

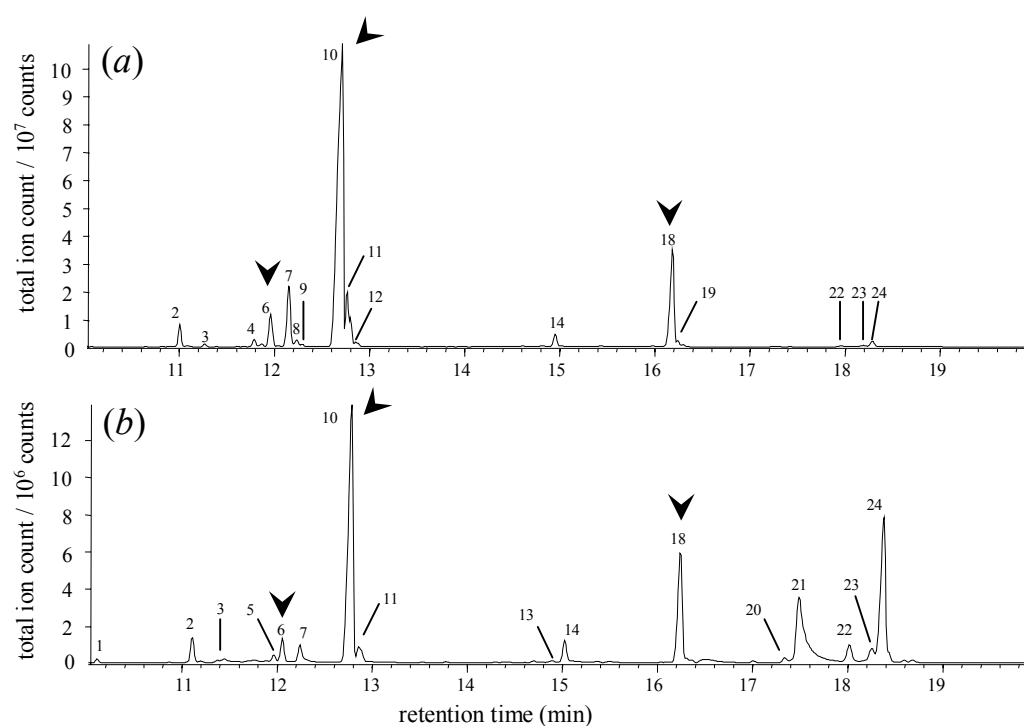


Fig. S1 Gas chromatograms of the novel compounds in two different *Cr. modiglianii* colonies. a) colony B3, b) colony B4. Arrows indicate the three compounds further analyzed in Fig. S2.

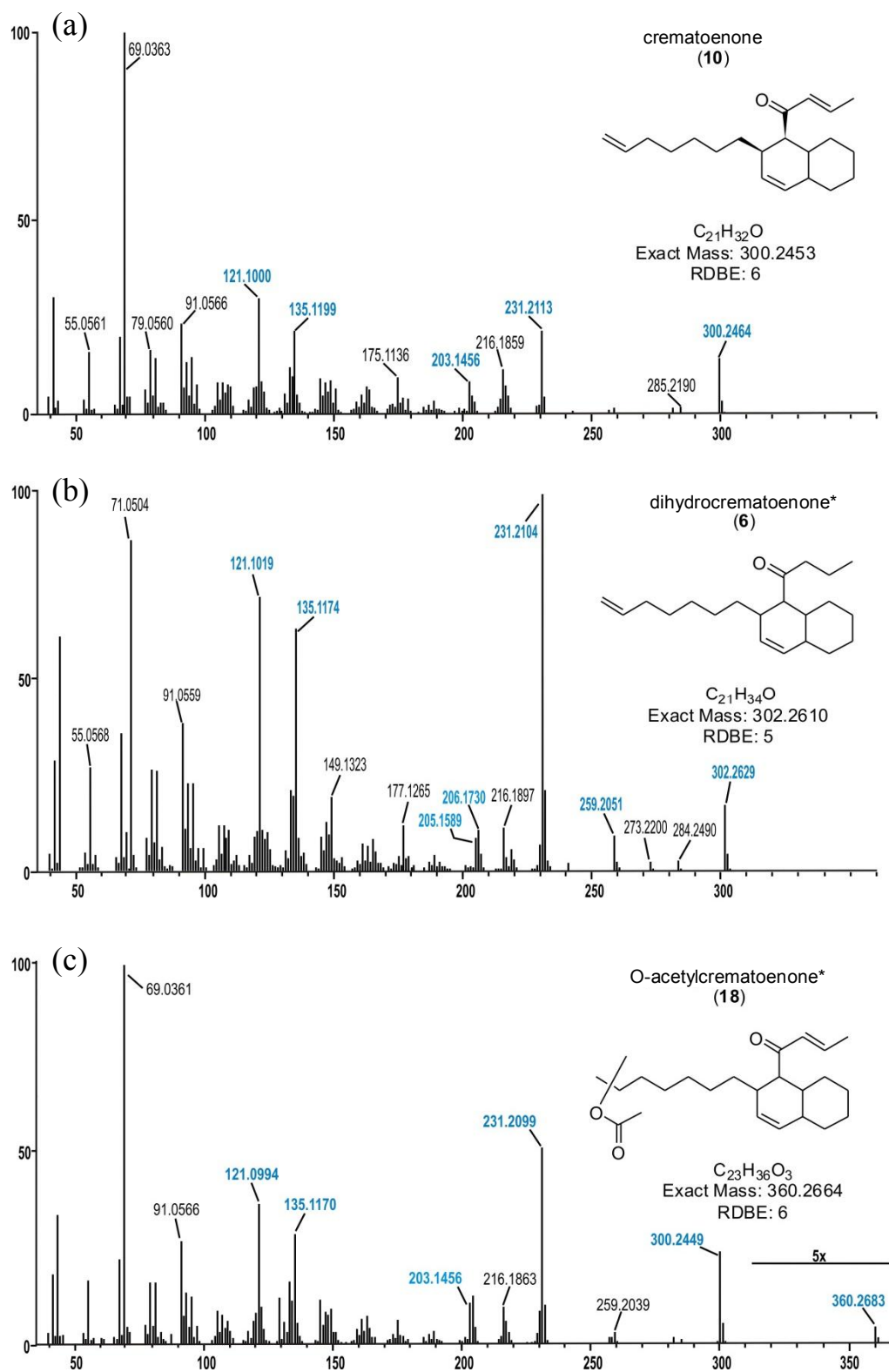


Fig. S2 HRMS Mass spectra of three novel compounds that were further characterized. a) compound **6**, b) compound **10**, c) compound **18**. Fragments and ions which were tentatively structurally assigned are marked in blue. Tentatively assigned structures (**6** and **18**) are marked with an asterisk.

Fig. S3 Proposed EI-MS fragmentation of compound **10** (crematoenone).

