

Supplementary Materials

Figure S1. High resolution MS (**A**) and MSMS (**B**) spectra of standard chlorophyllide a.

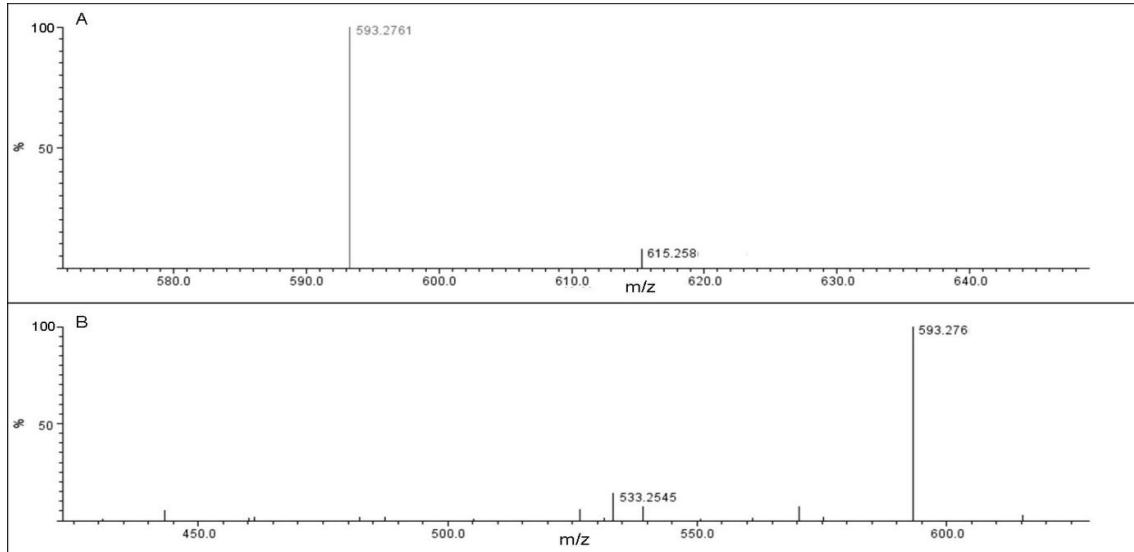


Figure S2. UV-vis (**A**), high resolution MS (**B**) and MSMS (**C**) spectra of Fraction 1 (chlorophyllide a).

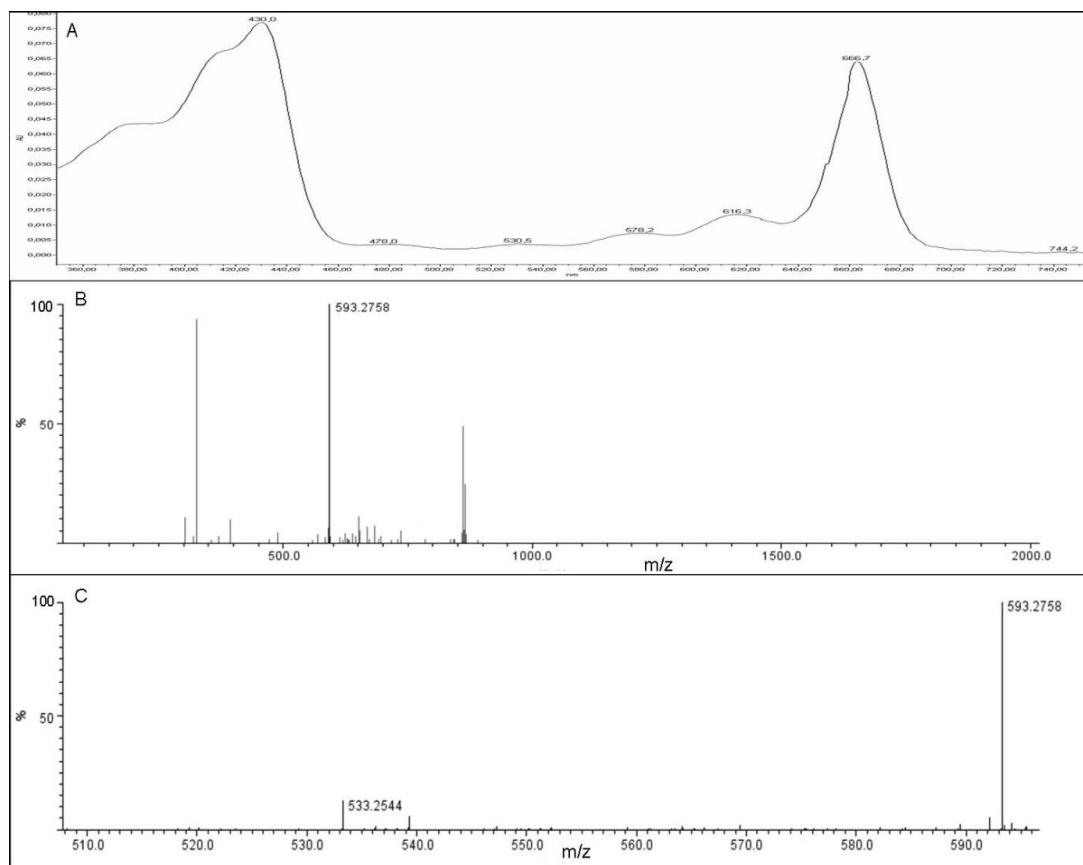


Figure S3. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of Fraction 2 (chlorophyllone).

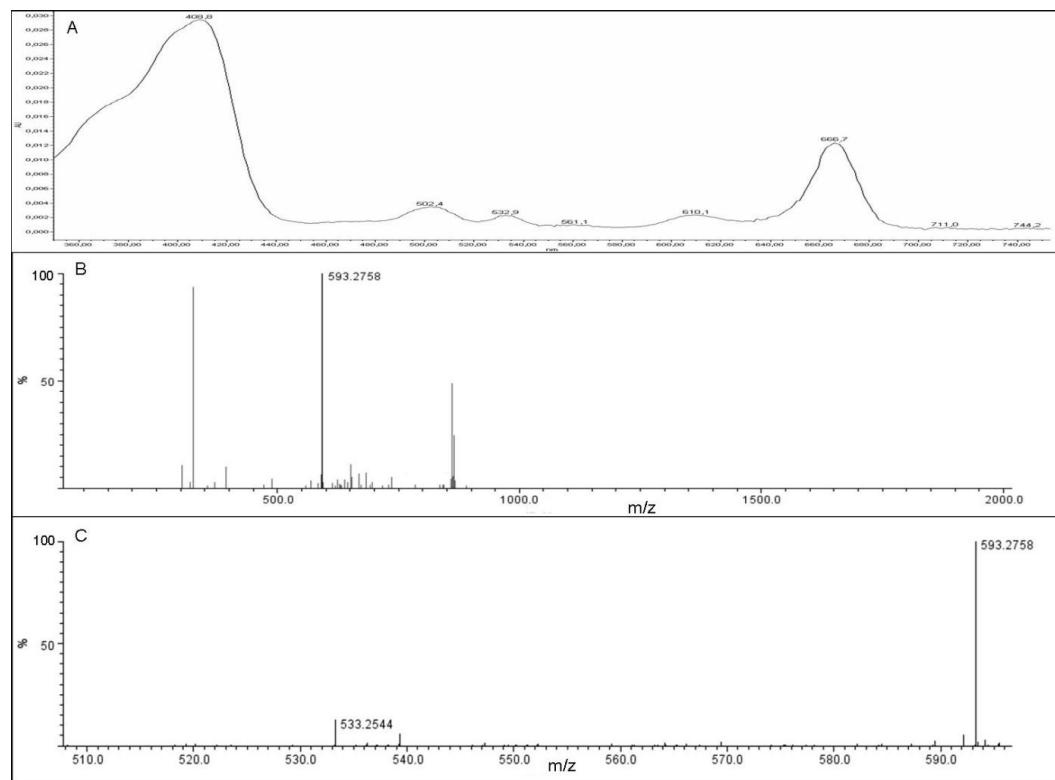


Figure S4. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard pheophorbide a.

