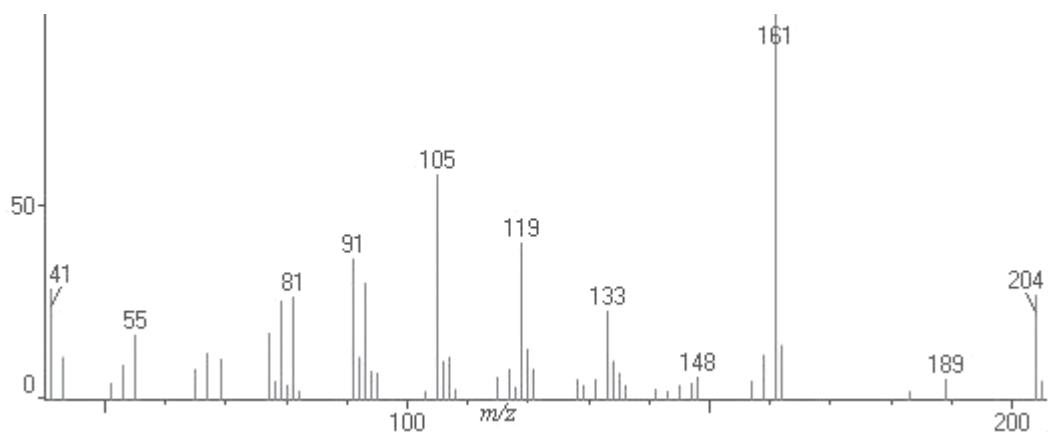
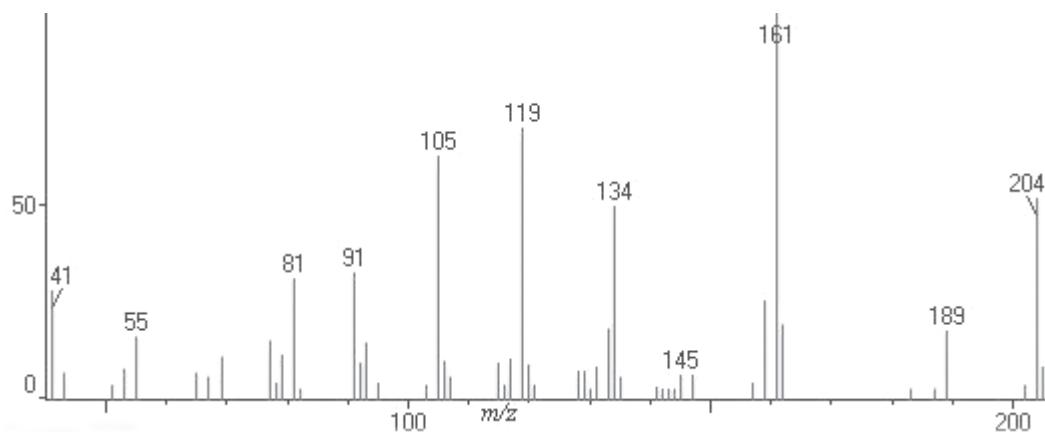
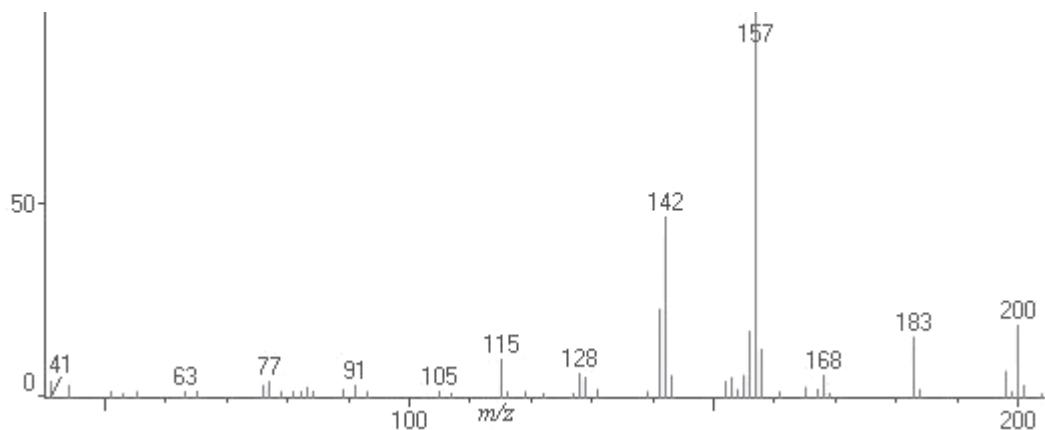