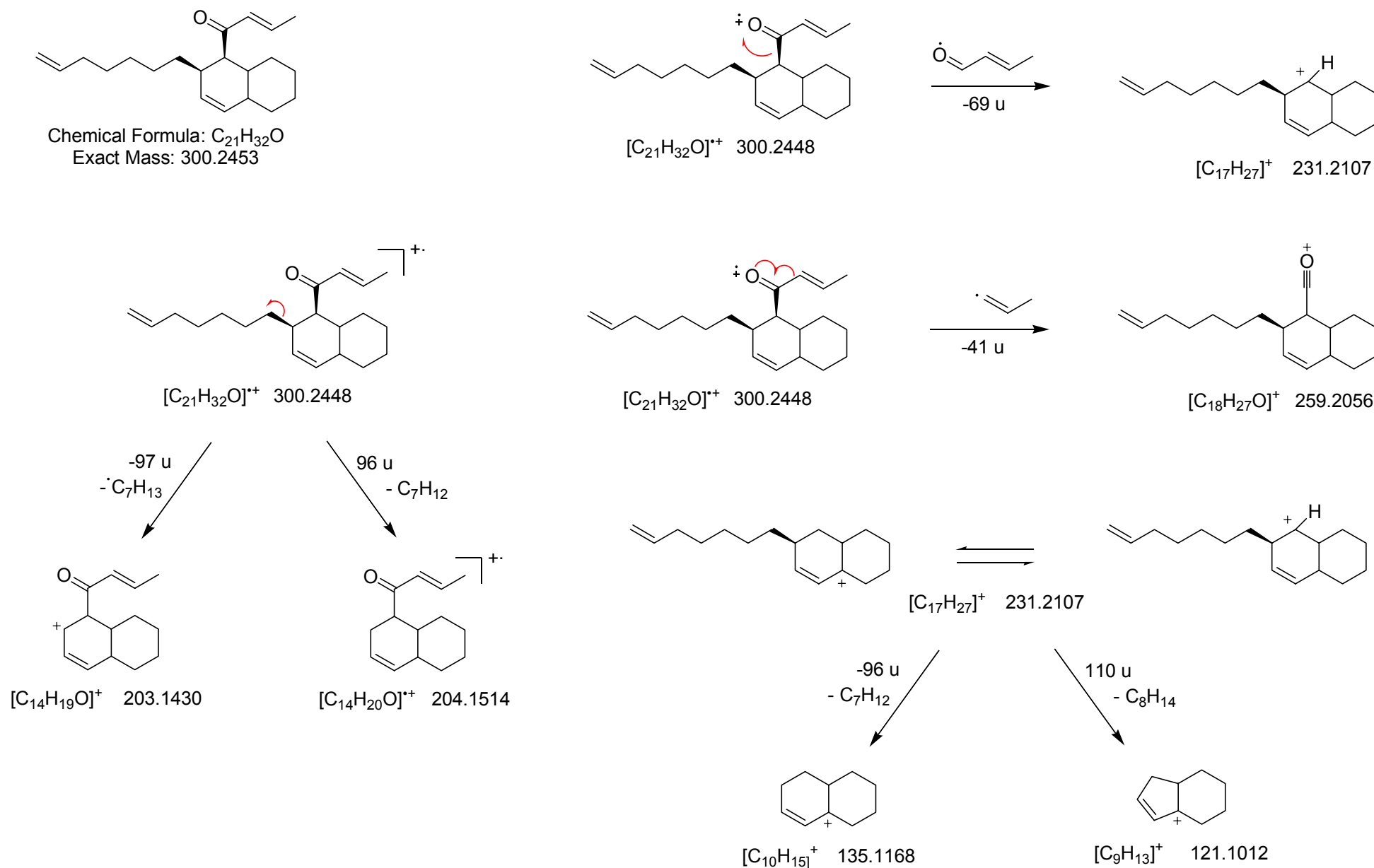


Fig. S4 Proposed EI-MS fragmentation of compound **6** (dihydrocrematoenone).

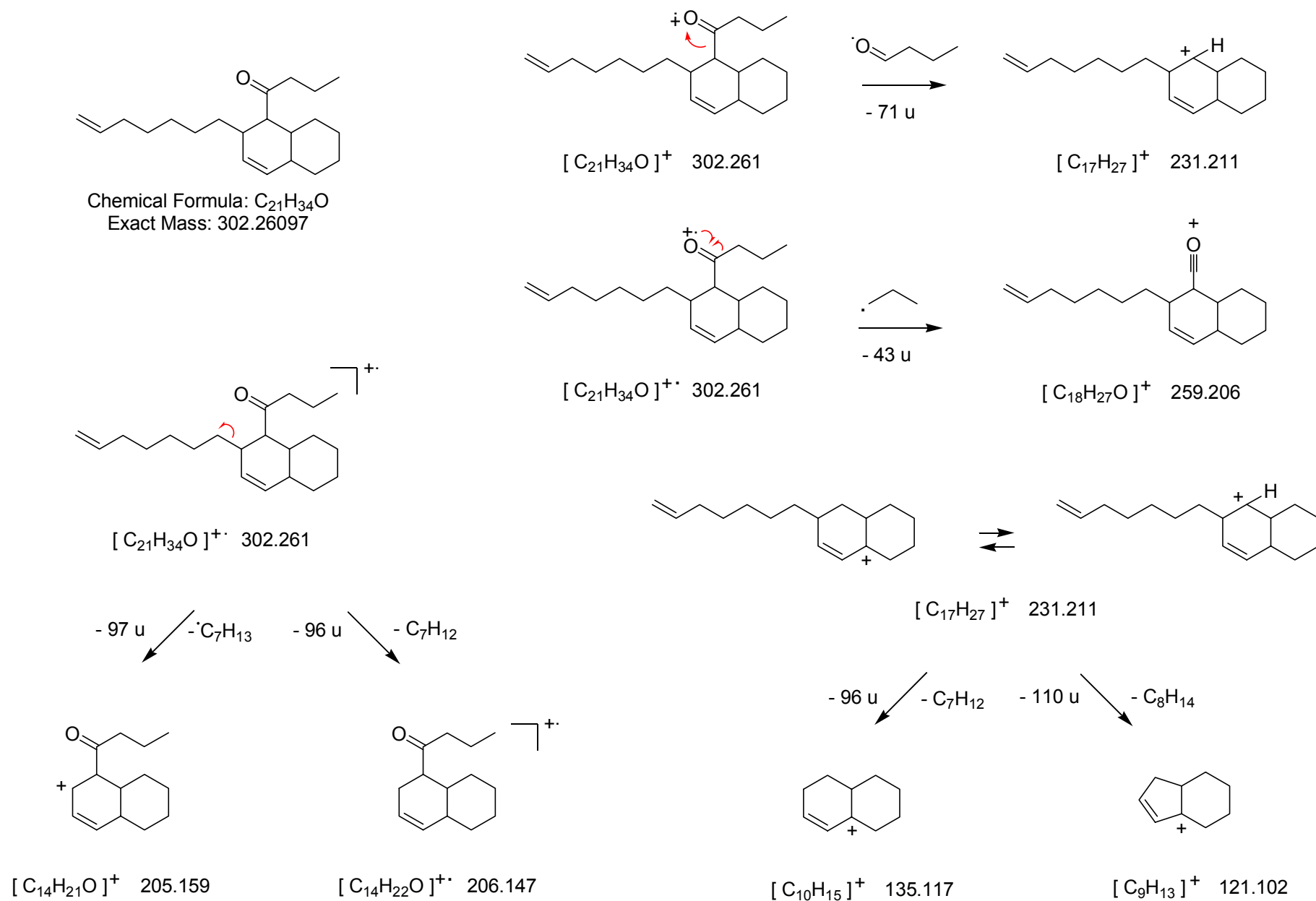
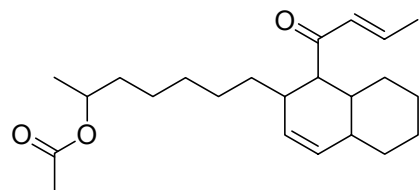
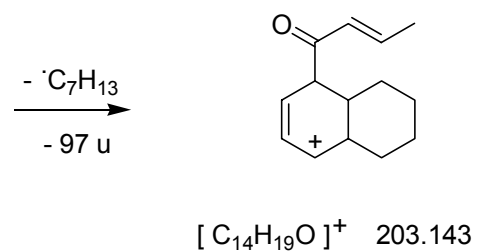
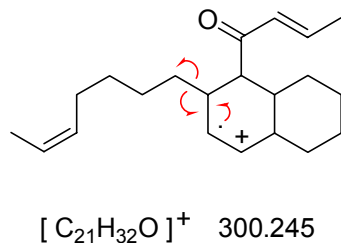
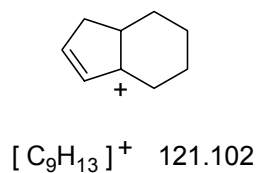
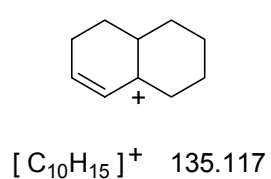
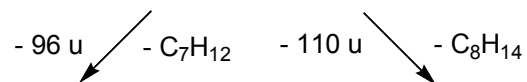
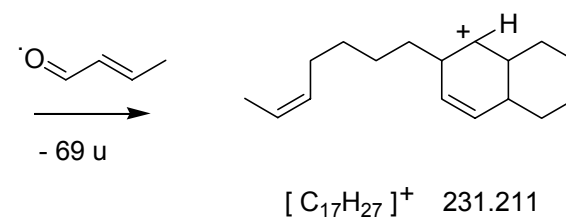
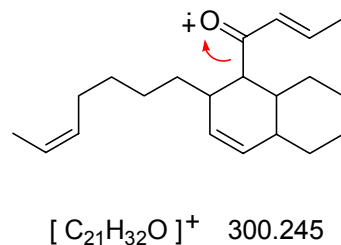
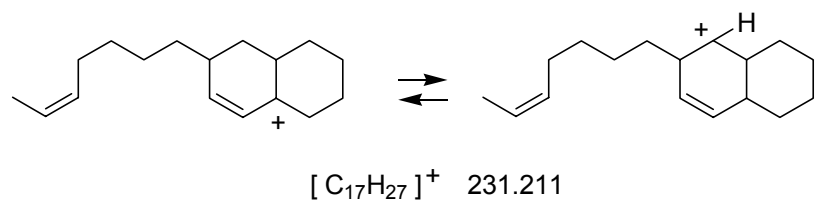
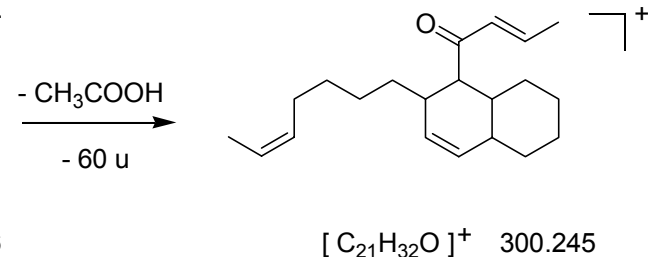
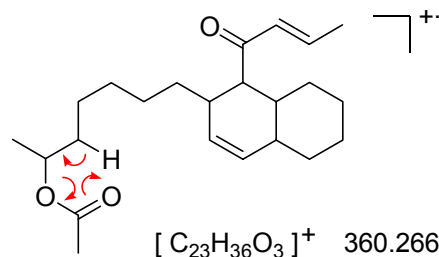