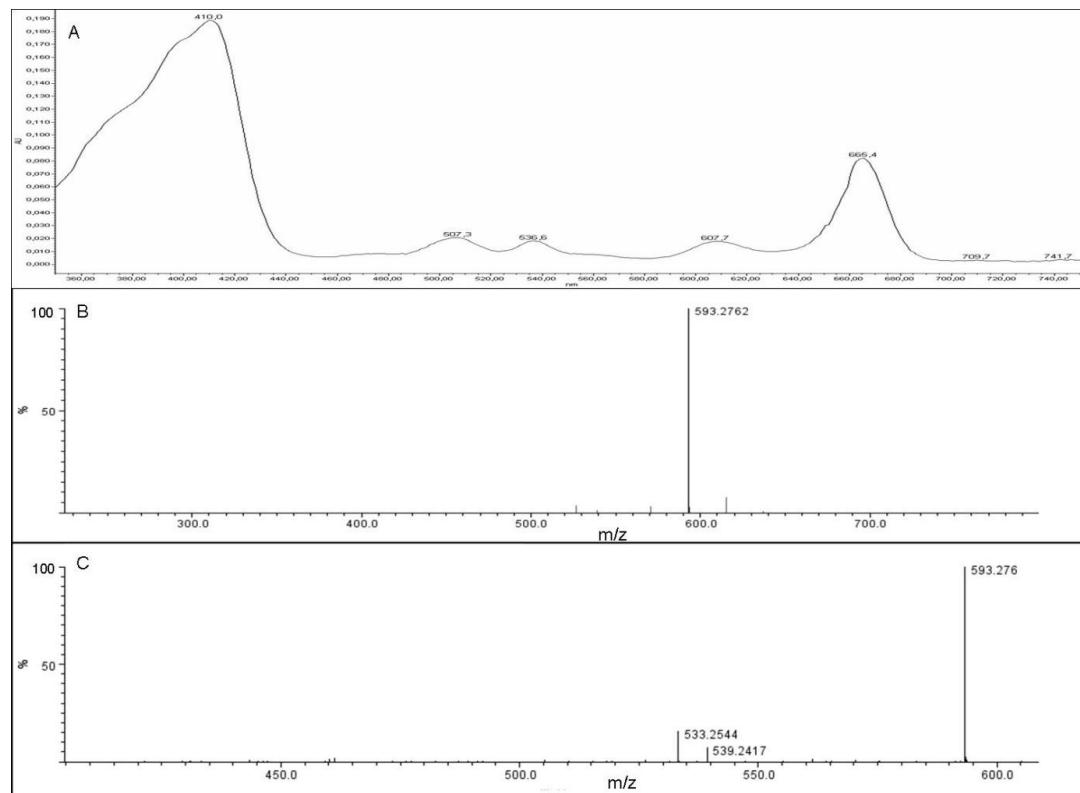


Figure S5. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of Fraction 3 (pheophorbide a).

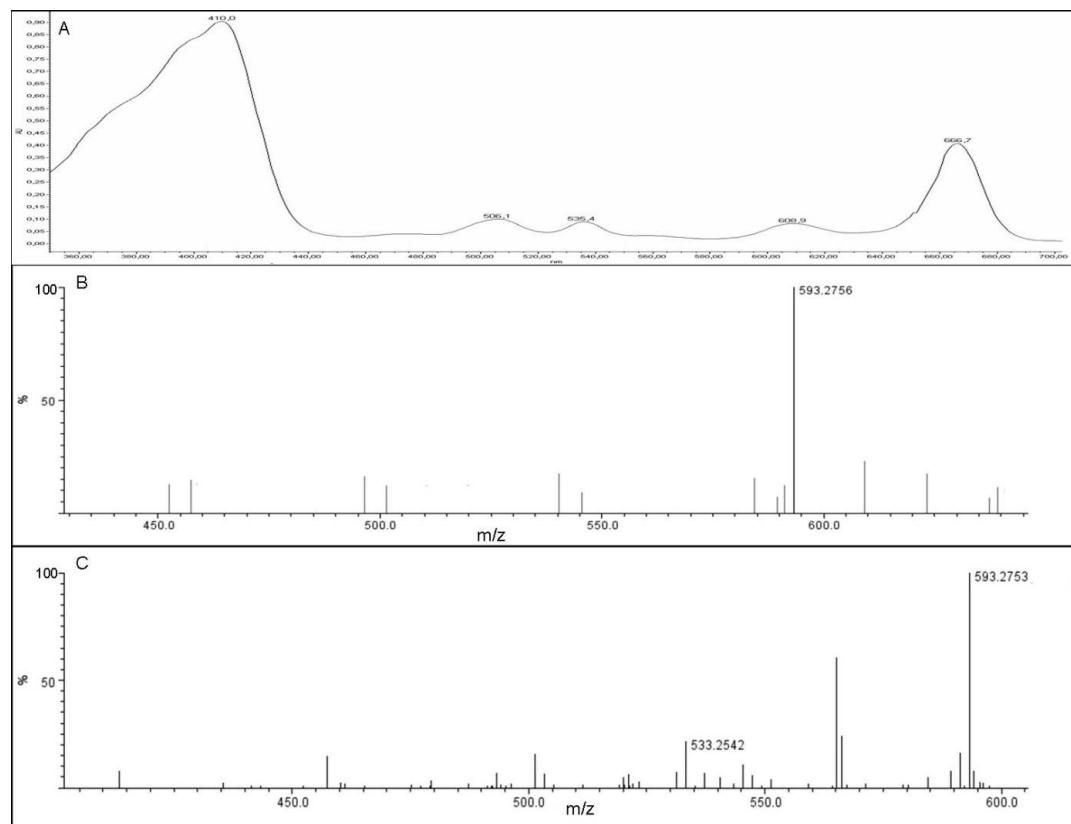


Figure S6. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard pyropheophorbide a.

