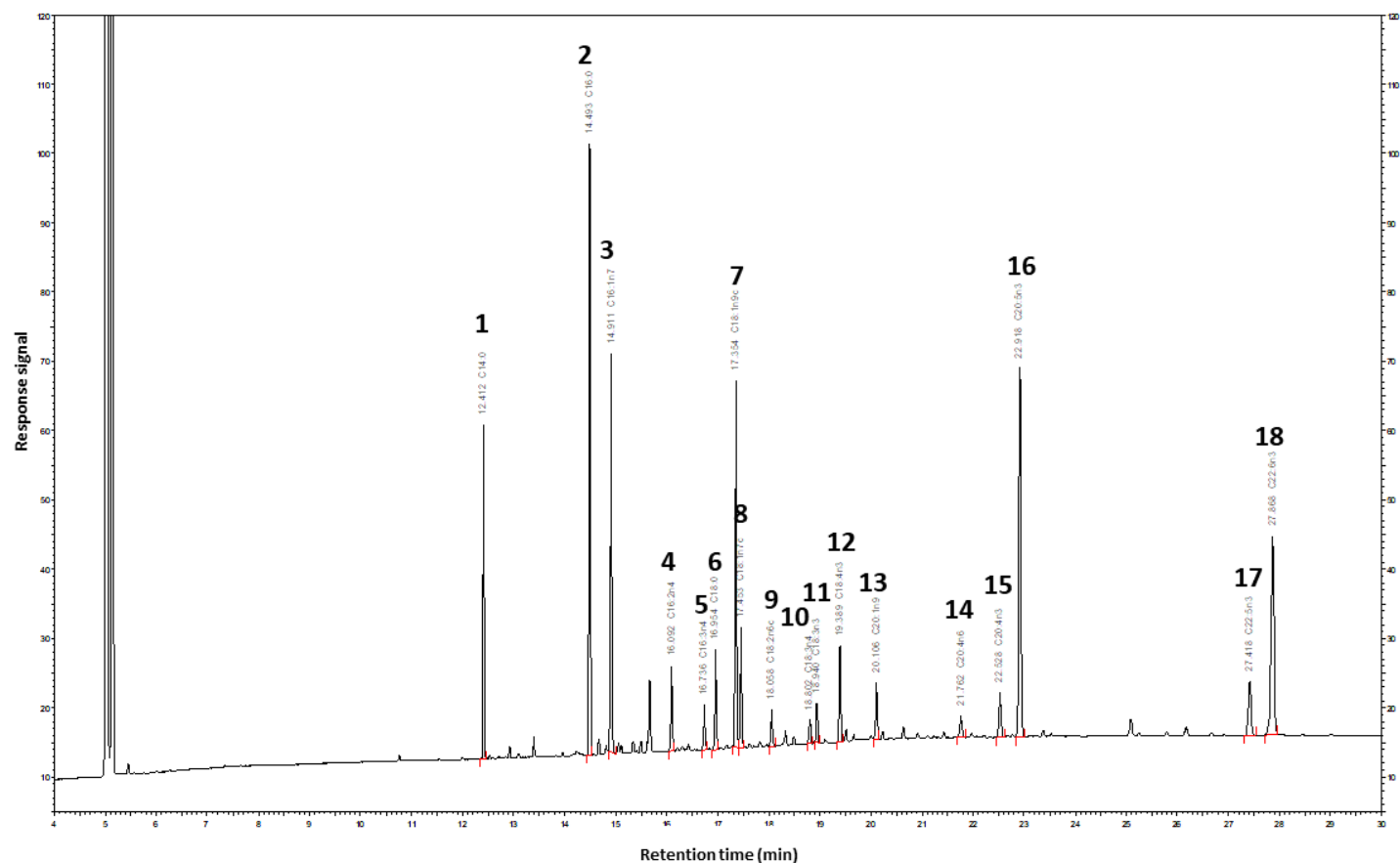
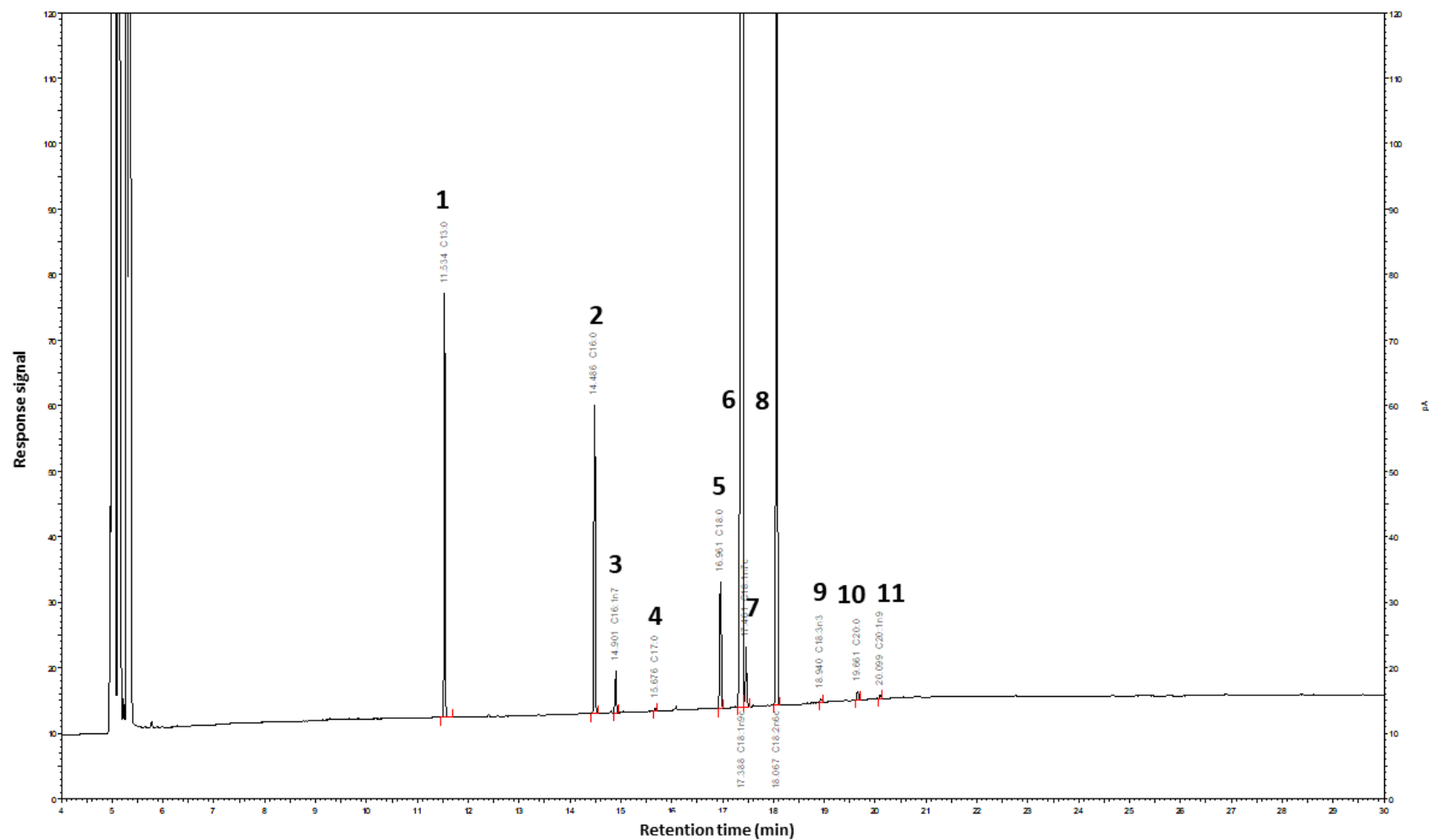


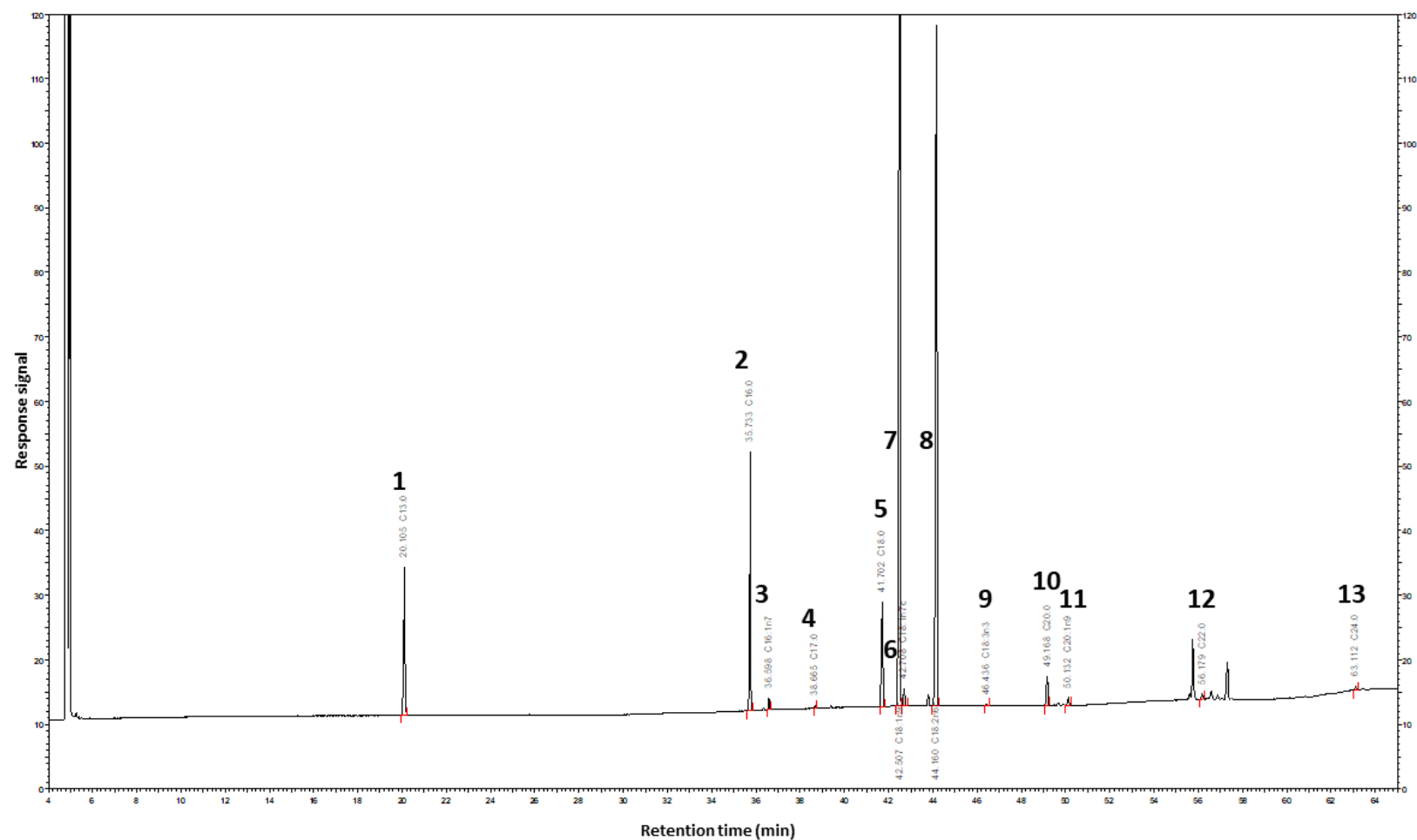
**Figure S1.** Chromatogram of the standard mixture FAME 37 component SUPELCO Ref CRM47885 by GC-FID. (1) Methyl butyrate (C4:0); (2) methyl hexanoate (C6:0); (3) methyl octanoate (C8:0); (4) methyl decanoate (C10:0); (5) methyl undecanoate (C11:0); (6) methyl laurate (C12:0); (7) methyl tridecanoate (C13:0); (8) methyl myristate (C14:0); (9) methyl myristoleate (C14:1n5); (10) methyl pentadecanoate (C15:0); (11) methyl cis-10-pentadecenoate (C15:1n5); (12) methyl palmitate (C16:0); (13) methyl palmitoleate (C16:1n7); (14) methyl heptadecanoate (margarate, C17:0); (15) cis-10-heptadecanoic acid methyl ester (C17:1n7); (16) methyl stearate (C18:0); (17) trans-9-elaidic acid methyl ester (C18:1n9t); (18) cis-9-oleic acid methyl ester (C18:1n9c); (19) methyl linolelaidate (C18:2n6t); (20) methyl linoleate (C18:2n6c); (21) methyl  $\gamma$ -linolenate (C18:3n3); (22) methyl linolenate (C18:3n3); (23) methyl arachidate (C20:0); (24) methyl cis-11-eicosenoate (C20:1n9); (25) cis-11,14-Eicosadienoic acid methyl ester (C20:2n6); (26) methyl heneicosanoate (C21:0); (27) cis-8,11,14-eicosatrienoic acid methyl ester (C20:3n6); (28) cis-5,8,11,14-eicosatetraenoic acid methyl ester (C20:4n6); (29) cis-11,14,17-eicosatrienoic acid methyl ester (C20:3n3); (30) methyl behenate (C22:0); (31) cis-5,8,11,14,17-Eicosapentaenoic acid methyl ester (C20:5n3); (32) methyl erucate (C22:1n9); (33) cis-13,16-docosadienoic acid methyl ester (C22:2n6); (34) methyl tricosanoate (C23:0); (35) methyl lignocerate (C24:0); (36) cis-4,7,10,13,16,19-Docosahexaenoic acid methyl ester (C22:6n3); (37) methyl nervonate (C24:1n9).



**Figure S2.** Chromatogram of the standard mixture PUFA N°3 Menhaden oil Ref 47085-U by GC-FID. (1) Methyl myristate (C14:0); (2) methyl palmitate (C16:0); (3) methyl palmitoleate (C16:1n7); (4) cis- 9,12 hexadecadienoic acid methyl ester (C16:2n4); (5) cis 6,9,12-hexadecatrienoic acid methyl ester (C16:3n4); (6) methyl stearate (C18:0); (7) cis-9-oleic acid methyl ester (C18:1n9c); (8) cis-11 octadecenoic acid methyl ester (C18:1n7c); (9) methyl linoleate (C18:2n6c); (10) cis 9,11,14 octadecatrienoic acid methyl ester (C18:3n4); (11) methyl linolenate (C18:3n3); (12) cis-6,9,12,15 Octadecatetraenoic acid methyl ester (C18:4n3); (13) methyl cis-11-eicosenoate (C20:1n9); (14) cis-5,8,11,14 eicosatetraenoic acid methyl ester (C20:4n6); (15) cis-8,11,14,17 eicosatetraenoic acid methyl ester (C20:4n3); (16) cis-5,8,11,14,17-eicosapentaenoic acid methyl ester (C20:5n3); (17) cis-7,10,13,16,19 docosapentaenoic acid methyl ester (C22:5n3); (18) cis-4,7,10,13,16,19 docosahexaenoic acid methyl ester (C22:6n3).



**Figure S3.** Chromatogram of plum seed oil by GC-FID. (1) methyl tridecanoate (C13:0) internal standard; (2) methyl palmitate (C16:0); (3) methyl palmitoleate (C16:1n7); (4) methyl heptadecanoate (margarate, C17:0); (5) cis-10-heptadecanoic acid methyl ester (C17:1n7); (6) methyl stearate (C18:0); (7) cis-9-oleic acid methyl ester (C18:1n9c); (8) methyl linoleate (C18:2n6c); (9) methyl linolenate (C18:3n3); (10) methyl arachidate (C20:0); (11) methyl cis-11-eicosenoate (C20:1n9).



**Figure S4.** Chromatogram of cherry seed oil by GC-FID. (1) methyl tridecanoate (C13:0) internal standard; (2) methyl palmitate (C16:0); (3) methyl palmitoleate (C16:1n7); (4) methyl heptadecanoate (margarate, C17:0); (5) cis-10-heptadecanoic acid methyl ester (C17:1n7); (6) methyl stearate (C18:0); (7) cis-9-oleic acid methyl ester (C18:1n9c); (8) methyl linoleate (C18:2n6c); (9) methyl linolenate (C18:3n3); (10) methyl arachidate (C20:0); (11) methyl cis-11-eicosenoate (C20:1n9); (12) methyl behenate (C22:0); (13) methyl lignocerate (C24:0).