Fig. S5 Proposed EI-MS fragmentation of compound **18** (O-acetylcrematoenone).

Proposed structure for **18**
(position of O-Acetyl could be also terminal at the side chain)



Chemical Formula: $C_{23}H_{36}O_3$
Exact Mass: 360.26645



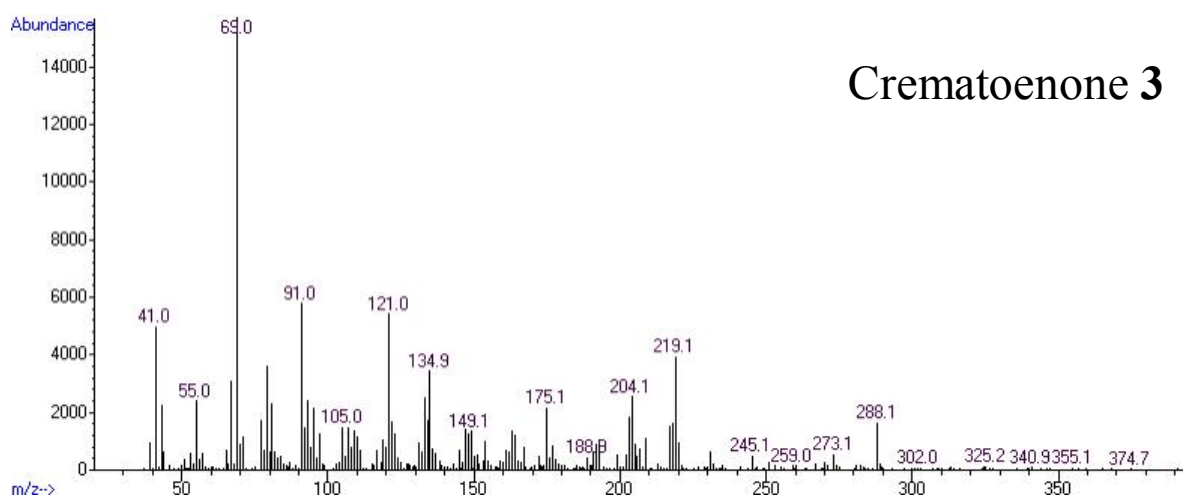
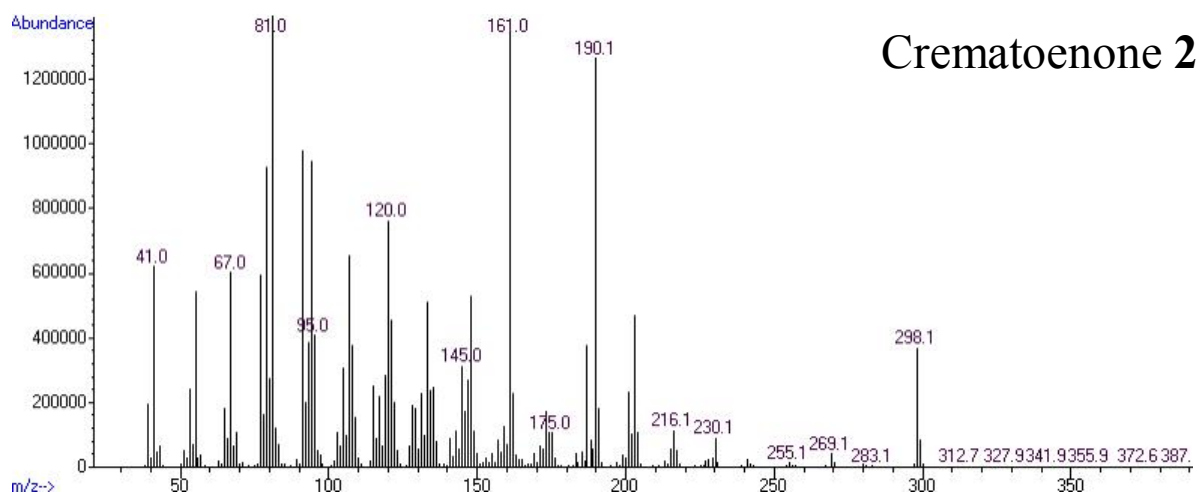
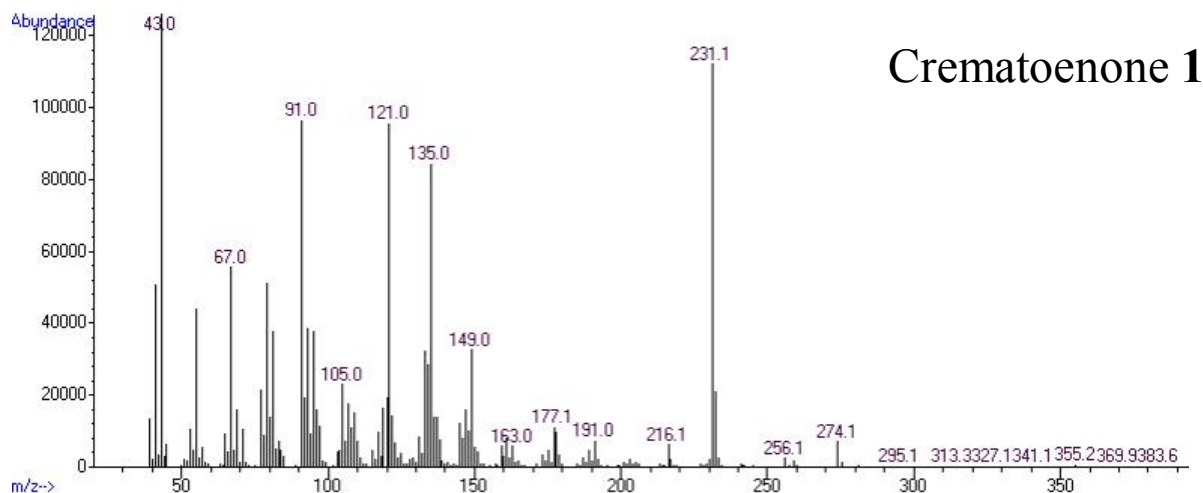


Fig. S6a. GCMS mass spectra of Crematoenones 1 to 3.