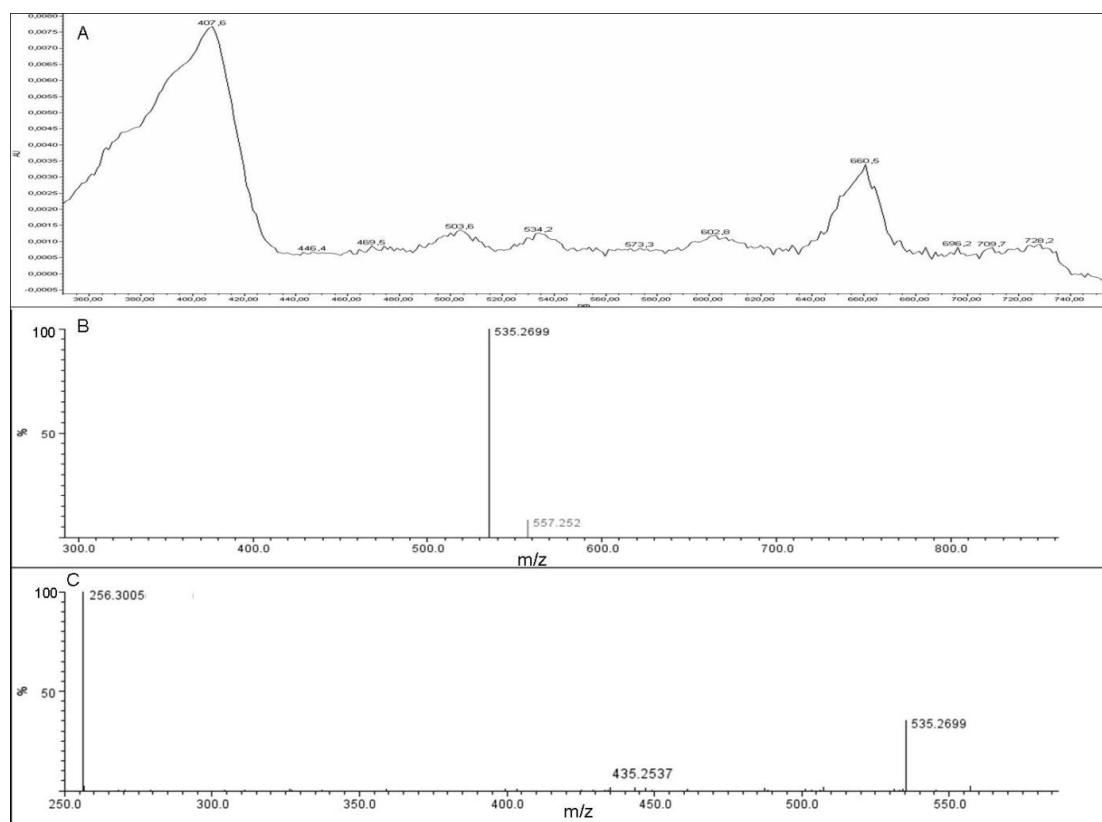


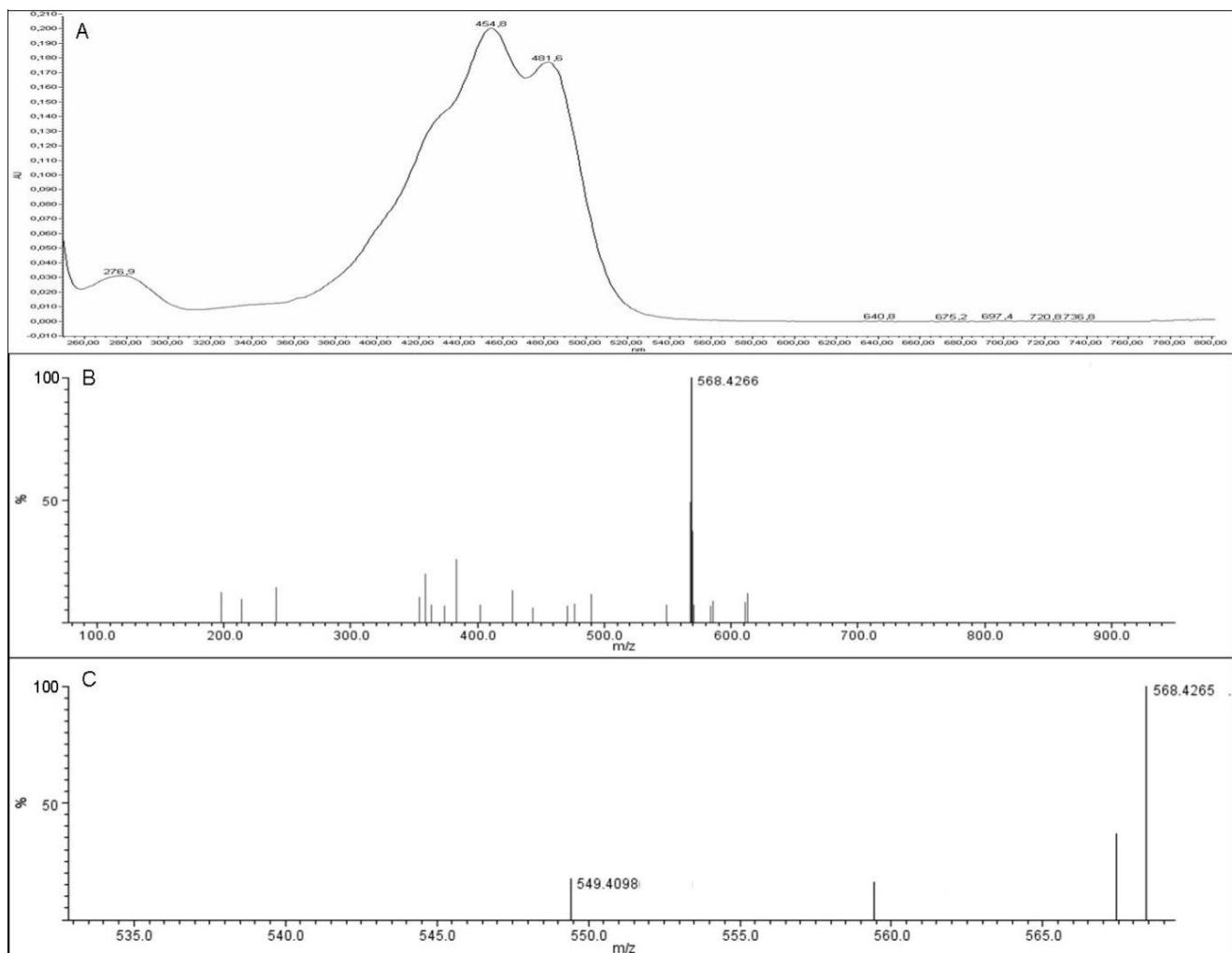
Figure S7. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard zeaxanthin.

Figure S8. UV-vis (A and D), high resolution MS (B and E) and MSMS (C and F) spectra of Fraction 4. The A, B and C spectra correspond to pyropheophorbide a. The D, E and F spectra correspond to zeaxanthin.