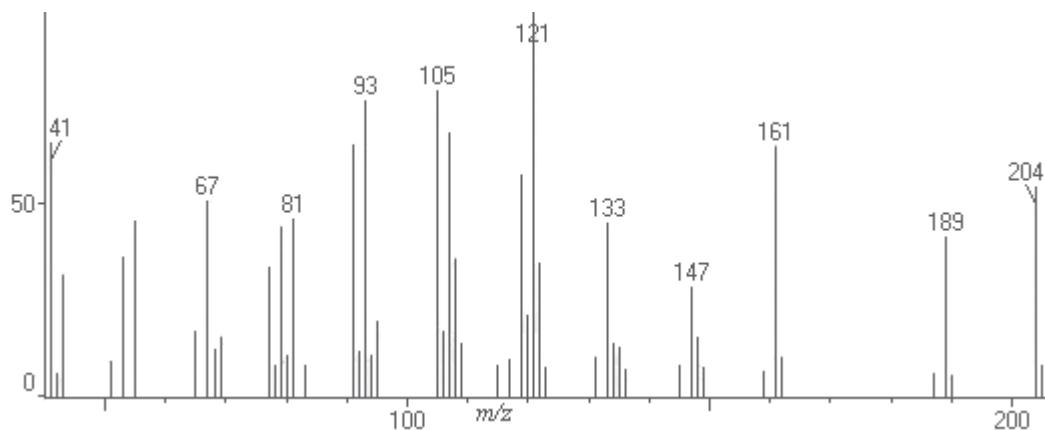
Figure S16. Mass spectrum of  $\gamma$ -cadinene (peak 15).



**Figure S17.** Mass spectrum of  $\delta$ -cadinene (peak 16).



**Figure S18.** Mass spectrum of  $\delta$ -calacorene (peak 17).



**Figure S19.** Mass spectrum of germacrene B (peak 18).

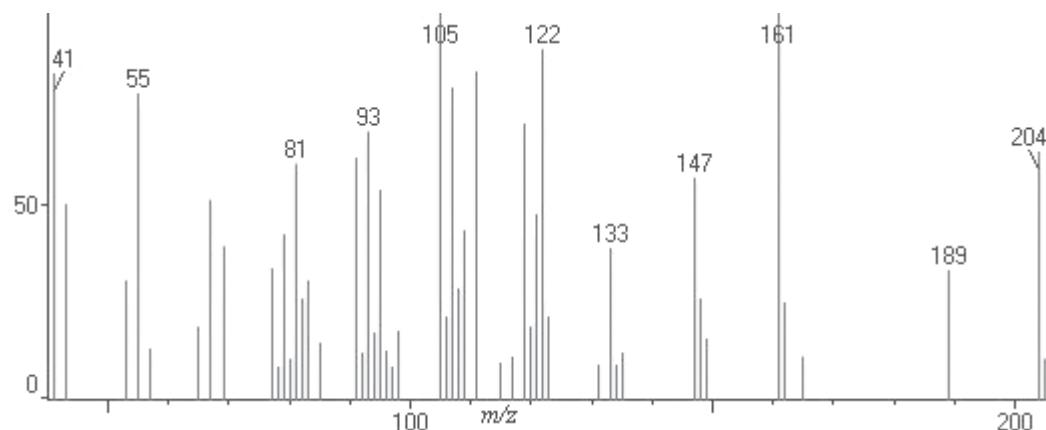


Figure S20. Mass spectrum of ledol (peak 19).

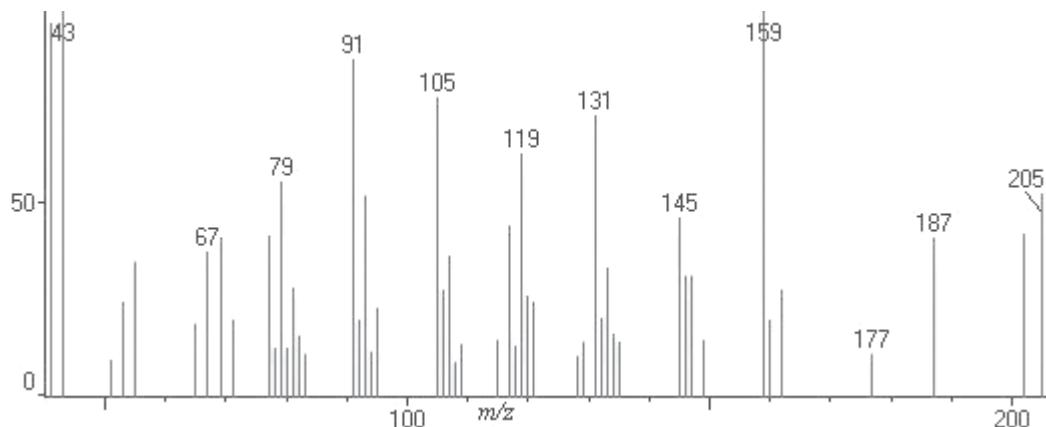


Figure S21. Mass spectrum of spathulenol (peak 20).