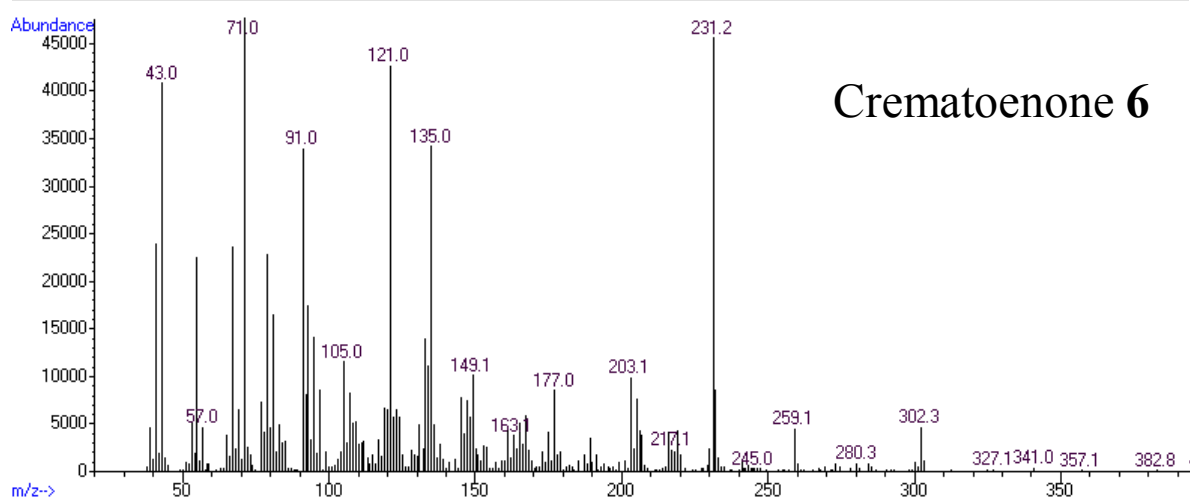
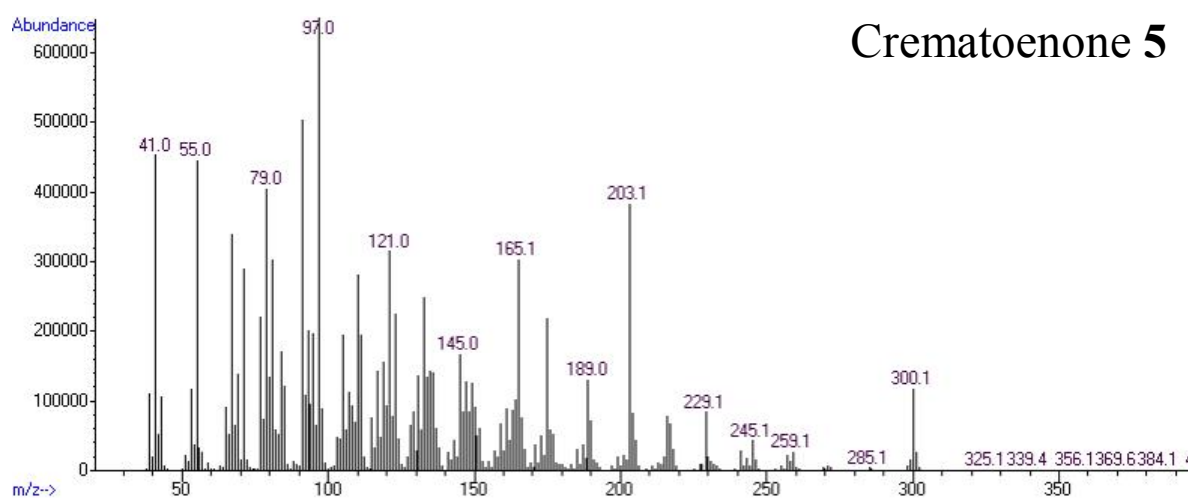
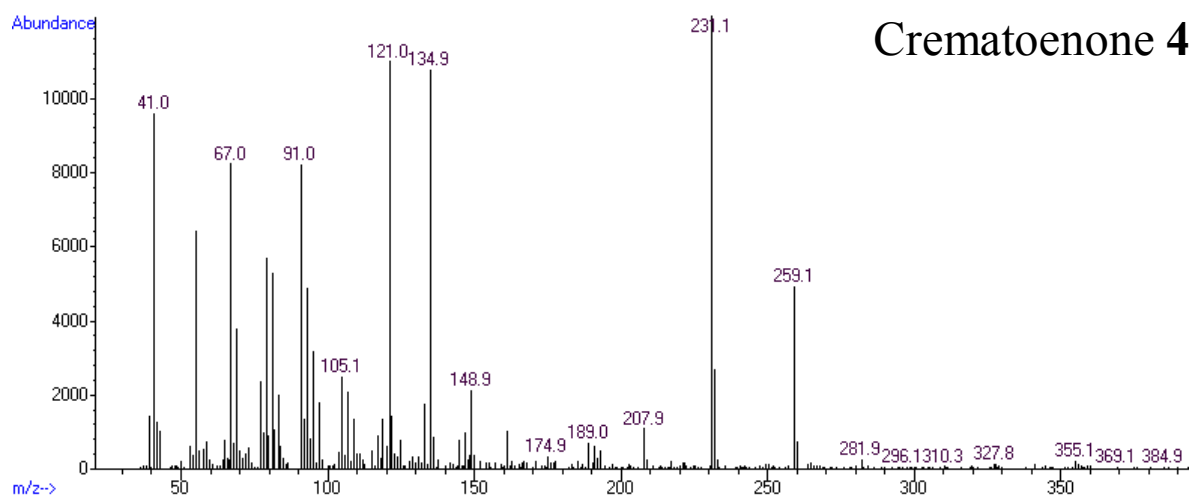


Fig. S6b. GCMS mass spectra of Crematoenones 4 to 6.