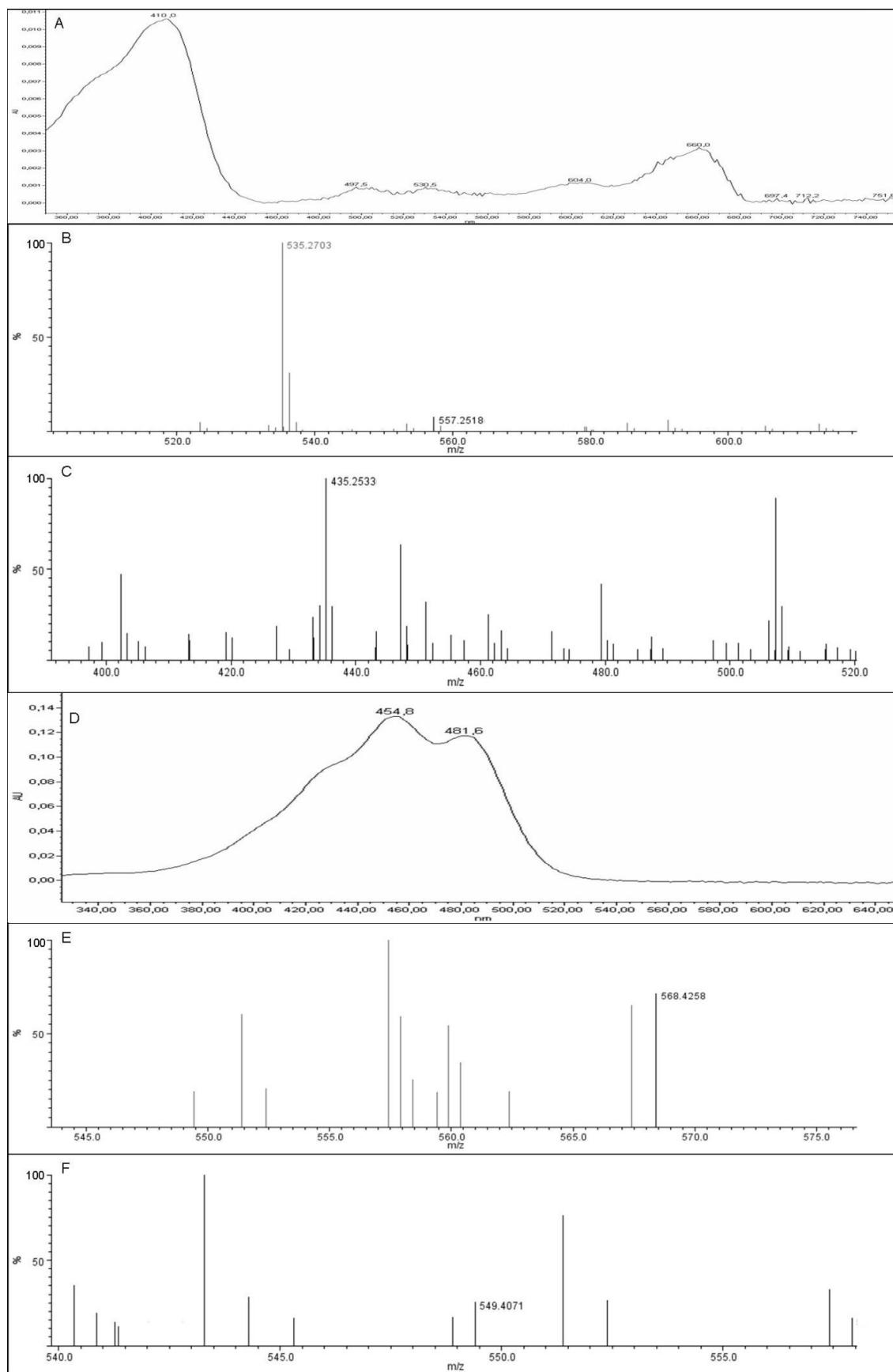


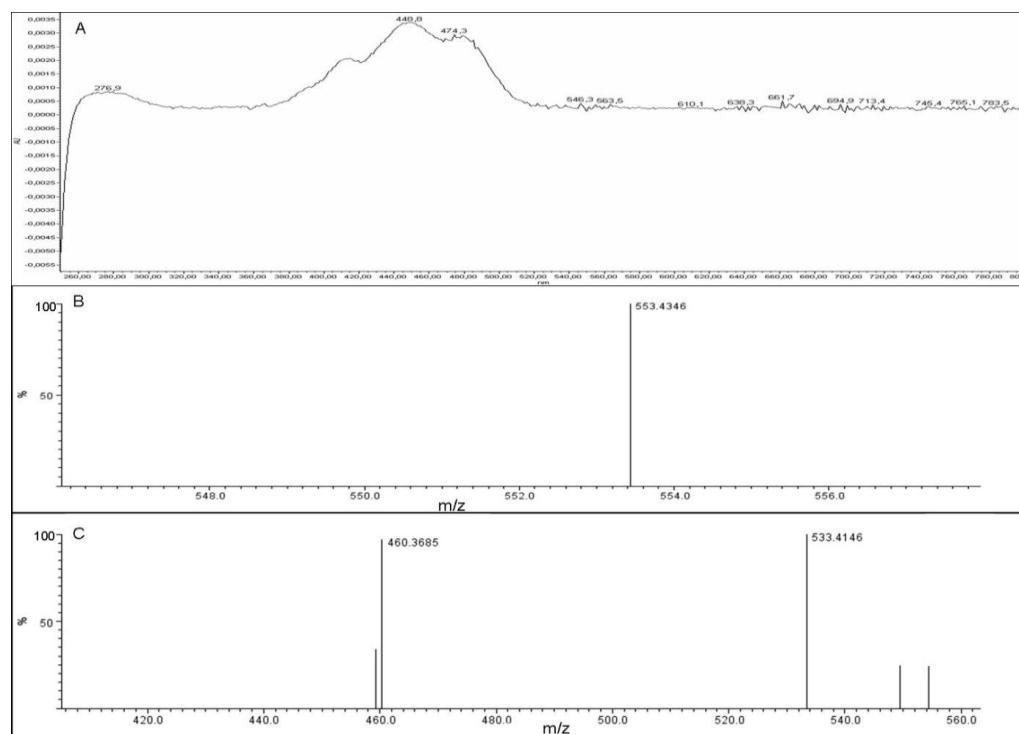
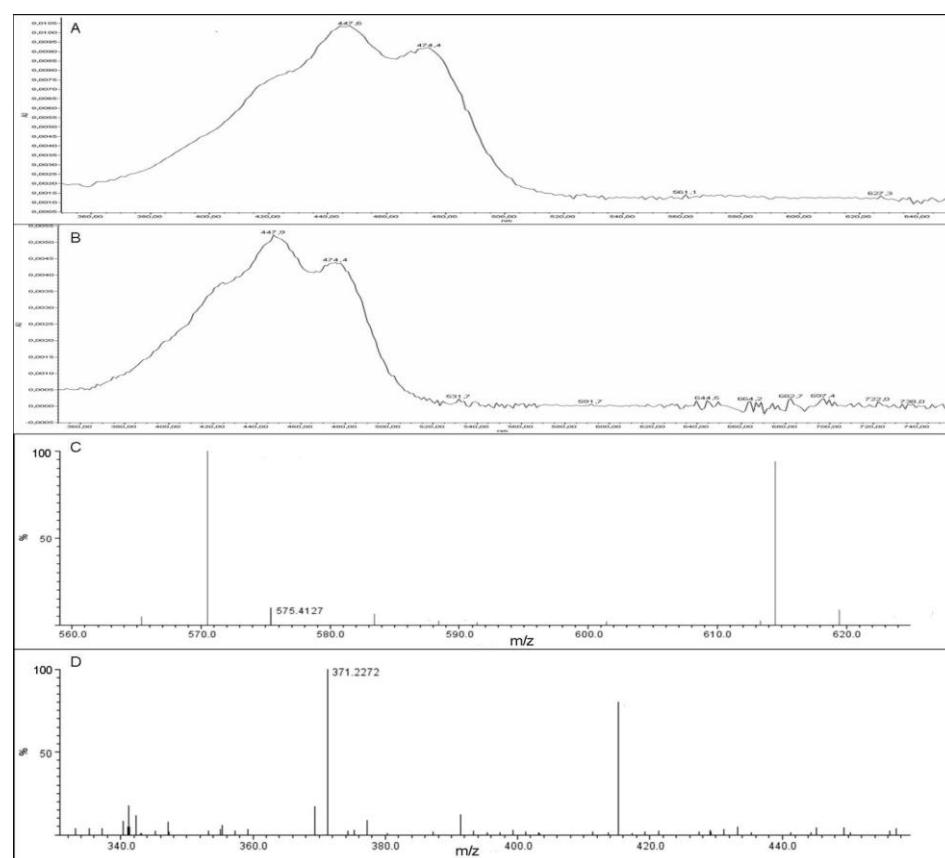
Figure S9. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard β -cryptoxanthin.**Figure S10.** UV-vis (A and B), high resolution MS (C) and MSMS (D) spectra of Fraction 5. The A spectrum corresponds to 5,6-epoxy- β -cryptoxanthin. The B, C and D spectra correspond to β -cryptoxanthin.