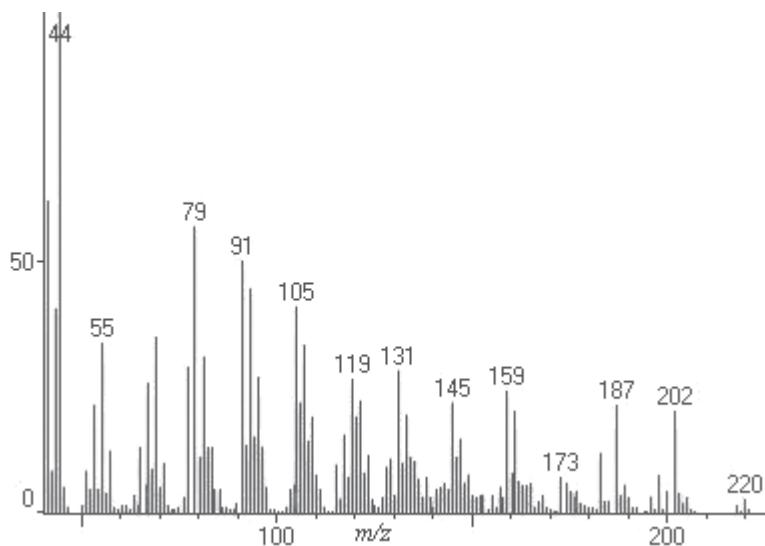
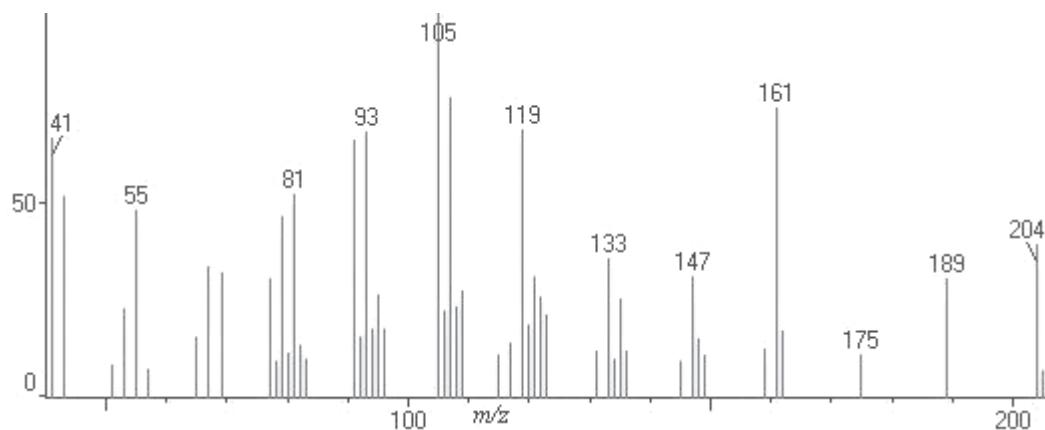
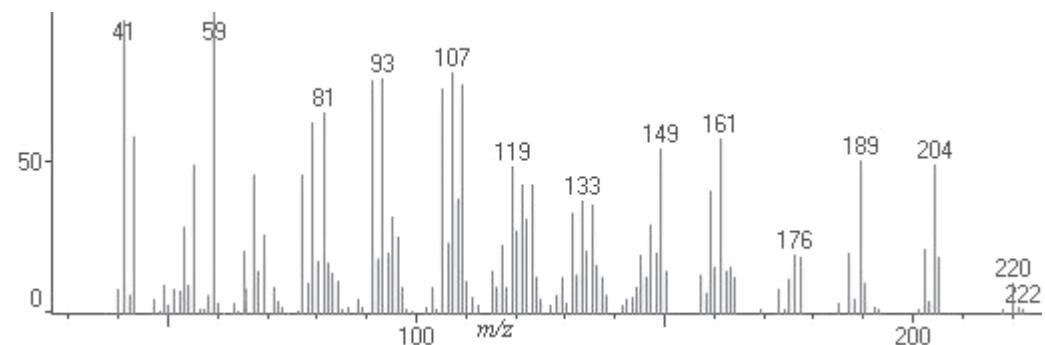