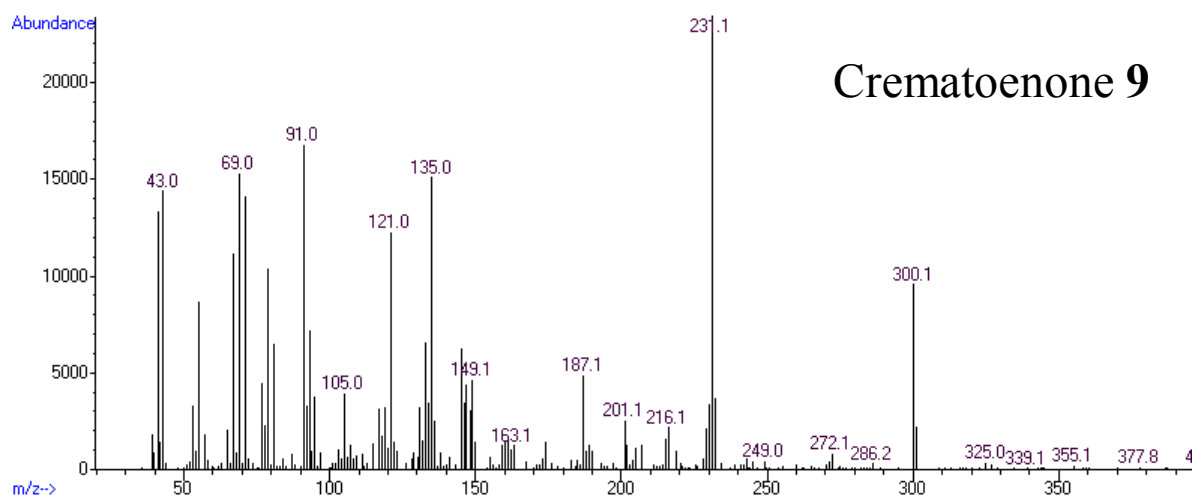
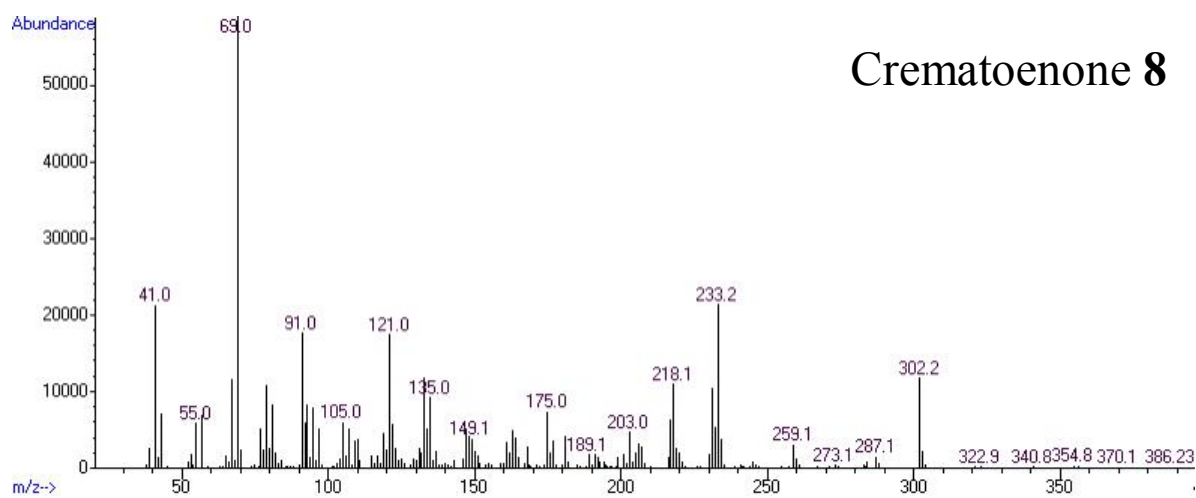
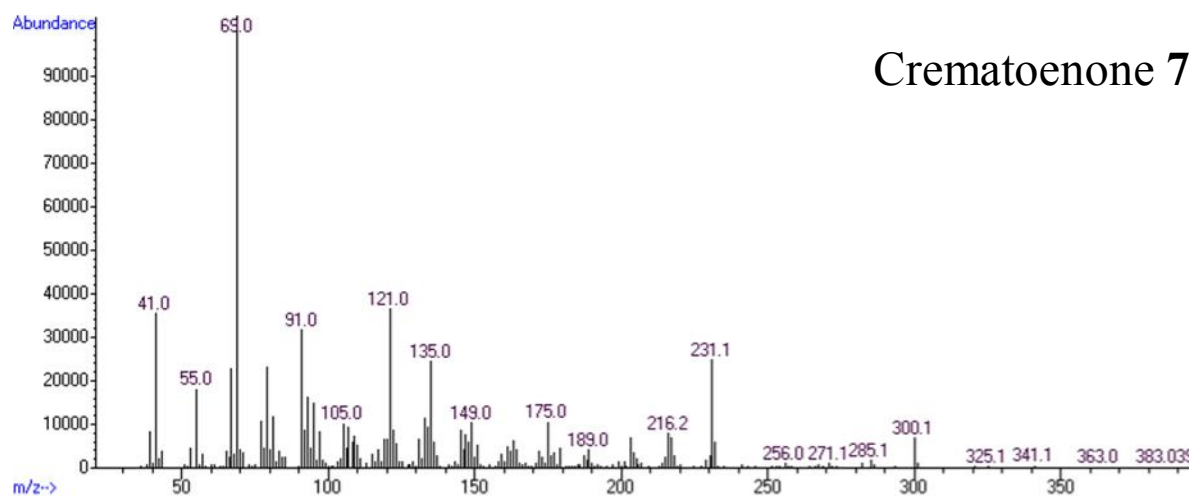


Fig. S6c. GCMS mass spectra of Crematoenones 7 to 9.

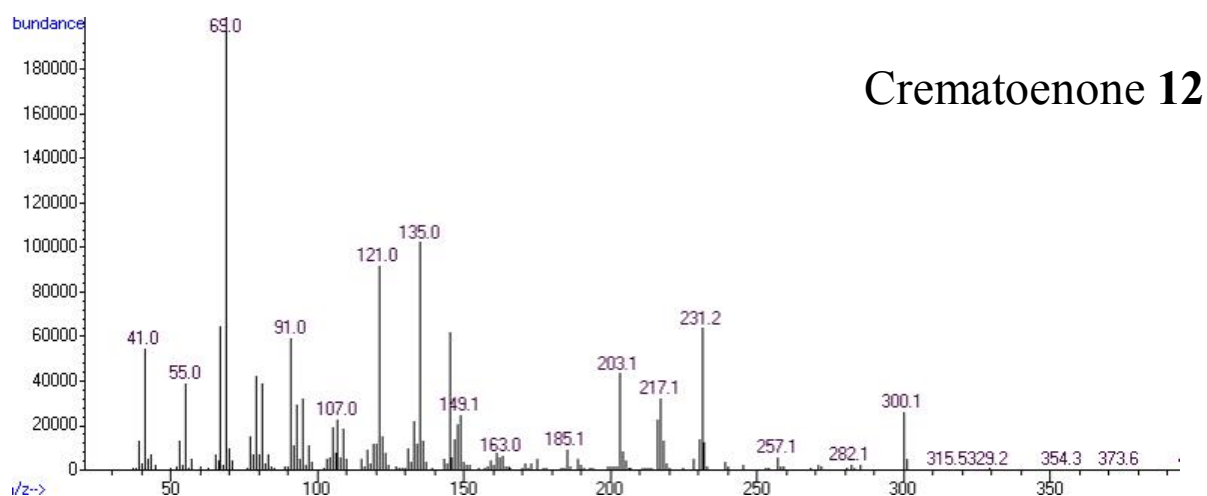
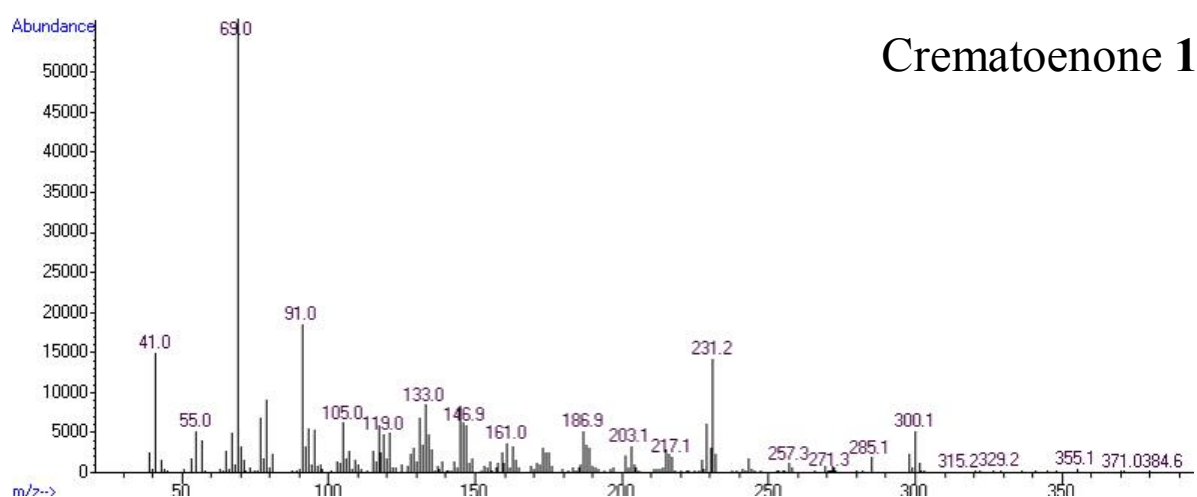
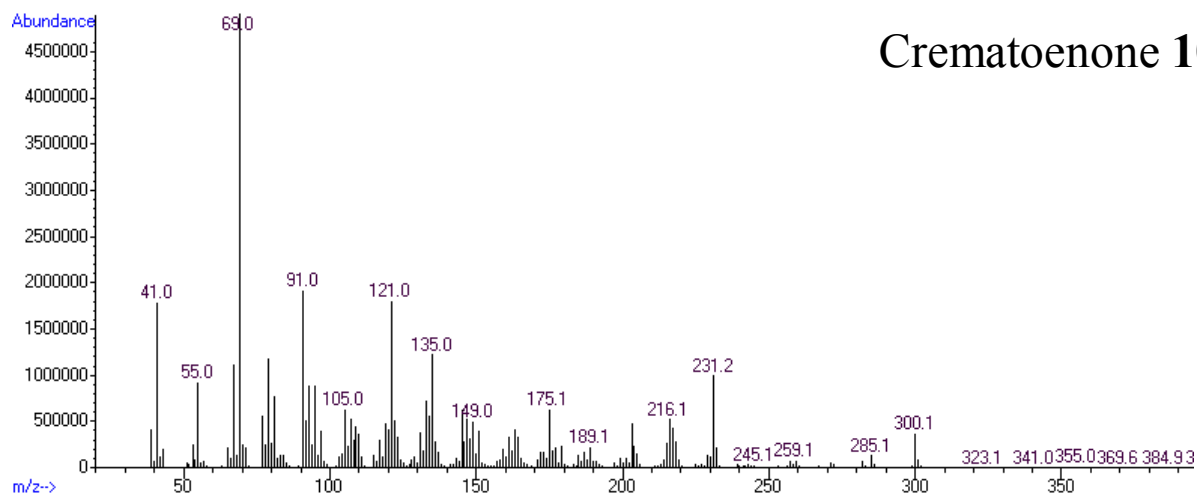


Fig. S6d. GCMS mass spectra of Crematoenones 10 to 12.