Figure S11. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard chlorophyll a.

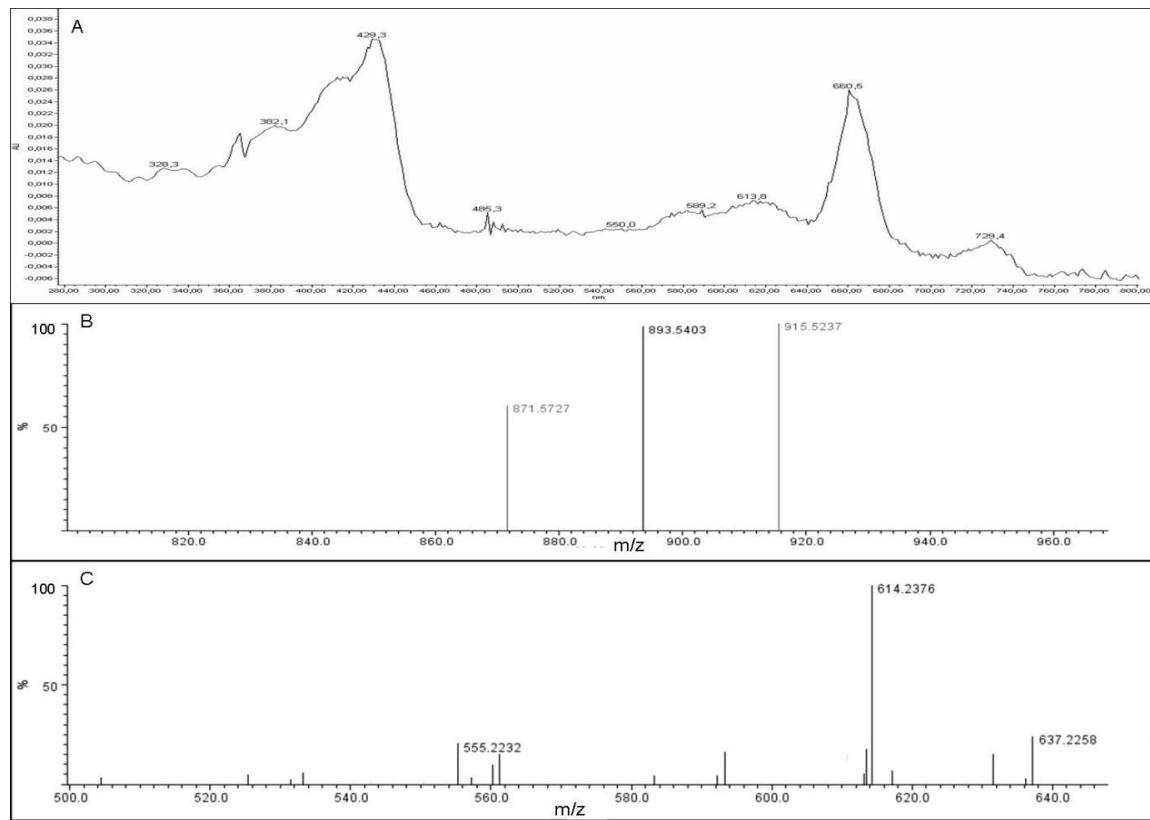


Figure S12. UV-vis (A, D and G), high resolution MS (B and E) and MSMS (C and F) spectra of Fraction 6. The A, B and C spectra correspond to chlorophyll a. The D, E and F spectra correspond to pheophytin a. The G spectrum corresponds to the unidentified carotenoid.

