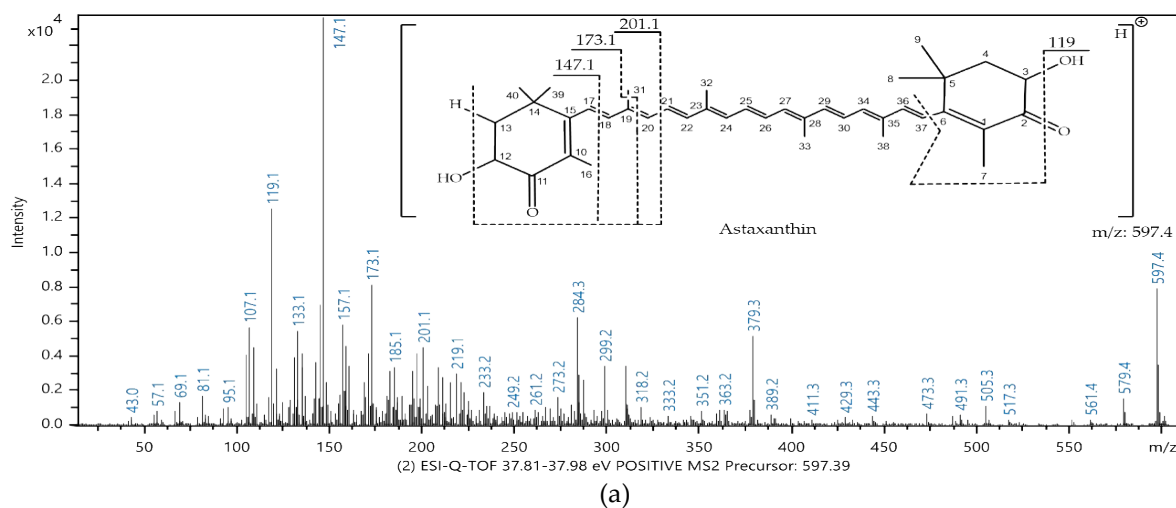


Figure S1. Overlay HPLC-DAD chromatograms of carotenoid standards and MSPD extracts in ethanol: (a) astaxanthin, (b) β-Carotene, (c) zeaxanthin-lutein; and their UV-Vis absorption spectra: (a.1) astaxanthin, (b.1) β-Carotene, (c.1) zeaxanthin-lutein