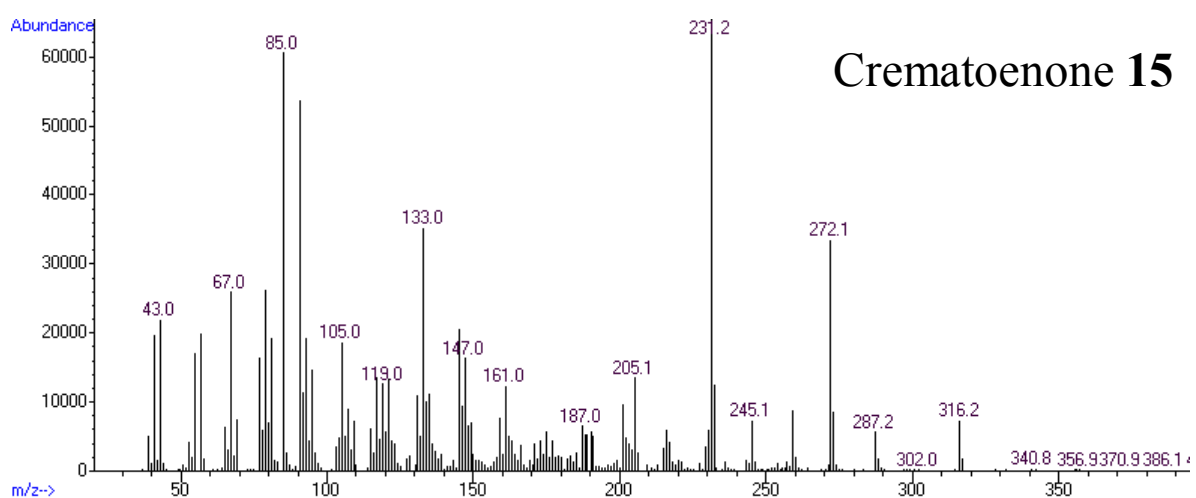
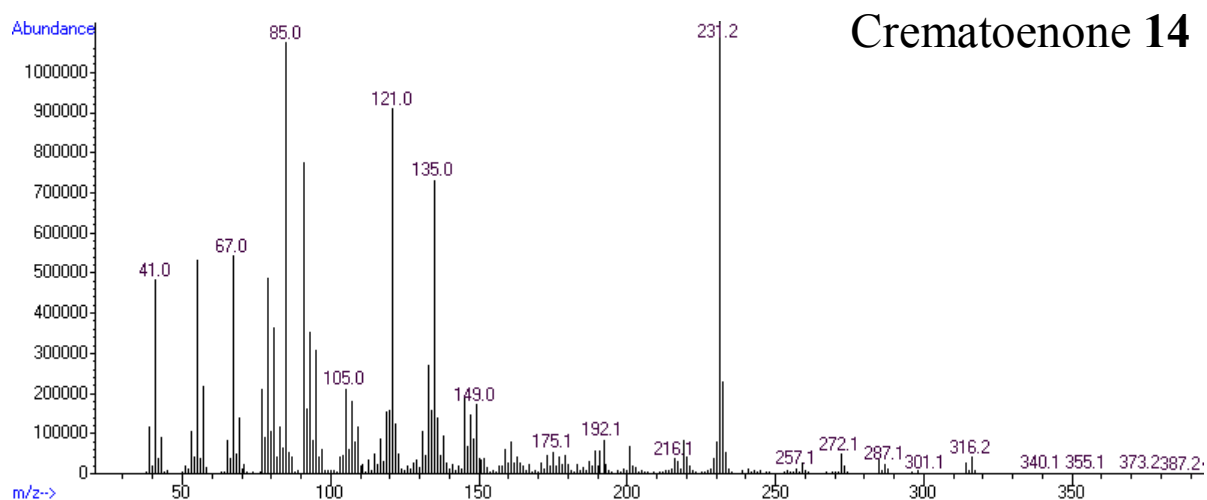
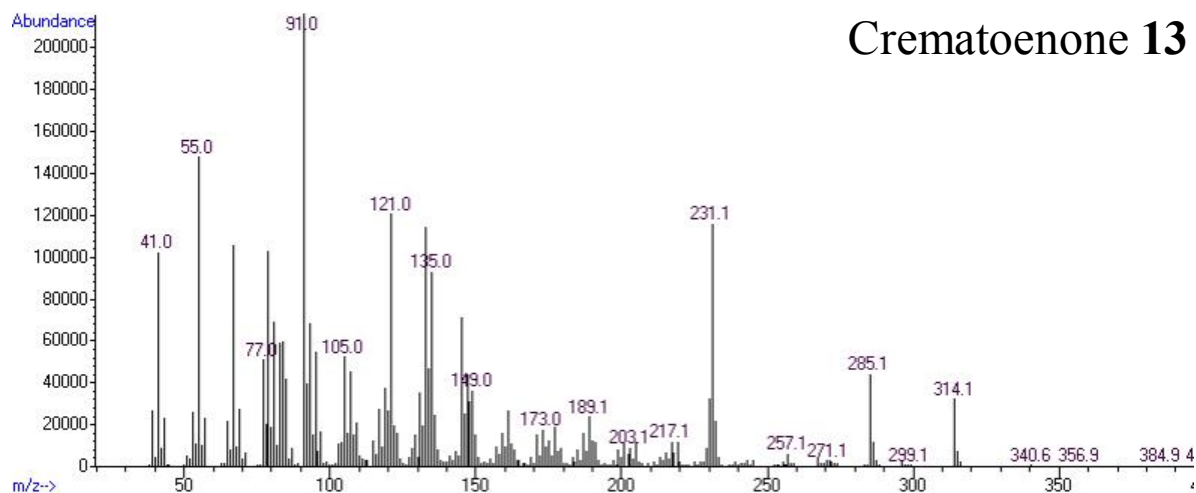


Fig. S6e. GCMS mass spectra of Crematoenones 13 to 15.