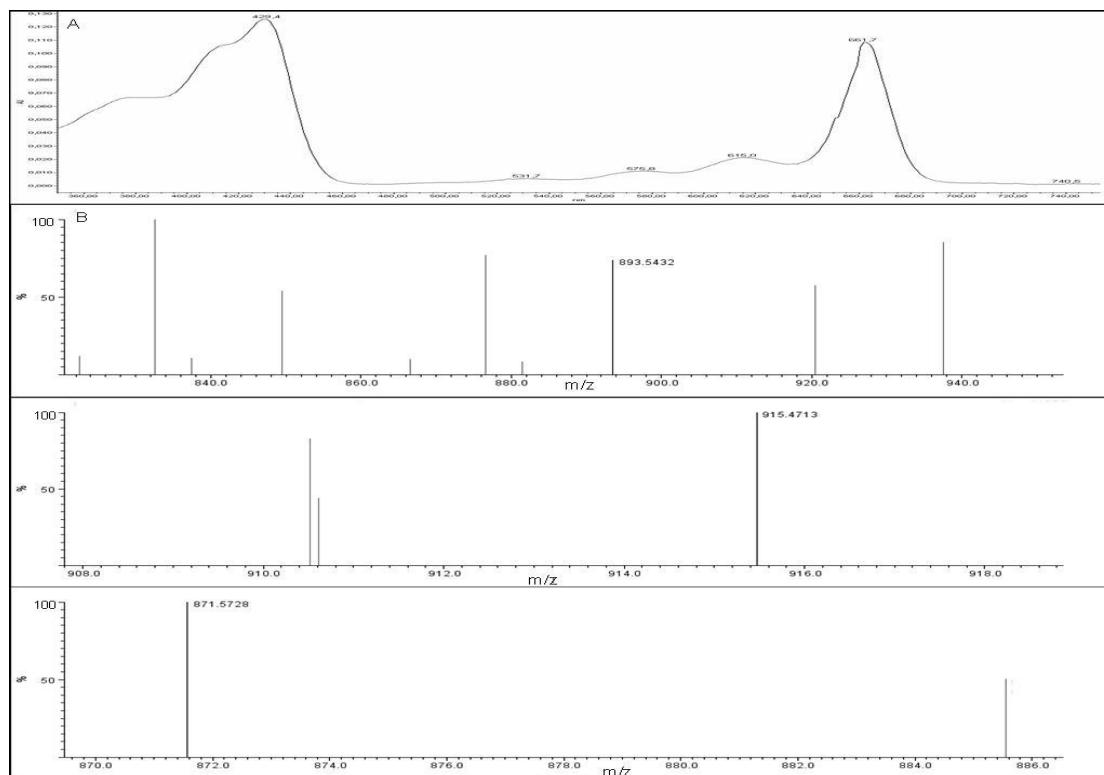


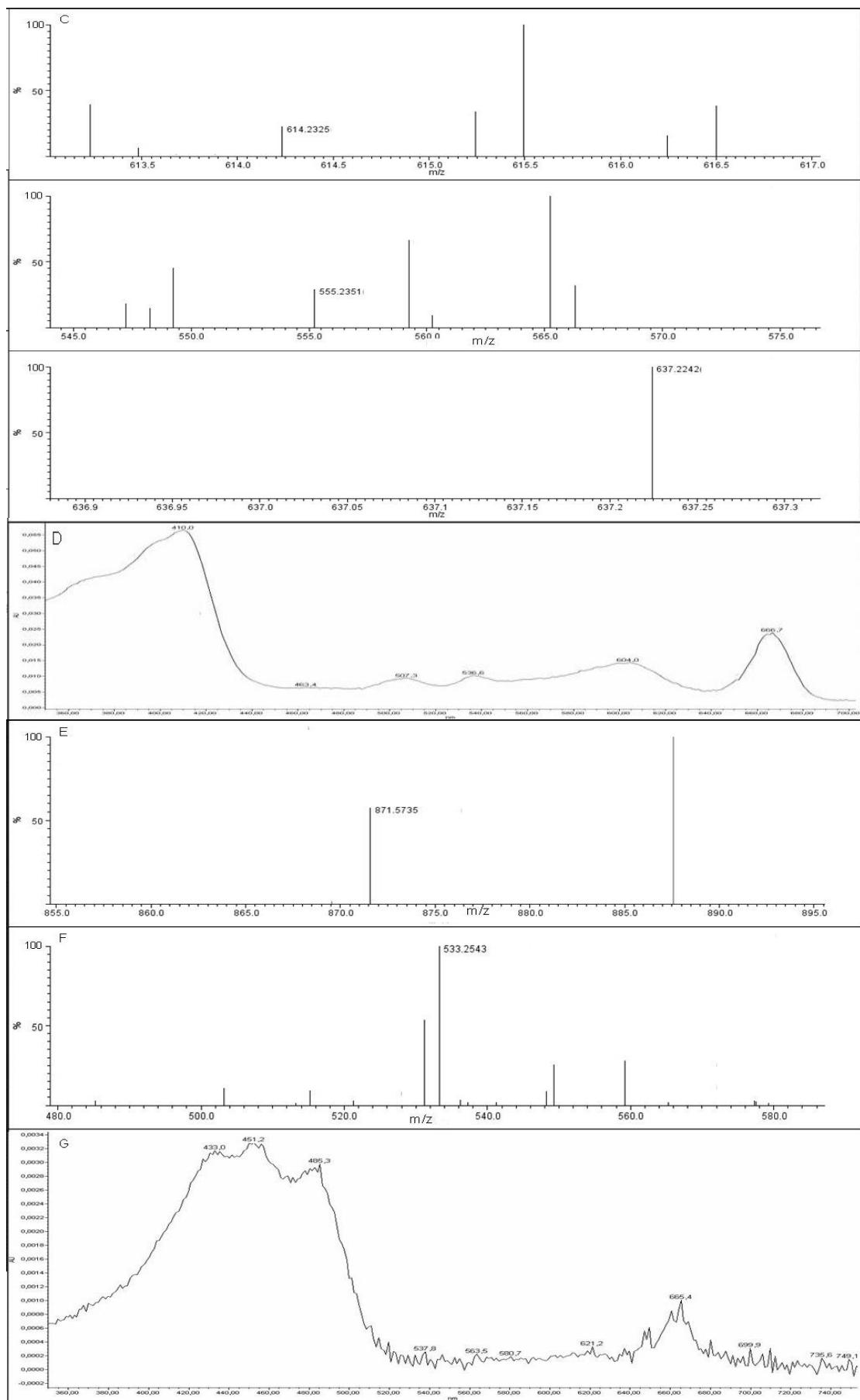
Figure S12. Cont.

Figure S13. UV-vis (A, D, G, H, I and J), high resolution MS (B and E) and MSMS (C and F) spectra of Fraction 7. The A, B and C spectra correspond to chlrorophyll a epimer. The D, E and F spectra correspond to pheophytin a. The G spectrum corresponds to DV-pheophytin a. The H spectrum corresponds to MV-pheophytin a. The I spectrum corresponds to mutatochrome. The J spectrum corresponds to purpurin-7-phytyl ester.