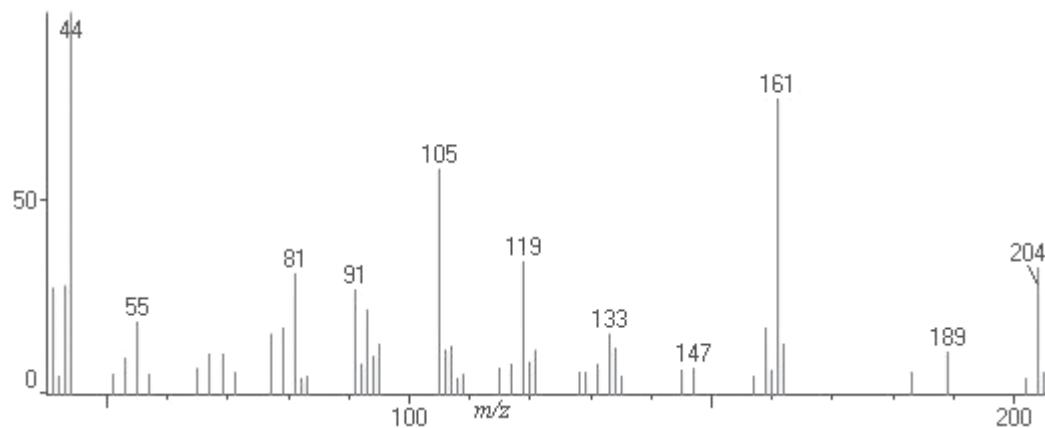
Figure S22. Mass spectrum of globulol (peak 21).



**Figure S23.** Mass spectrum of viridiflorol (peak 22).



**Figure S24.** Mass spectrum of guaiol (peak 23).



**Figure S25.** Mass spectrum of *epi*- $\alpha$ -cadinol (peak 24).

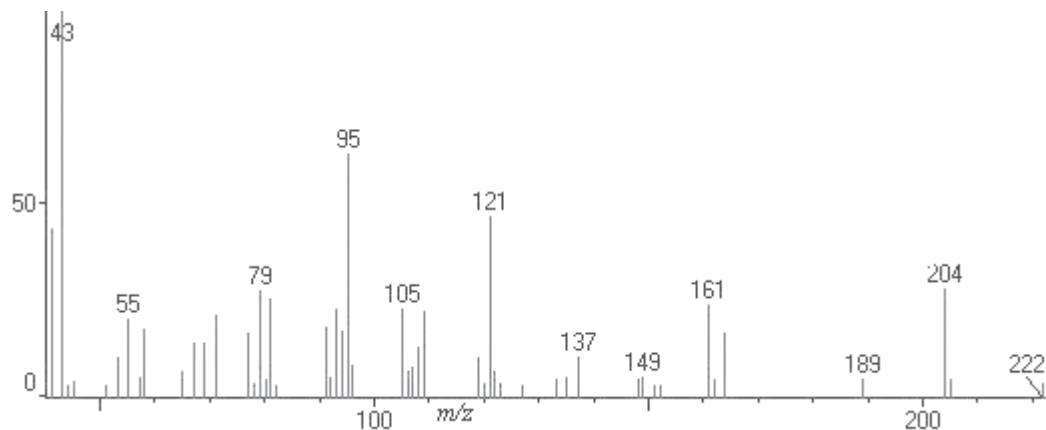


Figure S26. Mass spectrum of  $\alpha$ -cadinol (peak 25).

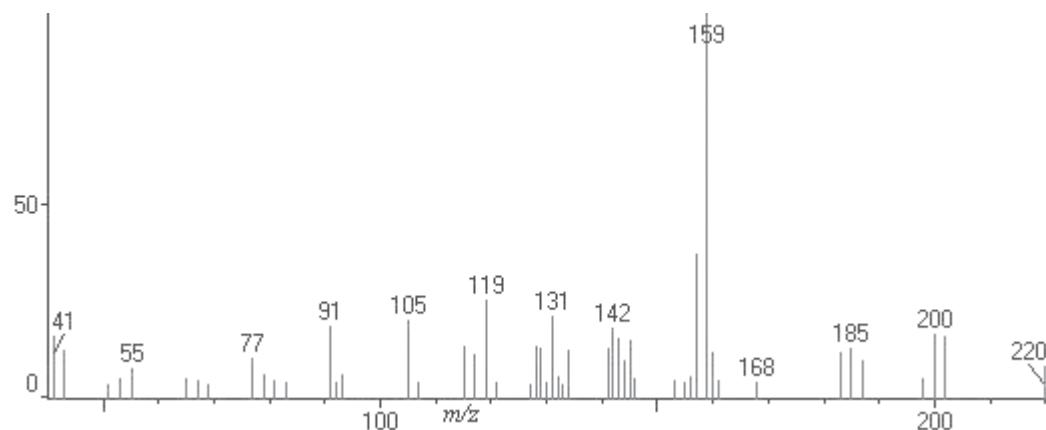


Figure S27. Mass spectrum of eudesma-4(15),7-dien-1- $\beta$ -ol (peak 26).