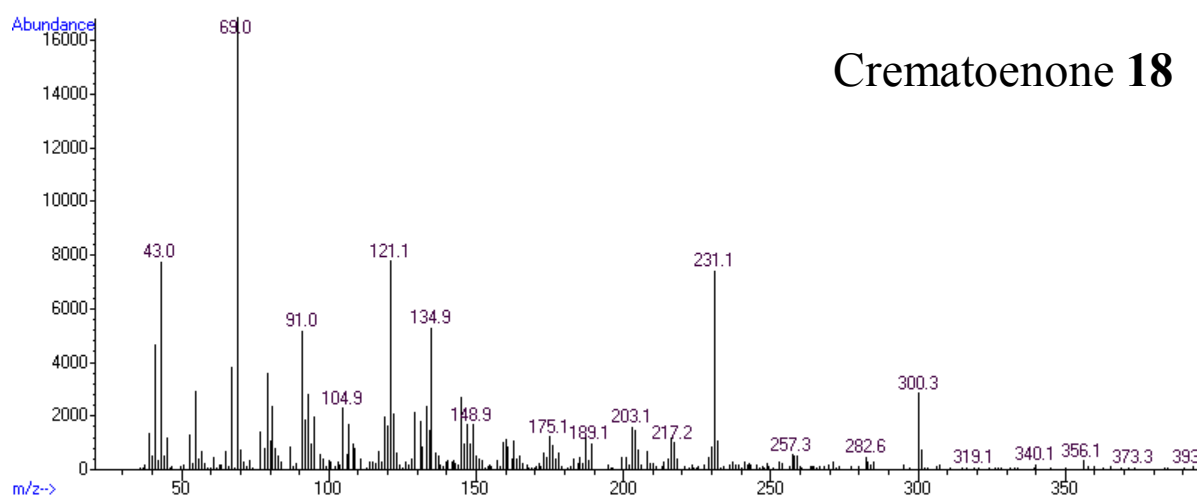
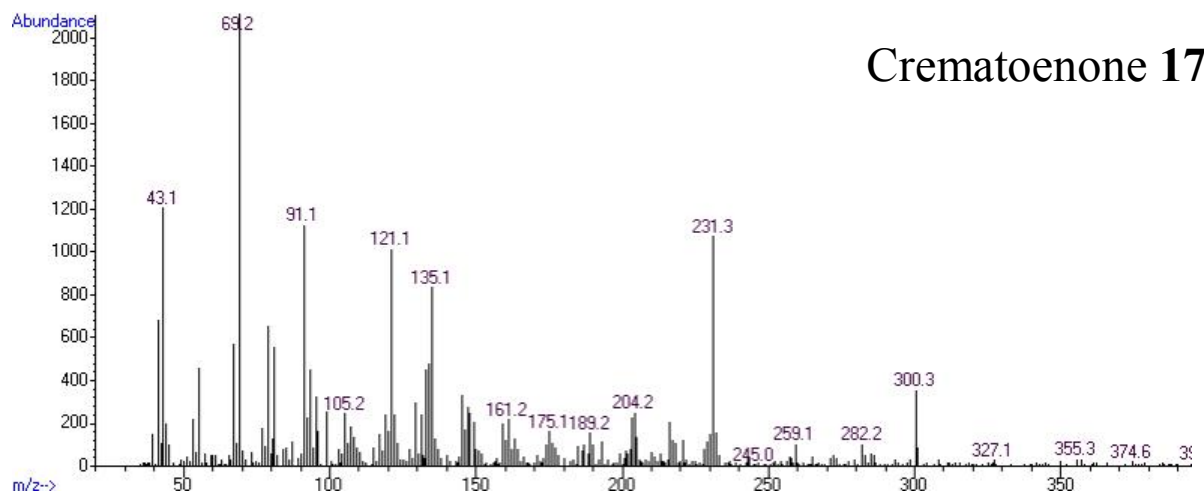
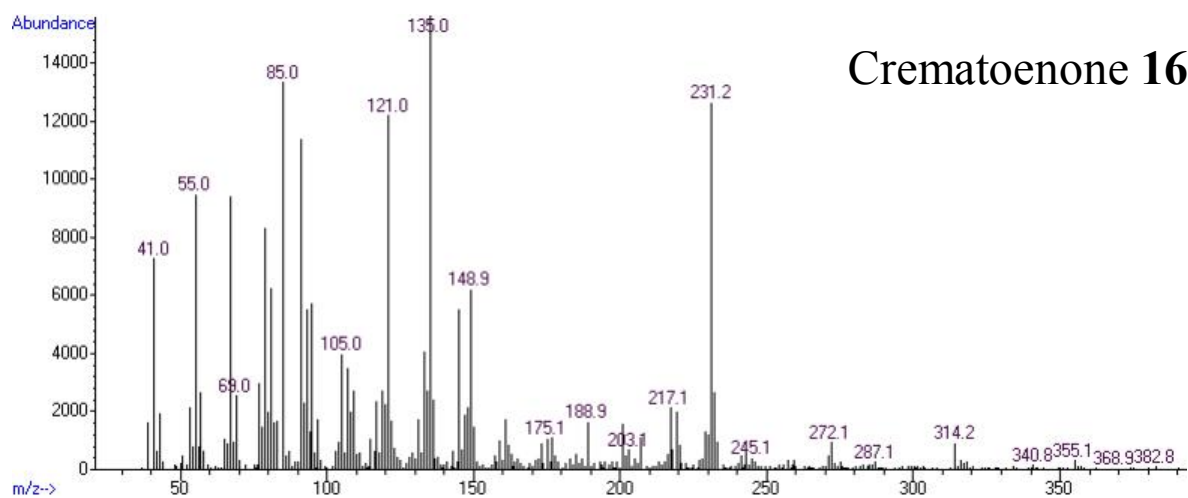


Fig. S6f. GCMS mass spectra of Crematoenones 16 to 18.

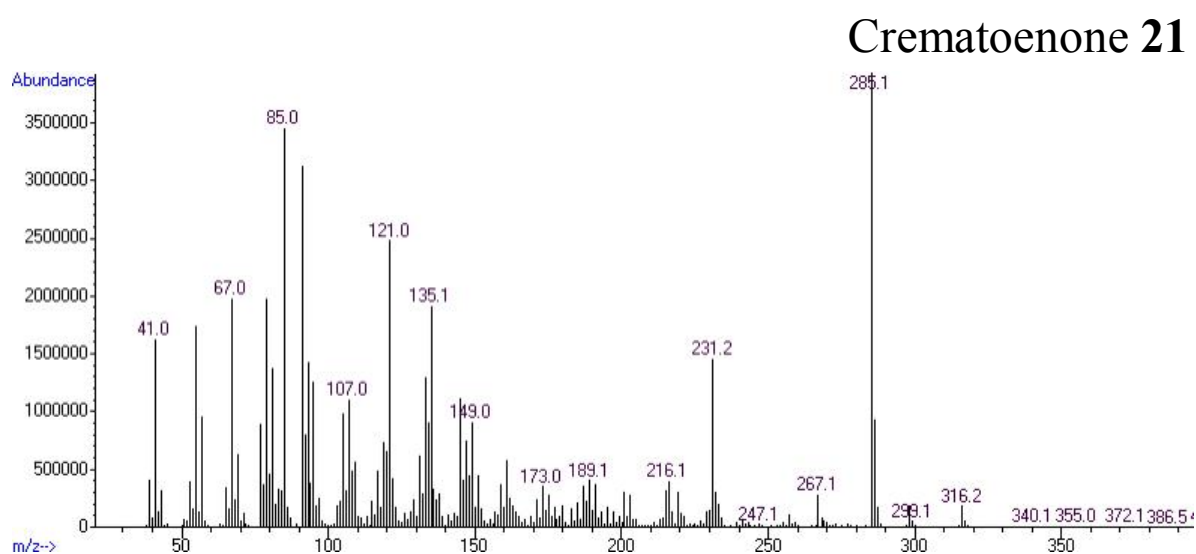
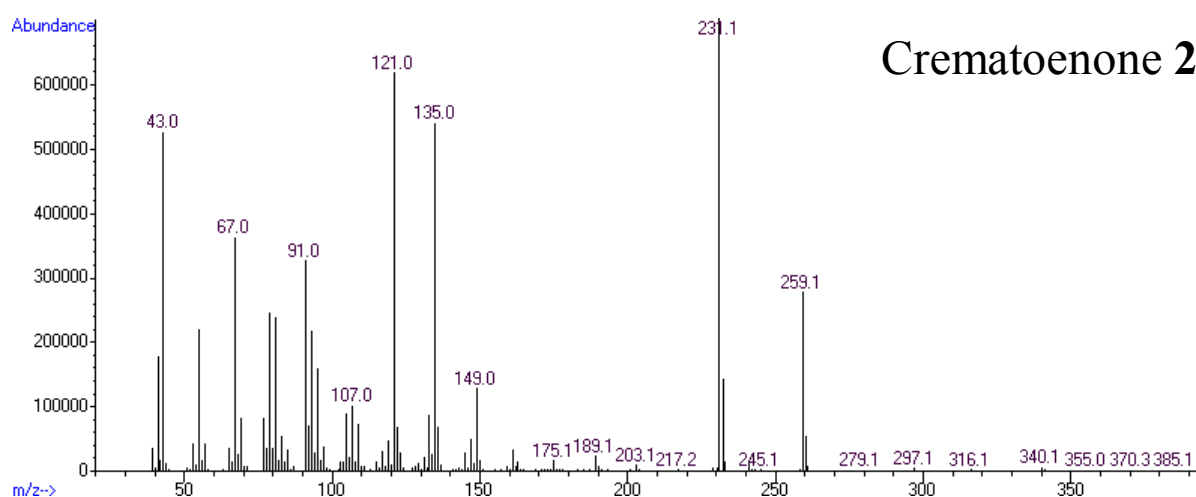
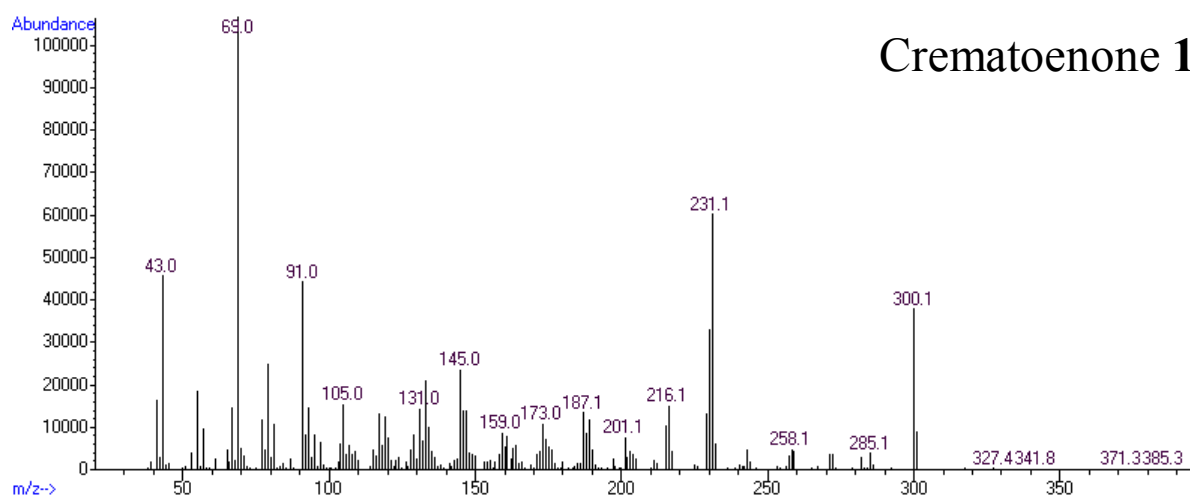