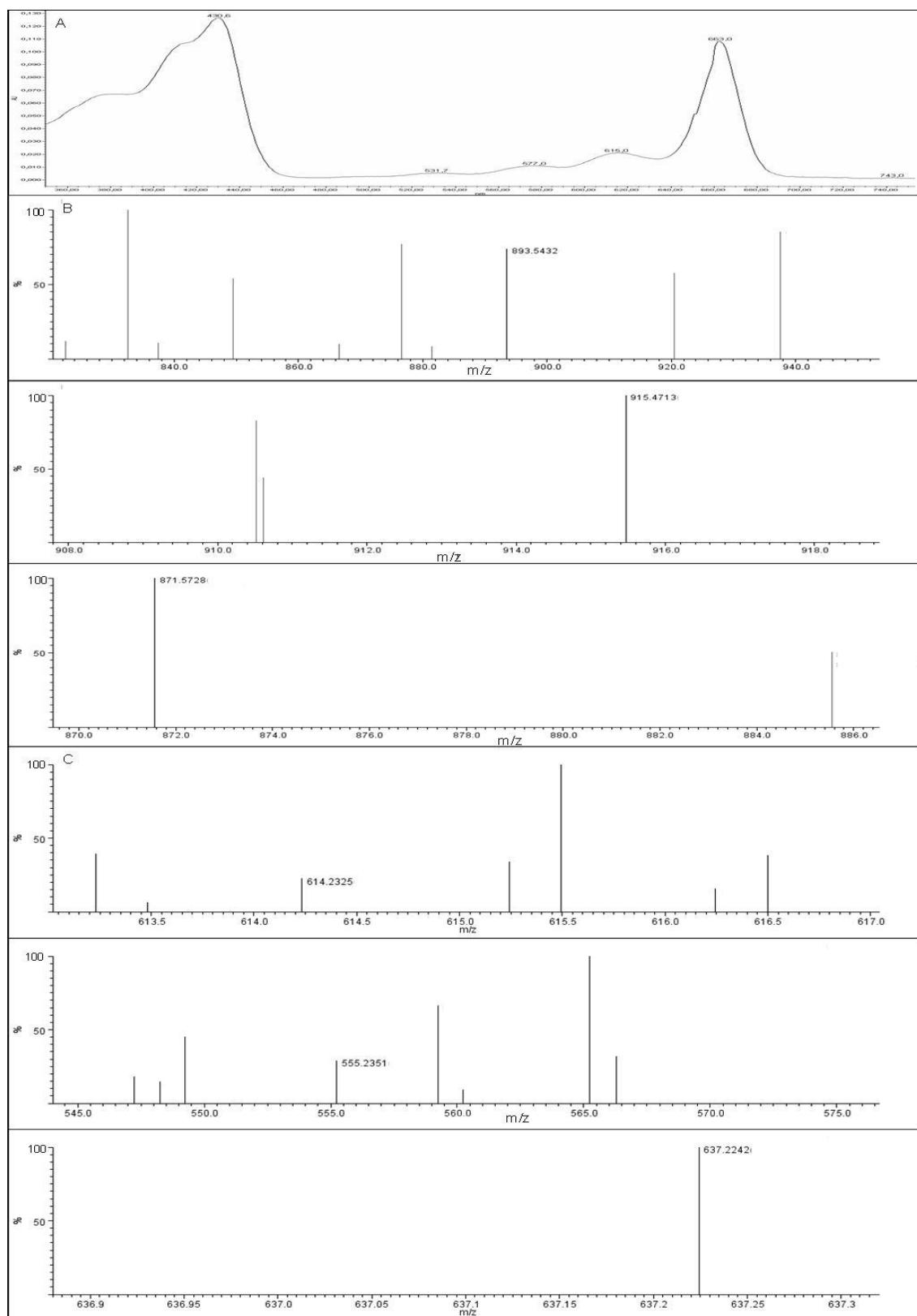


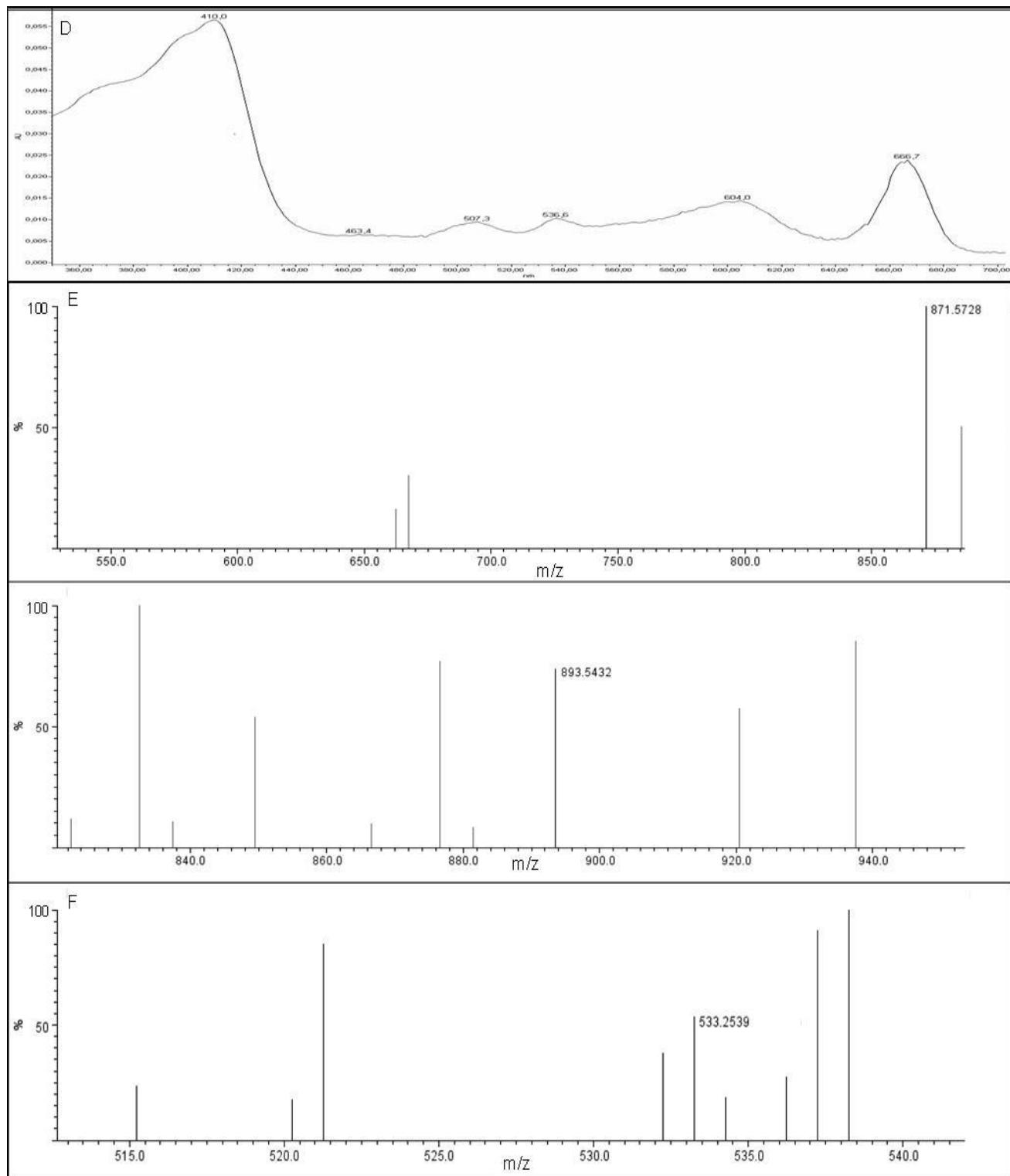
Figure S13. Cont.

Figure S13. Cont.