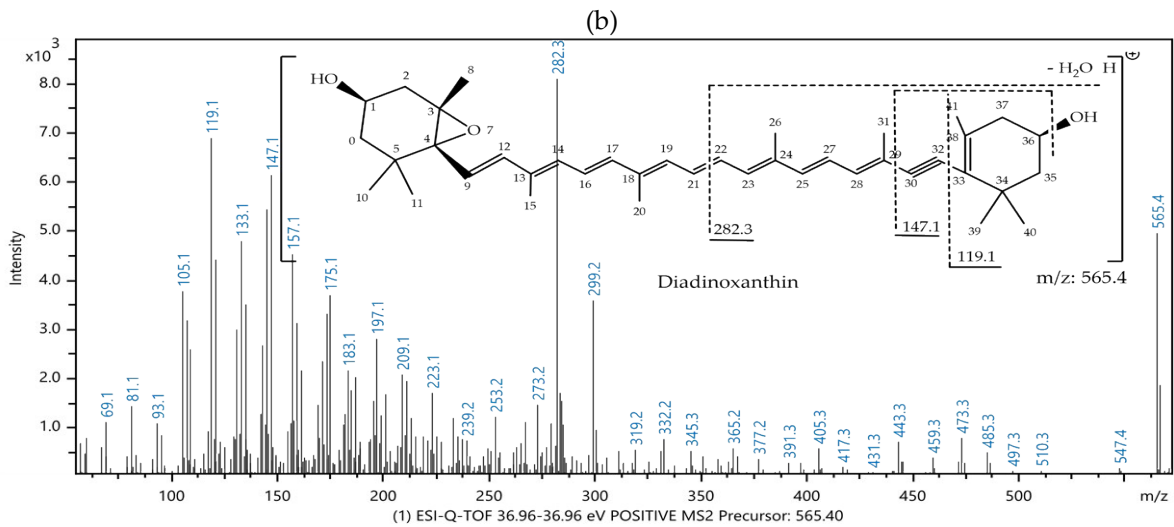
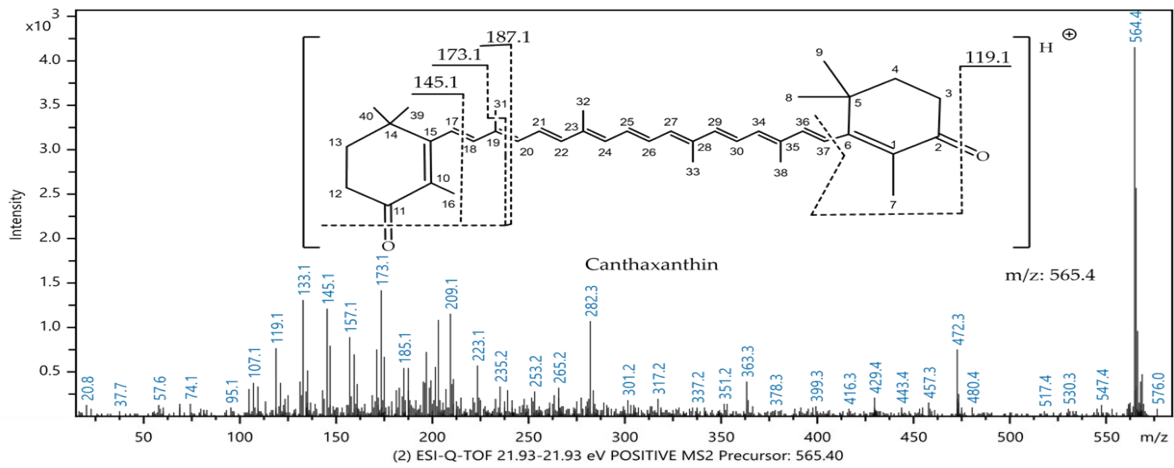
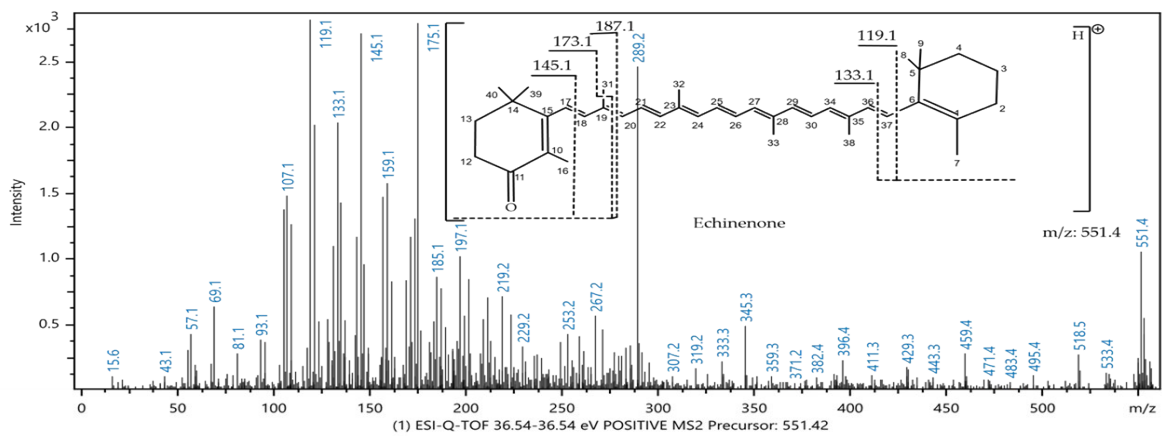
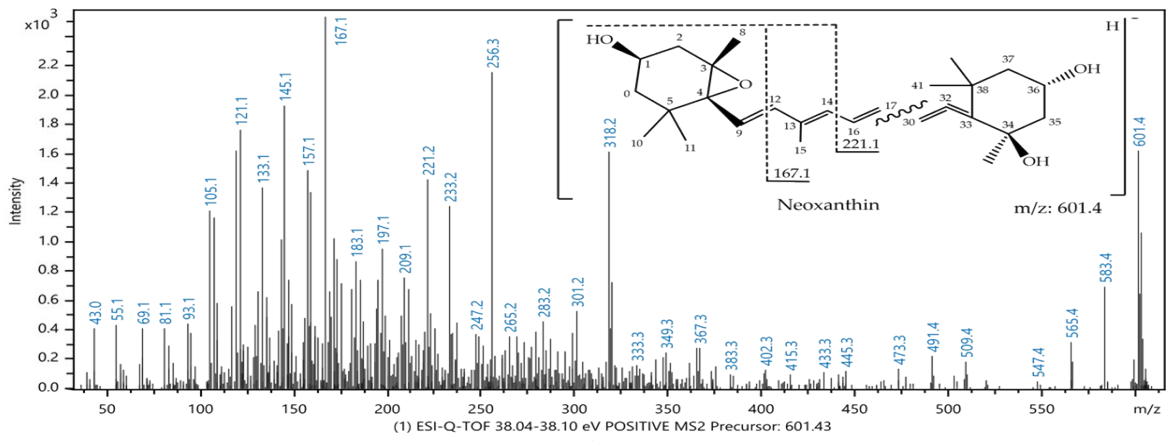
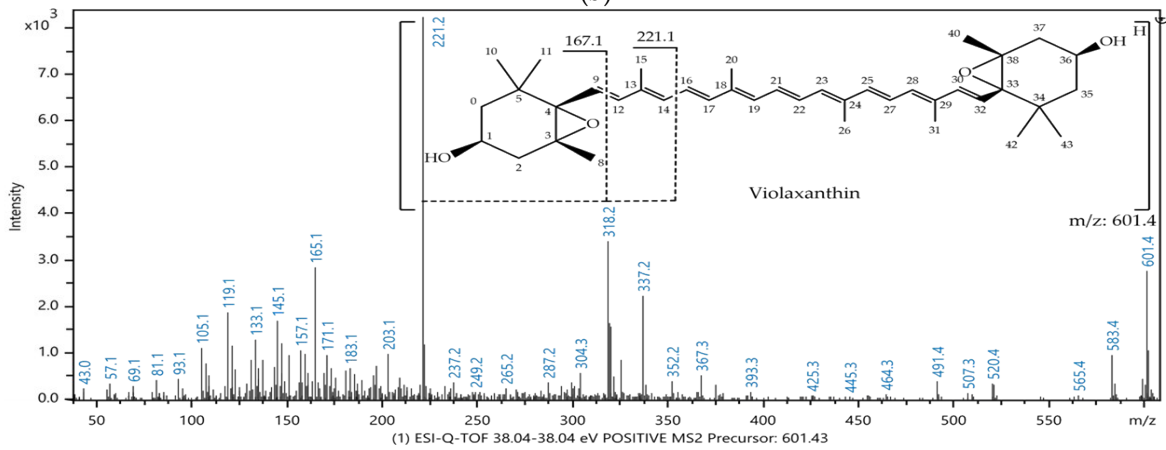


Figure S2. Mass spectrum obtained by UHPLC-QTOF of the carotenoid compounds present in the extract of *H. pluvialis* red. Astaxanthin (a). Canthaxanthin (b). Diadinoxanthin (c).





(b)



(c)

Figure S3. Mass spectrum obtained by UHPLC-QToF of the carotenoid compounds present in the extract of *H. pluvialis* red. Echinone (a). Neoxanthin (b). Violaxanthin (c)