Fig. S6g. GCMS mass spectra of Crematoenones 19 to 21.

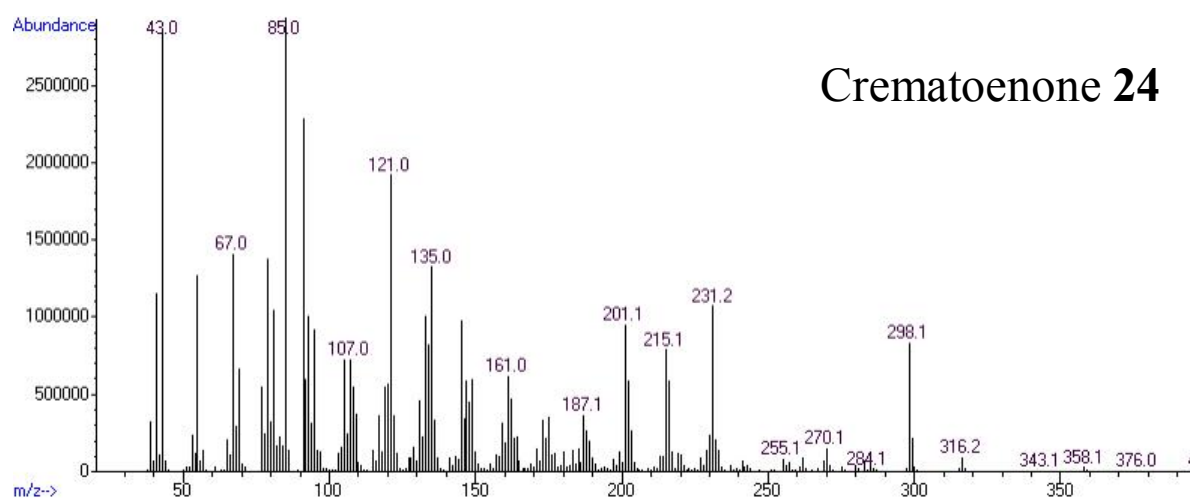
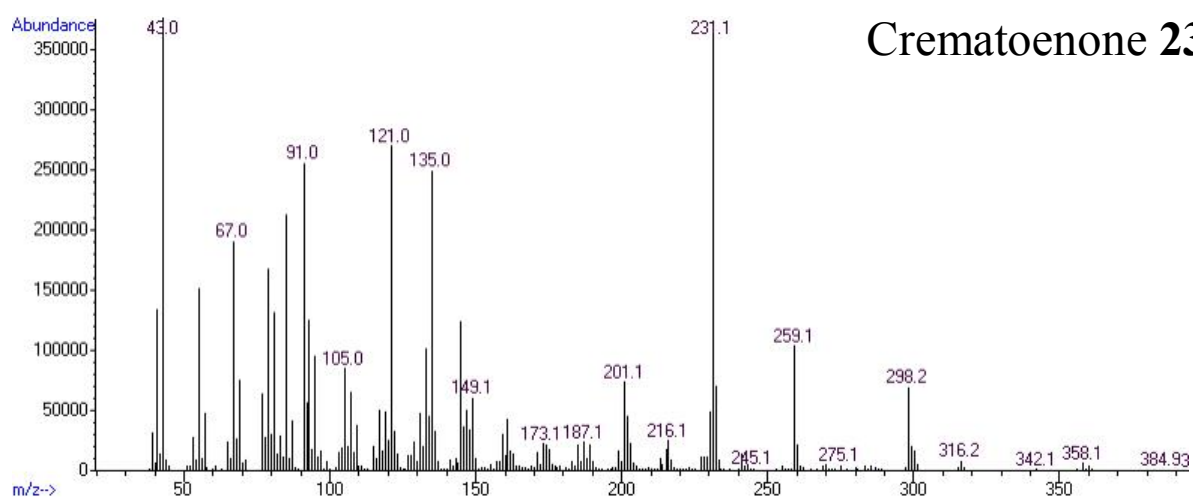
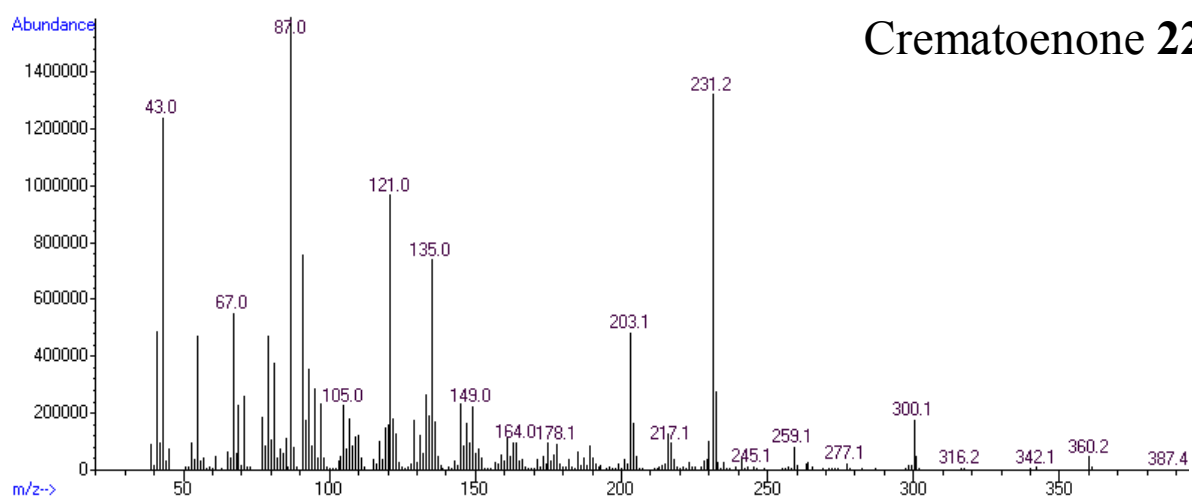


Fig. S6h. GCMS mass spectra of Crematoenones 22 to 24.