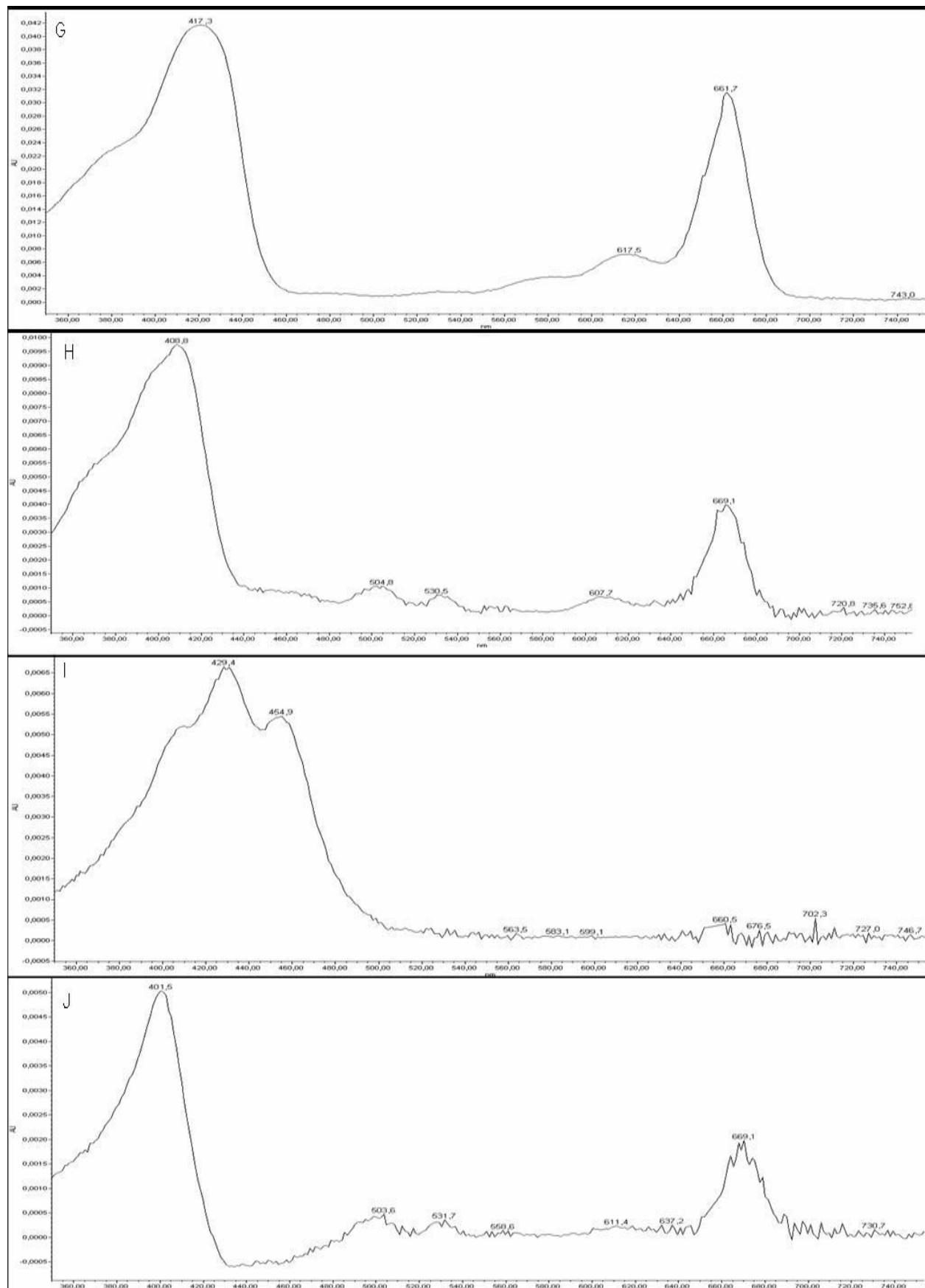


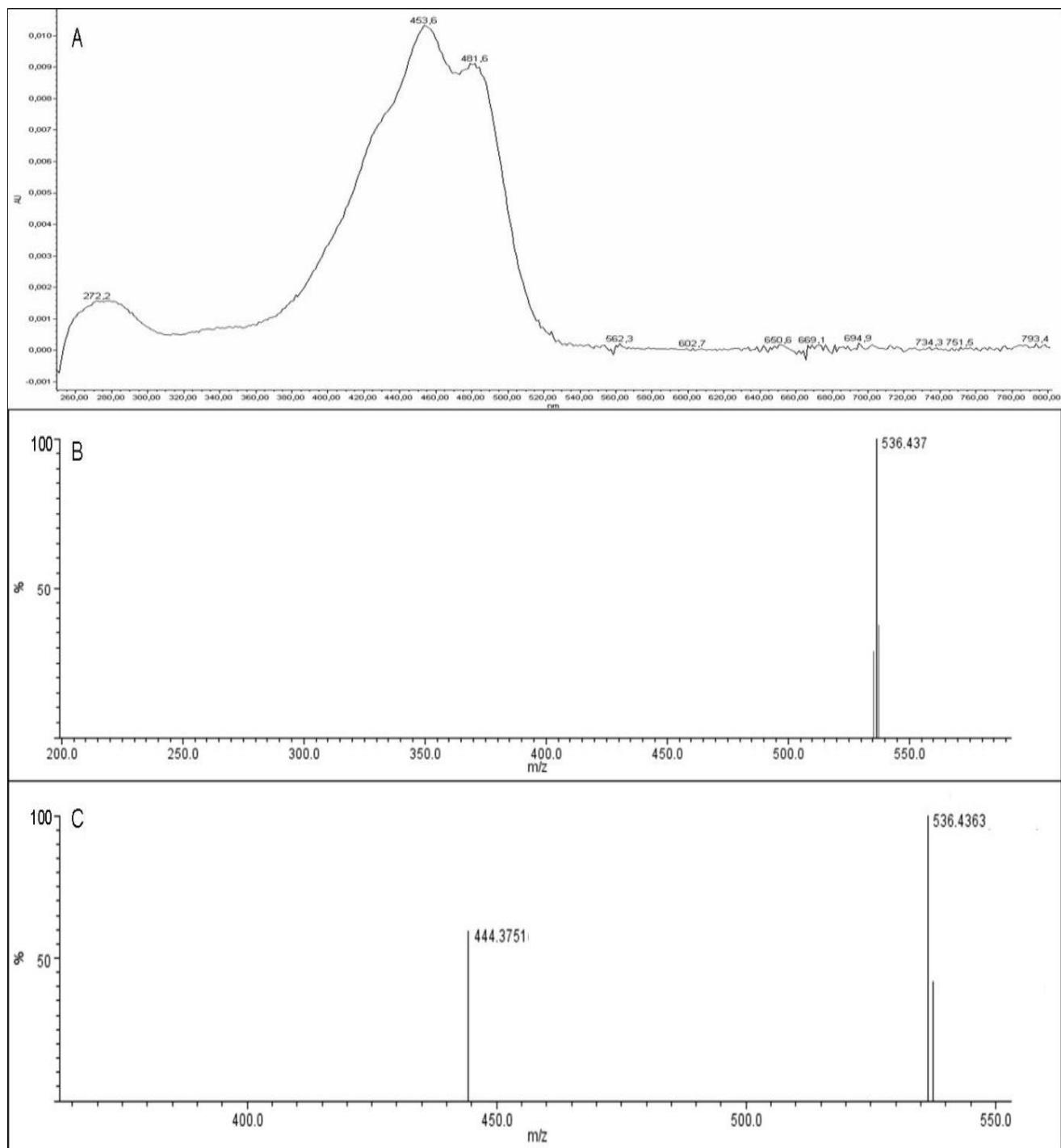
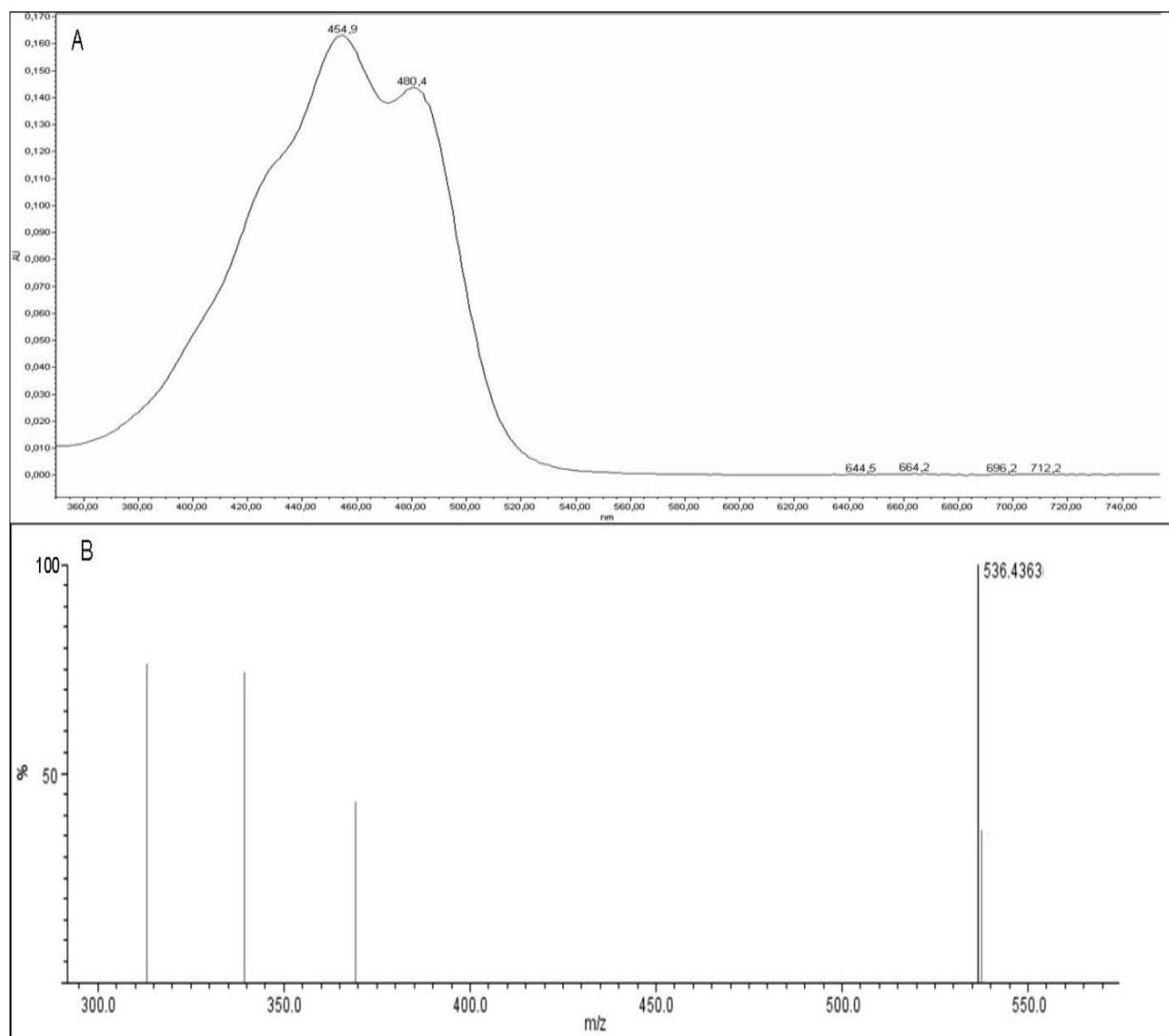
Figure S14. UV-vis (A), high resolution MS (B) and MSMS (C) spectra of standard β -Carotene.

Figure S15. UV-vis (**A**) and high resolution MS (**B**) spectra of Fraction 8 (β -carotene).

© 2013 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).